

API Guide to Report Process Safety Incidents

JUNE 2008 (Report Year 2008)
Version 1.2

Contents

1	<u>General</u>	3
1.1	<u>Purpose</u>	3
1.2	<u>Objective</u>	3
1.3	<u>Approach</u>	3
1.4	<u>Scope</u>	4
2	<u>Definitions</u>	5
3	<u>Reportable Process Safety Incident</u>	8
3.1	<u>Fatality and Days Away From Work Incidents</u>	8
3.2	<u>PSI Reporting Criteria</u>	8
3.3	<u>Applicability</u>	9
4	<u>Reporting to API</u>	11
5	<u>References</u>	12
<u>Appendix A</u>	Sample API Process Safety Incident Reporting Form	13
<u>Appendix B</u>	UN Dangerous Goods List	15
<u>Appendix C</u>	Interpretations and Examples	16
<u>Appendix D</u>	Decision Logic Tree	23
<u>Appendix E</u>	Listing of Chemicals Sorted by Threshold Quantities Based on UN Dangerous Goods Hazard Class or Grouping	24

API GUIDE TO REPORT PROCESS SAFETY INCIDENTS

1 GENERAL

1.1 Purpose

The purpose of this document is to provide guidance to Company-wholly owned and operated global refining and petrochemical plants on the collection and reporting of process safety incidents. This document may augment Companies' existing practices and protocols.

This document, which describes the collection and reporting of lagging performance indicators, does not preempt any law regulating process safety. Therefore, nothing contained in this document is intended to alter or determine any Companies' compliance responsibilities set forth in the Occupational Safety and Health Act (OSHA) Act of 1970 and/or OSHA standards themselves, or any other legal or regulatory requirement concerning process safety. The use of the term or concept "process safety" in this document is independent of, unrelated to, and may in fact be broader than the term or concept "process safety" contained in OSHA standards, or as the term may be used in other legal or regulatory contexts.

1.2 Objective

The objective of this document is to provide guidance as follows: provide consistent lagging indicators for operating companies to consider and use to set performance targets, drive continuous improvement and permit benchmarking, as applicable.

1.3 Approach

The approach of this program is to collect information on incidents that meet the definition of Process Safety Incident (PSI) as defined in this document. For the purposes of this benchmarking program, incidents are treated equally and are not segregated based on severity since the outcome of a PSI is dependent on numerous, and sometimes random factors.

1.4 Scope

A PSI is reportable pursuant to this document if a Loss of Primary Containment (LOPC) occurs on Company-wholly owned or operated refineries and petrochemical plants and results in one or more of the following:

- a. A Fatality or Days Away From Work Incident; or
- b. A fire or explosion; or
- c. An acute release of flammable or combustible liquid, gas or vapor; or
- d. An acute release of a toxic chemical.

The guidance is to be applied to a Company's global operations. Facilities covered include assets, processes and operations within the property line with the exception of those noted in [Section 3.3](#), Applicability.

2 DEFINITIONS

Acute Release: A sudden release of material that reaches or exceeds the reporting threshold as defined in this document in approximately 1 hour or less.

Combustible Liquids: High-flash liquids [flash points 100 deg. F (38 deg. C or higher) stored or handled at temperatures more than 15 deg. F (8 deg. C) below their closed cup (Pensky-Martens) flash point.

Company: "Company" (when designated with a capital C) or "the Company", refers to wholly owned or operated company in the refining and petrochemical industries and/or any of its divisions, and/or any of its consolidated affiliates.

Contractor: Any individual not on the Company payroll, including subcontractors, whose exposure hours, injuries and illnesses are included in the Company's safety stewardship.

Direct Cost: Cost directly attributed to the fire and/or explosion, such as the replacement value of equipment lost, cost of repairs, cleanup, emergency response and/or fines. Direct cost does not include indirect costs, such as business opportunity losses, loss of profits due to equipment outages, cost of obtaining or operating temporary facilities or cost of obtaining replacement products to meet customer demand.

Employee: "Employee" (when designated with a capital E) refers to any individual on the Company payroll and whose exposure hours, injuries and illnesses are routinely tracked by the Company.

Flammable Gases: Gases that, at ambient temperature and pressure, form a flammable mixture with air where: the Lower Flammable Limit (LFL) is <13% or the range between the LFL and Upper Flammable Limit (UFL) is >12%, regardless of the LFL.

Flammable Liquids: Low-flash liquids [flash point below 100 deg. F (38 deg. C), and high-flash liquids [flash point 100 deg. F (38 deg. C) or higher] stored or handled at temperatures above or within 15 deg. F (8 deg. C) of their closed cup (Pensky-Martens) flash points.

Loss Of Primary Containment (LOPC): An unplanned or uncontrolled release of material from primary containment. A LOPC is a PSI with both of the following elements present:

- A. A material is involved where the hazard (situation or condition with the potential to cause harm to people, property or the environment) is due to (1) the inherent properties of the material (e.g., hydrocarbon, chlorine, etc.); (2) the physical properties of the material (e.g., steam, high pressure air, etc.); or (3) the manner in which the material is used (e.g., nitrogen leak into a confined space); and,

B. There was an actual, unplanned or uncontrolled LOPC of the material, or the material was inadvertently released to a containment system for which it was not intended.

Office Buildings: For the purposes of PSI reporting, "Office Buildings" are those that are intended to house office workers (e.g., affiliate office complex, office building located on a refinery or chemical plant, etc.).

Primary Containment: A tank, vessel, pipe, rail car or equipment intended to serve as the primary container or used for the transfer of the material. Primary containers may be designed with secondary containment systems to contain and control the release. Secondary containment systems include, but are not limited to, tank dikes, curbing around process equipment, drainage collection systems into segregated oily drain systems, the outer wall of double walled tanks, etc.

Process Safety Incident: For reporting purposes, a Process Safety Incident (PSI) is an actual unplanned or uncontrolled LOPC that either (1) had an effect on people, property, or the environment; or (2) was above a threshold amount as described in Section 3.2 of this document.

Process Safety Incident/ Normalization of Data: The data will be aggregated and normalized using the OSHA injury/illness formula based on total hours worked (employee, contractor & subcontractor work hours). Work hours associated with major construction projects or corporate administration would not be included. The number of PS incidents will be inserted in the formula in place of the injury/illness number as follows:

$$\text{PSIRate} = \left(\frac{\text{Total PSI Incidents}}{\text{Total Employee, Contractor and Subcontractor Work Hours}} \right) \times 200,000$$

Process Safety Reporting Unit: A business unit of the Company that reports its individual LOPC information to API.

Third Party: Any individual other than an employee, contractor or subcontractor of the Company (e.g., onsite visitors, plant neighbors, etc.).

Toxic Chemicals: Toxic chemical release that is greater than the threshold quantities described in the following table based upon the UN Dangerous Goods hazard categories:

Material Hazard Classification as Defined by the United Nations Dangerous Goods definition ¹	PSI threshold quantity
All TIH Class A materials	5kg (11 lb.)
All TIH Class B Materials	25 kg. (55 lbs.)
All TIH Class C Materials	100 kg. (220 lbs.)
All TIH Class D Materials	200 kg. (440 lbs.)
All “Packing Group I” materials	500 kg (1100 lbs.)
All “Packing Group II” materials	1000 kg (2200 lbs.)
All “Packing Group III” materials	2000 kg (4400 lbs.)

UN Dangerous Goods Hazard Categories: A classification system used to evaluate the potential hazards of various chemicals, if released, and used by the U.S. and many other countries as part of the product labeling or shipping information. In the U.S., these hazard categories are defined in US Department of Transportation regulations (49 CFR 172.101). For more information on these classifications, see the UN web site:

<http://www.unece.org/trans/danger/publi/adr/adr2007/07ContentsE.html>

¹ The UN Dangerous Goods definitions include several generic descriptions (e.g., “toxic fluids”) or materials that are not germane to the chemical or petroleum industries (e.g., cotton, explosive ammunition). Although the specific chemicals listed in the UN Dangerous Goods listing have been used as a basis for establishing the process safety incident threshold quantities, these generic or non-applicable materials have been excluded.

3 REPORTABLE PROCESS SAFETY INCIDENT (PSI)

A reportable PSI is an actual unplanned or uncontrolled LOPC (as defined in Section 2.0) that either 1) has an effect on people, property or the environment; or 2) was above a threshold amount as defined in Section 3.2.

3.1 Fatality and Days Away from Work Incidents Criteria

Fatalities and Days Away from Work Incidents that occur as part of a reportable PSI are those that fit into one of the following categories, regardless of the direct cost:

- Employee (Fatality and/or Days Away from Work)
- Contractor and Subcontractor (Fatality and/or Days Away from Work)
- Third Party (Fatality and/or Hospital Admission)

3.2 PSI Reporting Criteria

A PSI is reportable if it results in:

- An employee, contractor or subcontractor Fatality and/or Days Away from Work, or
- A third-party fatality or injury/illness that results in a hospital admission
- A Fire or Explosion that causes \$25,000 or more of direct cost, or
- An acute release of:
 1. 7 Bbls (~1 tonne) or more of Flammable Liquids, or
 2. 14 Bbls (~2 tonnes) or more of Combustible Liquids, or
 3. Flammable gas or flammable vapor arising from flammable liquid, that is 500 kg (~1,100 lbs) or more at a facility; or
 4. Toxic chemical that is greater than the threshold quantities described in the table below based on the UN Dangerous Goods List hazard categories:

Material Hazard Classification as Defined by the United Nations Dangerous Goods definition ²	PSI threshold quantity
All TIH Class A materials	5kg (11 lb.)
All TIH Class B Materials	25 kg. (55 lbs.)
All TIH Class C Materials	100 kg. (220 lbs.)
All TIH Class D Materials	200 kg. (440 lbs.)
All “Packing Group I” materials	500 kg (1100 lbs.)
All “Packing Group II” materials	1000 kg (2200 lbs.)
All “Packing Group III” materials	2000 kg (4400 lbs.)

3.3 Applicability

This document applies to any PSIs occurring at Company-wholly owned or operated refineries and petrochemical plants, except as noted below:

1. PSIs that originated off Company property are excluded;
2. PSIs that occur at “operated by other” joint venture sites are excluded;
3. Pipeline transfer operations and other DOT regulated assets are excluded;
4. Marine transport vessel incidents are excluded, except when the vessel is connected to the refinery or petrochemical facility for the purposes of crude or product transfer;
5. Truck and/or rail incidents are excluded except when they are connected to the refinery;
6. Routine emissions that are allowable under permit or regulation are excluded;

² The UN Dangerous Goods definitions include several generic descriptions (e.g., “toxic fluids”) or materials that are not germane to the chemical or petroleum industries (e.g., cotton, explosive ammunition). Although the specific chemicals listed in the UN Dangerous Goods listing have been used as a basis for establishing the process safety incident threshold quantities, these generic or non-applicable materials have been excluded.

7. Vapors and gases released to the atmosphere from properly designed and operating safety devices, such as a flare, scrubber or relief device designed per API Standard 521 or an equivalent industry standard are excluded, as long as the release did not result in: (1) a liquid carryover that created a reportable PSI related to the liquid (e.g., days away from work incident, fatality, a fire or explosion that caused \$25,000 or more of direct cost, liquid release or toxic aerosol release at or above threshold amounts, etc.), or (2) on-site activation of a shelter-in-place response, or (3) public protective measures being taken;
8. An incident that resulted in only an underground contamination that had no safety consequences is excluded [Note: The exclusion does not apply if the release resulted in an aboveground reportable LOPC, such as pooling of flammable liquids (e.g., 7 bbls or more within 1 hour).];
9. Incidents that originate in an Office Building are excluded (e.g., boiler explosions, fires, spills, releases, personnel injury or illnesses);
10. Personnel safety incidents, such as a "slip/trip/fall," that are not directly associated with evacuating from, or responding to a PSI are excluded;
11. LOPC incidents from ancillary equipment not connected to the process (e.g., small sample containers) are excluded;
12. Planned and controlled drainage of materials to collection or drain system designed for such service are excluded. (Note: Exclusion does not apply to an unintended or uncontrolled release of material from primary containment that flows to a collection or drain system);
13. Maintenance or mechanical work being conducted outside of process units or in maintenance shops is excluded;
14. Quality Assurance (QA), Quality Control (QC) and Research and Development (R&D) laboratories are excluded. Pilot plants are not excluded;
15. Fuel marketing service stations and associated onsite operations are excluded (e.g., UST systems and equipment, fuel dispensers, truck deliveries, etc.).

4 REPORTING TO API

Participating companies will file an annual report with API using an online Reporting Form similar to the one shown in Appendix A. A Process Safety Performance (PSP) summary report will be issued annually by API. It will present aggregate industry data that will reflect the total number of incidents separated by refining and petrochemical facilities, and by US data and international data. The report will also contain a brief explanation of the data and its overall meaning.

During the 1st quarter of each year, participating companies will be asked to submit data for the previous year and the final report will be issued by API during the 2nd quarter. Results presented in the annual report are representative of those who participated during that year. It is expected that a large percentage of the oil and petrochemical industry will participate, which should provide a realistic estimate of the overall industry performance.

5 REFERENCES

United Nations Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labeling of Chemicals
<http://www.unece.org/trans/doc/2007/ac10/ST-SG-AC10-34a3c1e.doc>

Appendix A

Sample API PSI Reporting Form

Type of Facility (check one)

U.S. Refinery _____ U.S. Petrochemical _____
Non U.S./International Refinery _____ Non U.S./International Petrochemical _____

Part 1

General

1) Number of refineries included in this survey _____
 1a) Total capacity of these refineries (BBL/Day) _____

No. of Process Safety Incidents (PSIs) in 2008

2) Total No. of PSIs (for selected survey) _____
 2a) No. of these PSIs due to confirmed acts of terrorism or sabotage _____

Hours Worked³

3) Total hours worked by all covered employees _____
4) Total hours worked by all covered contractors & subcontractors _____

³ Excludes any hours not directly associated with operations (e.g., Greenfield projects, headquarters staff, and technical support staff)

Part 2

PSI Consequences

Each PSI will have one or more of the following consequences. Count all consequences that apply. As a result, the total number of consequences will be equal to or greater than the total number of PSI incidents.

- 1) No. of fires causing \$25,000 or more in direct cost: _____
- 2) No. of explosions causing \$25,000 or more in direct cost: _____
- 3) No. of incidents to employees, contractors, subcontractors, and/or third-parties _____
 - 3a) No. of Company employees (days away from work) _____
 - 3b) No. of Company employee fatalities _____
 - 3c) No. of Company contractors and subcontractors (days away from work) _____
 - 3d) No. of Company contractor and subcontractor fatalities _____
 - 3e) No. of third-parties admitted to hospital _____
 - 3f) No. of third-party fatalities _____
- 4) No. of acute releases of 7 bbls (~1 tonne) or more of flammable liquid _____
- 5) No. of acute releases of 14 bbls (~2 tonnes) or more of combustible liquid _____
- 6) No. of acute releases of flammable gas, including flammable vapor arising from flammable liquid that is 500 kg or more at a facility _____
- 7) No. of releases of toxic toxic gas, vapor or aerosol that are greater than the quantities described in the guidance document _____

Appendix B

Toxic chemical release threshold quantities (TQ) are based upon criteria aligned to the UN Dangerous Goods Hazard Classification System. The specific TQs agreed upon were:

Material Hazard Classification as Defined by the United Nations Dangerous Goods definition ⁴	PSI threshold quantity
All TIH Class A materials	5kg (11 lb.)
All TIH Class B Materials	25 kg. (55 lbs.)
All TIH Class C Materials	100 kg. (220 lbs.)
All TIH Class D Materials	200 kg. (440 lbs.)
All "Packing Group I" materials	500 kg (1100 lbs.)
All "Packing Group II" materials	1000 kg (2200 lbs.)
All "Packing Group III" materials	2000 kg (4400 lbs.)

For a full list of materials cross-referenced to the UN Dangerous Goods definitions, see Appendix E.

⁴ The UN Dangerous Goods definitions include several generic descriptions (e.g., "toxic fluids") or materials that are not germane to the chemical or petroleum industries (e.g., cotton, explosive ammunition). Although the specific chemicals listed in the UN Dangerous Goods listing have been used as a basis for establishing the process safety incident threshold quantities, these generic or non-applicable materials have been excluded.

Appendix C

INTERPRETATIONS AND EXAMPLES

The following interpretations and examples have been prepared to help clarify areas of potential uncertainty in the evaluation of reportable Process Safety Incidents (PSIs). They are for illustrative purposes only. The following areas are addressed:

- Company Premises
- PSIs With Multiple Outcomes
- Loss Of Primary Containment
- Acute Releases
- Safety Relief Device/System
- Toxic Chemicals
- Days Away from Work Incidents
- Pipelines
- Marine Vessels
- Truck and Rail
- Office Building
- Man-Machine Interface Incidents

<p>COMPANY PREMISES</p> <p>(In general, most PSIs inside the property/ fence line will be associated with process units or associated equipment, such as piping and storage tanks.)</p>	<p>1. A third-party truck loaded with a flammable product is traveling on Company Premises and experiences a leak and subsequent fire and property loss damages of \$75,000 (direct costs). The incident would not be a reportable PSI since truck incidents are excluded except when they are connected to equipment for the purpose of product transfer.</p>
<p>PSIs WITH MULTIPLE OUTCOMES</p>	<p>2. There is a 200 bbl spill of flammable liquid that results in flammable vapor being released, ignited and causing a fire. The fire damages other equipment resulting in a toxic gas release above the reporting threshold, along with multiple lost time injuries, including a fatality. There would be multiple outcomes from the single PSI.</p>
<p>LOSS OF PRIMARY CONTAINMENT</p>	<p>3. Ten barrels of flammable liquid leaks from piping onto concrete and the gasoline doesn't reach soil or water. Site personnel estimate that the leak was "acute" (e.g., occurred within a 1 hour timeframe). This is a reportable PSI because there was an "acute" LOPC (e.g., within "1 hour") of 7 bbls (~1 tonne) or more of flammable liquids."</p> <p>4. A faulty tank gauge results in the overfilling of a gasoline or other flammable liquid product tank. Approximately 50 bbls of gasoline or other flammable liquid overflows into the tank's diked area. This incident is a reportable PSI since it is an "acute" spill greater than 7 bbls, regardless of secondary containment.</p> <p>5. A maintenance contractor opens a process valve and gets sprayed with sulfuric acid resulting in a severe burn and lost time injury. This would be a reportable PSI. It is an unintended event involving a hazardous material and a LOPC. For fatalities and days away from work injuries and illnesses, there is no release threshold amount.</p> <p>6. An operator opens a quality control sample point to collect a routine sample of rundown hydrocarbon product and receives a bad hand laceration requiring stitches due to a broken glass bottle and misses the next day of work. This is not a reportable PSI because it is not related to a LOPC.</p> <p>7. A bleeder valve is left open after a plant turnaround. On start-up, an estimated 10 bbls of naphtha is released onto the ground and into the plant's drainage system before the bleeder</p>

	<p>is found and closed within one hour. This would be a PSI because it is an unintended, acute release and it is greater than the release criteria of 7 bbls.</p> <p>8. Operations are draining water off of a crude oil tank into a drainage system designed for that purpose. The operator leaves the site and forgets to close the valve. 20 Bbls of combustible crude oil is released into the drainage system within one hour. This would be a PSI because the release of crude oil is an unintended, acute release and it is greater than the release criteria of 14 Bbls of liquid combustibles.</p> <p>9. A pipe corrodes and leaks 10 bbls of 550°F Heavy Cycle Oil (HCO) to the ground within one hour. The HCO has a flash point of 300°F. Based on the definition of Flammable Liquids, this would be a PSI because the HCO was released at a temperature above the flash point and it is greater than the release criteria of 7 Bbls.</p> <p>10. An operator purposely drains 20 bbls of combustible material into an oily water collection system within one hour as part of a vessel cleaning operation. The drainage is planned and controlled and the collection system is designed for such service. This is not a reportable PSI since it is consistent with a specific exclusion. If the material had been unintentionally released and flowed to an open drain, sewer or other collection system, it would be a reportable PSI.</p> <p>11. An operator discovers an approximate 10 Bbl liquid spill of aromatic solvent (e.g., benzene, toluene or xylene) near a chemical plant exchanger within one hour. The incident is a reportable PSI event since the solvents involved are flammable liquids and exceeded the 7 Bbl reporting threshold.</p>
<p>ACUTE RELEASES</p>	<p>12. There is a 10 bbl spill of gasoline that steadily leaked from piping onto soil over a two-week time period. Simple calculations show the spill rate was approximately 0.03 bbls per hour. This is not a reportable PSI since the spill event was not an "acute" release (e.g., 7 or more barrels within 1 hour).</p> <p>13. Same example as above, except that the 10 bbl leak was estimated to have spilled at a steady rate over a period of 1 hour and 30 minutes. Simple calculations show that the spill rate was 6.7 bbls per hour. The spill rate was less than the reporting threshold of 7 bbls within "1 hour", and therefore is not a reportable PSI.</p> <p>14. While troubleshooting a higher-than-expected natural gas flow rate, operating personnel find a safety valve on the natural gas line that did not reseat properly and was relieving to the</p>

	<p>atmospheric vent stack through a knock-out drum. Upon further investigation, it is determined that a total of 1 Million lbs of natural gas was relieved at a steady rate over a 6 month period. This is not a reportable PSI as the release rate (~100 kg per hour) was not "acute" (e.g., 500 kg or more within 1 hour).</p>
<p>SAFETY RELIEF DEVICE / SYSTEM</p>	<p>15. There is a unit upset and the relief valve opens, resulting in a gas release to the atmosphere. This would not be a reportable PSI since vapors and gases released to atmosphere from safety valves, high-pressure rupture disks, and similar safety devices designed per API Standard 521 or equivalent industry standard are specifically excluded, as long as the release did not result in (1) a liquid carryover that created a reportable PSI related to the liquid (e.g., lost time incident, fatality, a fire or explosion that caused \$25,000 or more of direct cost, liquid release or toxic aerosol release at or above threshold amounts, etc.), or (2) activation of a shelter-in-place response on-site, or (3) public protective measures be taken.</p> <p>16. There is a unit upset and the relief valve fails to open, resulting in overpressure of the equipment and an "acute" release of flammable gas from a leaking flange. The amount released is above the 500 kg (within 1 hour) threshold. This is a reportable PSI. Releases from flanges are not excluded from PSI reporting.</p>
<p>TOXIC CHEMICAL</p>	<p>17. A leak on a high pressure hydrochloric acid line results in a spill of 1900 lbs of hydrochloric acid. Flash calculations indicate that greater than 220 lbs. of hydrogen chloride would be released as a vapor. The 1900 lb. release of hydrochloric acid is not a reportable PSI since this liquid is categorized as a "Packing Group II" corrosive liquid, with a 2200 lb. reporting threshold. However, since the liquid flashed or was sprayed out as an aerosol, producing more than 220 lbs. of hydrogen chloride, the event would be reportable due to exceeding the 100 kg (~220 lbs) or more of toxic chemical within 1 hour.</p> <p>18. A pipe containing CO₂ and 10,000 vppm (1% by volume) leaks and 7,000 kg (15,400 lbs) of the gas is released within a short time period (e.g., less than one hour). Calculations show that the release involved about 55 kg (120 lbs) of H₂S. The release is a reportable PSI since the reporting threshold for Toxic Inhalation Hazard Zone B chemicals is any amount greater than 25 kg (55 lbs) of the toxic chemical (e.g., H₂S). Further, the release is a reportable PSI since the reporting threshold for CO₂ is exceeded as the chemical is a Division</p>

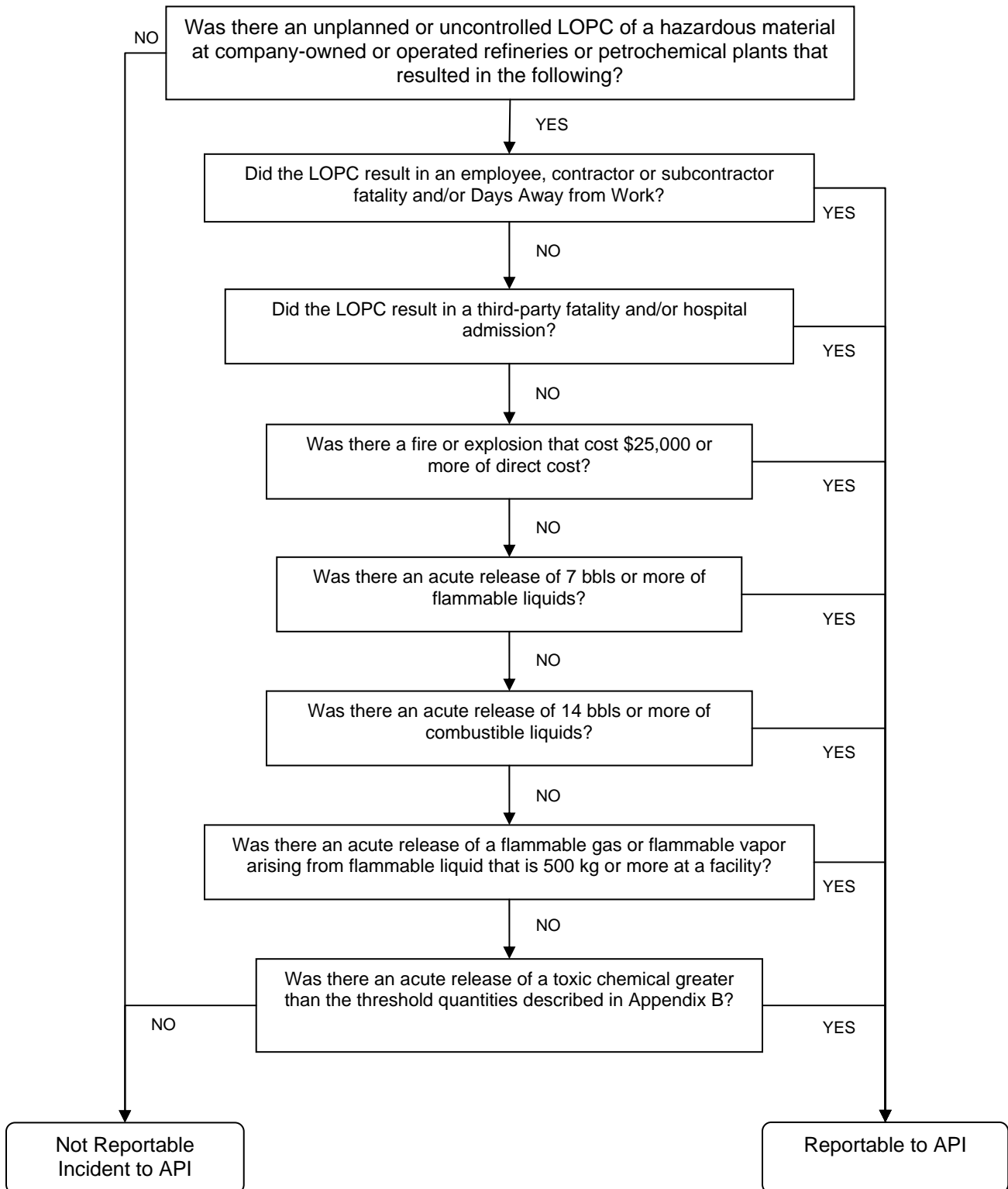
	<p>2.2—nonflammable, nontoxic gas with a threshold of 2,000 kg. (Note: the incident would not be reportable if it was released from a properly designed and operating safety device, since there is a specific exclusion provided, as long as the release did not result in (1) a liquid carryover that created a reportable PSI, or (2) on-site activation of a shelter-in-place response, or (3) public protective measures being taken.</p> <p>19. Same as above, except that the H₂S concentration is 50 vppm, rather than 10,000 vppm. The threshold remains unchanged at 25 kg for H₂S and 2,000 kg for CO₂. Calculations show that the release involved about 0.3 kg of H₂S. Therefore, the release is not PSI reportable since this amount is well below the 25 kg threshold for H₂S. However, the release is a reportable PSI since the CO₂ amount is well above the 2,000 kg threshold for CO₂.</p>
<p>DAYS AWAY FROM WORK INCIDENTS</p> <p>The inclusion of a “days away from work” incident (or fatality) as a reportable PSI depends upon it being caused by the loss of primary containment of a material.</p>	<p>20. An operator is walking, then slips and falls to the floor and suffers a lost time injury. The slip/fall is due to weather conditions, "chronic" oily floors and slippery shoes. This is not a reportable PSI. Personnel safety "slip/trip/fall" incidents that are not directly associated with evacuating from or responding to a LOPC are specifically excluded from PSI reporting.</p> <p>21. Same as above, except that the operator slipped and fell while responding to a small flammable liquid spill (e.g., less than 7 barrels in 1 hour). This would be PSI reportable since the operator was responding to a LOPC. It is reportable if the LOPC occurs on Company Premises and results in a lost time incident or fatality. For fatalities and lost time incidents, there is no release threshold amount.</p> <p>22. Same as above, except that the operator slipped and fell several hours after the incident had concluded. This would not be PSI reportable. The terms "evacuating from" and "responding to" in the reporting exclusion mean that the LOPC and associated emergency response activities are on-going. Slips/trip/falls after the event have concluded (such as "after-the-fact" clean-up and remediation) are excluded from PSI reporting.</p> <p>23. A scaffold builder experiences a lost time injury after falling from a scaffold ladder while evacuating from a LOPC on nearby equipment. This is a reportable PSI.</p> <p>24. An operator walks past an improperly designed steam trap. The steam trap releases and the operator's ankle is burned by the steam, resulting in a lost time injury. This is a reportable</p>

	<p>PSI because even though the LOPC was steam (vs. hydrocarbon), the physical state of the material was such that it caused a lost time injury. Utilities are within guideline scope.</p> <p>25. A reactor vessel has been intentionally purged with nitrogen. A contractor bypasses safety controls, enters the enclosure and dies. This is a reportable fatality, but not a reportable PSI since there was no unplanned or uncontrolled LOPC.</p> <p>26. Same as above, except that nitrogen inadvertently leaked into the enclosure. This would be a reportable PSI (and fatality) since there was a fatality associated with an unplanned LOPC.</p> <p>27. An operator responding to an H₂S alarm collapses and has a "days away from work" injury. If the alarm was triggered by an actual unplanned or uncontrolled H₂S LOPC, the event would be a reportable PSI. If the alarm was a false alarm, the event would not be a reportable PSI because there was no actual release.</p>
PIPELINES	<p>28. An underground pipeline leaks and releases 1,000 bbls of diesel (combustible material) on refinery property. The spill results in contaminated soil that is subsequently remediated. This is not a reportable PSI since there were no safety consequences. If the material resulted in "acute" surface pooling 14 bbls or greater (e.g., within "1 hour"), then the event would be PSI reportable and you would report the entire amount of released material (e.g., 1,000 bbls).</p>
MARINE TRANSPORT VESSELS	<p>29. A company operated Marine Transport Vessel has an on-board "acute" spill of combustible material greater than 14 bbls. The event is not PSI reportable since Marine Transport Vessel incidents are specifically excluded, except when the vessel is connected to the refinery or petrochemical facility for the purposes of crude or product transfer.</p> <p>30. A third-party barge is being pushed by a tug and hits the company dock. A barge compartment is breached and releases 50 bbl of diesel to the water. The event is not a reportable PSI since the marine vessel was not berthed at the dock and actively involved in crude or product transfer operations.</p>

<p>TRUCK AND RAIL</p>	<p>31. A company railcar derails and spills more than 7 bbls of gasoline while in transit. The incident is not PSI reportable since rail incidents off company property are specifically excluded.</p> <p>32. A third-party truck/trailer on Company Premises has an "acute" spill of gasoline greater than 7 bbls while unloading. The incident is PSI reportable since truck spills on company property while connected to a process are PSI reportable.</p>
<p>OFFICE BUILDING</p>	<p>33. There is a boiler fire at the Main Office complex, and direct cost damages totaled \$75,000. The incident is not PSI reportable since Office Building incidents are specifically excluded.</p>
<p>MAN-MACHINE INTERFACE INCIDENTS</p>	<p>34. An operations technician is injured while working around the finishing equipment in a polymers plant. The injury is caused by the mechanical, man-machine interface with the equipment. This would not be a reportable PSI because there was no LOPC of an acute release of flammable or combustible liquid, gas or vapor; or an acute release of toxic gas, vapor or aerosol.</p>

Appendix D

Process Safety Incident Reportability Logic



Appendix E

Listing of Chemicals – Sorted by Threshold Quantities

(NOTE: This list was compiled by the Center for Chemical Process Safety (CCPS) based on the UN Dangerous Goods List. API process safety reporting references this list only for determining acute releases of toxic gas, vapor or aerosol. For releases of flammable or combustible liquid, gas or vapor, refer to Section 3.2 of this Guide. The flammable and combustible chemicals are highlighted in this table to distinguish them from the toxic chemicals.)

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
2-Chloroethanal	5	11
3,5-Dichloro-2,4,6-trifluoropyridine	5	11
Acrolein, stabilized	5	11
Arsine	5	11
Bromine or Bromine solutions	5	11
Bromine pentafluoride	5	11
Chlorine pentafluoride	5	11
Cyanogen chloride, stabilized	5	11
Diborane	5	11
Dinitrogen tetroxide	5	11
Ethyl isocyanate	5	11
Ethyleneimine, stabilized	5	11
Fluorine, compressed	5	11
Hydrogen cyanide, stabilized <i>with less than 3 percent water</i>	5	11
Hydrogen selenide, anhydrous	5	11
Iron pentacarbonyl	5	11
Isobutyl isocyanate	5	11
Isopropyl isocyanate	5	11
Methoxymethyl isocyanate	5	11
Methyl chloroformate	5	11
Methyl chloromethyl ether	5	11
Methyl hydrazine	5	11
Methyl isocyanate	5	11
Methyl vinyl ketone, stabilized	5	11
Nickel carbonyl	5	11
Nitric oxide and dinitrogen tetroxide mixtures or Nitric oxide and nitrogen dioxide mixtures	5	11

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Nitric oxide, compressed	5	11
Nitrogen trioxide	5	11
n-Propyl isocyanate	5	11
Oxygen difluoride, compressed	5	11
Pentaborane	5	11
Phosgene	5	11
Phosphine	5	11
Selenium hexafluoride	5	11
Stibine	5	11
Sulfur tetrafluoride	5	11
Sulfuryl chloride	5	11
Tellurium hexafluoride	5	11
tert-Butyl isocyanate	5	11
2-Methyl-2-heptanethiol	25	55
Acetone cyanohydrin, stabilized	25	55
Allyl alcohol	25	55
Allyl chloroformate	25	55
Allylamine	25	55
Arsenic trichloride	25	55
Boron tribromide	25	55
Boron trifluoride	25	55
Boron trifluoride, compressed	25	55
Bromine chloride	25	55
Bromine trifluoride	25	55
Bromoacetone	25	55
Carbonyl fluoride	25	55
Chlorine	25	55
Chlorine trifluoride	25	55
Chloroacetone, stabilized	25	55
Chloroacetonitrile	25	55
Chloroacetyl chloride	25	55
Chloropicrin	25	55
Chloropicrin and methyl bromide mixtures	25	55
Chloropicrin and methyl chloride mixtures	25	55

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Chloropivaloyl chloride	25	55
Chlorosulfonic acid (<i>with or without sulfur trioxide</i>)	25	55
Crotonaldehyde, stabilized	25	55
Cyanogen	25	55
Cyclohexyl isocyanate	25	55
Dichlorosilane	25	55
Diketene, stabilized	25	55
Dimethyl sulfate	25	55
Dimethylhydrazine, symmetrical	25	55
Dimethylhydrazine, unsymmetrical	25	55
Ethyl chloroformate	25	55
Ethyl chlorothioformate	25	55
Ethyl phosphonothioic dichloride, anhydrous	25	55
Ethyl phosphonous dichloride, anhydrous <i>pyrophoric liquid</i>	25	55
Ethyl phosphorodichloridate	25	55
Ethyl dichloroarsine	25	55
Ethylene chlorohydrin	25	55
Ethylene dibromide	25	55
Germane	25	55
Hexachlorocyclopentadiene	25	55
Hexafluoroacetone	25	55
Hydrocyanic acid, aqueous solutions or Hydrogen cyanide, aqueous solutions <i>with not more than 20 percent hydrogen cyanide</i>	25	55
Hydrogen sulfide	25	55
Isobutyl chloroformate	25	55
Isopropyl chloroformate	25	55
Methacrylonitrile, stabilized	25	55
Methanesulfonyl chloride	25	55
Methyl bromide and ethylene dibromide mixtures, liquid	25	55
Methyl iodide	25	55
Methyl isothiocyanate	25	55

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Methyl phosphonic dichloride	25	55
Methyl phosphonous dichloride, <i>pyrophoric liquid</i>	25	55
Methylchlorosilane	25	55
Methyldichloroarsine	25	55
n-Butyl chloroformate	25	55
n-Butyl isocyanate	25	55
Nitric acid, red fuming	25	55
n-Propyl chloroformate	25	55
Perchloromethyl mercaptan	25	55
Perchloryl fluoride	25	55
Phenyl isocyanate	25	55
Phenyl mercaptan	25	55
Phenylcarbylamine chloride	25	55
Phosphorus oxychloride	25	55
Phosphorus pentafluoride	25	55
Phosphorus trichloride	25	55
sec-Butyl chloroformate	25	55
Silicon tetrafluoride	25	55
Sulfur chlorides	25	55
Sulfur trioxide, stabilized	25	55
Sulfuric acid, fuming <i>with 30 percent or more free sulfur trioxide</i>	25	55
Tetranitromethane	25	55
Thiophosgene	25	55
Titanium tetrachloride	25	55
Trichloroacetyl chloride	25	55
Trifluoroacetyl chloride	25	55
Trimethoxysilane	25	55
Trimethylacetyl chloride	25	55
Tungsten hexafluoride	25	55
Boron trichloride	100	220
Carbonyl sulfide	100	220
Coal gas, compressed	100	220
Hexaethyl tetraphosphate	100	220
Hydrogen bromide, anhydrous	100	220

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Hydrogen chloride, anhydrous	100	220
Hydrogen chloride, refrigerated liquid	100	220
Hydrogen fluoride, anhydrous	100	220
Hydrogen iodide, anhydrous	100	220
Methyl bromide	100	220
Methyl mercaptan	100	220
Nitrosyl chloride	100	220
Organic phosphate, mixed with compressed gas or Organic phosphate compound, mixed with compressed gas or Organic phosphorus compound, mixed with compressed gas	100	220
Parathion and compressed gas mixture	100	220
Sulfur dioxide	100	220
Trifluorochloroethylene, stabilized	100	220
Ammonia solution, <i>relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia</i>	200	440
Ammonia, anhydrous	200	440
Carbon monoxide and hydrogen mixture, compressed	200	440
Carbon monoxide, compressed	200	440
Carbon monoxide, refrigerated liquid (<i>cryogenic liquid</i>)	200	440
Ethylene oxide or Ethylene oxide with nitrogen <i>up to a total pressure of 1MPa (10 bar) at 50 degrees C</i>	200	440
Sulfuryl fluoride	200	440
1,1,1-Trifluoroethane or Refrigerant gas R 143a	500	1100
1,1-Difluoroethane or Refrigerant gas R 152a	500	1100
1,1-Difluoroethylene or Refrigerant gas R 1132a	500	1100
1-Chloro-1,1-difluoroethane or Refrigerant gas R 142b	500	1100
2,2-Dimethylpropane	500	1100
Acetylene, dissolved	500	1100
Bromotrifluoroethylene	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u>	<u>TQ Quantity,</u>
	<u>kg</u>	<u>lbs</u>
Butadienes, stabilized	500	1100
Butane <i>see also</i> Petroleum gases, liquefied	500	1100
Butylene <i>see also</i> Petroleum gases, liquefied	500	1100
Compressed gas, flammable, n.o.s.	500	1100
Cyclobutane	500	1100
Cyclopropane	500	1100
Deuterium, compressed	500	1100
Devices, small, hydrocarbon gas powered or Hydrocarbon gas refills for small devices <i>with release device</i>		
Difluoromethane or Refrigerant gas R 32	500	1100
Dimethyl ether	500	1100
Dimethylamine, anhydrous	500	1100
Ethane	500	1100
Ethane, refrigerated liquid	500	1100
Ethane-Propane mixture, refrigerated liquid	500	1100
Ethyl chloride	500	1100
Ethyl fluoride or Refrigerant gas R161	500	1100
Ethyl methyl ether	500	1100
Ethylacetylene, stabilized	500	1100
Ethylamine	500	1100
Ethylene	500	1100
Ethylene oxide and carbon dioxide mixtures <i>with more than 9 percent but not more than 87 percent ethylene oxide</i>		
Ethylene, acetylene and propylene in mixture, refrigerated liquid <i>with at least 71.5 percent ethylene with not more than 22.5 percent acetylene and not more than 6 percent propylene</i>	500	1100
Ethylene, refrigerated liquid (<i>cryogenic liquid</i>)	500	1100
Hydrocarbon gas mixture, compressed, n.o.s.	500	1100
Hydrocarbon gas mixture, liquefied, n.o.s.	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u>	<u>TQ Quantity,</u>
	<u>kg</u>	<u>lbs</u>
Hydrogen and Methane mixtures, compressed	500	1100
Hydrogen, compressed	500	1100
Hydrogen, refrigerated liquid (<i>cryogenic liquid</i>)	500	1100
Insecticide gases, flammable, n.o.s.	500	1100
Isobutane <i>see also</i> Petroleum gases, liquefied	500	1100
Isobutylene <i>see also</i> Petroleum gases, liquefied	500	1100
Liquefied gas, flammable, n.o.s.	500	1100
Methane, compressed <i>or</i> Natural gas, compressed (<i>with high methane content</i>)	500	1100
Methane, refrigerated liquid (<i>cryogenic liquid</i>) <i>or</i> Natural gas, refrigerated liquid (<i>cryogenic liquid</i>), <i>with high methane content</i>	500	1100
Methyl acetylene and propadiene mixtures, stabilized	500	1100
Methyl chloride and methylene chloride mixtures	500	1100
Methyl chloride, <i>or</i> Refrigerant gas R 40	500	1100
Methyl fluoride, <i>or</i> Refrigerant gas R 41	500	1100
Methylamine, anhydrous	500	1100
Perfluoro(ethyl vinyl ether)	500	1100
Perfluoro(methyl vinyl ether)	500	1100
Petroleum gases, liquefied <i>or</i> Liquefied petroleum gas	500	1100
Propadiene, stabilized	500	1100
Propane <i>see also</i> Petroleum gases, liquefied	500	1100
Propylene <i>see also</i> Petroleum gases, liquefied	500	1100
Refrigerant gases, n.o.s. <i>or</i> Dispersant gases, n.o.s.	500	1100
Refrigerating machines, <i>containing flammable, non-toxic, liquefied gas</i>	500	1100
Silane	500	1100
Tetrafluoroethylene, stabilized	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u>	<u>TQ Quantity,</u>
	<u>kg</u>	<u>lbs</u>
Trimethylamine, anhydrous	500	1100
Vinyl bromide, stabilized	500	1100
Vinyl chloride, stabilized	500	1100
Vinyl fluoride, stabilized	500	1100
Vinyl methyl ether, stabilized	500	1100
1-Pentene (<i>n-amylene</i>)	500	1100
2-Chloropropane	500	1100
2-Chloropropene	500	1100
2-Methyl-1-butene	500	1100
3-Methyl-1-butene	500	1100
Acetaldehyde	500	1100
Acrylonitrile, stabilized	500	1100
Aldehydes, flammable, toxic, n.o.s.	500	1100
Aldehydes, n.o.s.	500	1100
Allyl bromide	500	1100
Allyl chloride	500	1100
Allyl formate	500	1100
Amines, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s.	500	1100
Butyl nitrites	500	1100
Carbon disulfide	500	1100
Chloroprene, stabilized	500	1100
Coating solution (<i>includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining</i>)	500	1100
Crotonylene	500	1100
Diethyl ether or Ethyl ether	500	1100
Divinyl ether, stabilized	500	1100
Ethyl mercaptan	500	1100
Ethyl nitrite solutions	500	1100
Fuel, aviation, turbine engine	500	1100
Furan	500	1100
Hydrocarbons, liquid, n.o.s	500	1100
Isopentenes	500	1100
Isoprene, stabilized	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u>	<u>TQ Quantity,</u>
	<u>kg</u>	<u>lbs</u>
Isopropylamine	500	1100
Ketones, liquid, n.o.s.	500	1100
Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixture, liquid, flammable, n.o.s.	500	1100
Methyl formate	500	1100
Methyltrichlorosilane	500	1100
Nitriles, flammable, toxic, n.o.s.	500	1100
Pentanes	500	1100
Petroleum crude oil	500	1100
Petroleum distillates, n.o.s. or Petroleum products, n.o.s.	500	1100
Petroleum oil	500	1100
Propylene oxide	500	1100
Propyleneimine, stabilized	500	1100
Resin solution, <i>flammable</i>	500	1100
Shale oil	500	1100
Tetramethylsilane	500	1100
Trimethylamine, aqueous solutions <i>with not more than 50 percent trimethylamine by mass</i>	500	1100
Turpentine substitute	500	1100
Vinyl ethyl ether, stabilized	500	1100
Vinylidene chloride, stabilized	500	1100
Vinyltrichlorosilane, stabilized	500	1100
Zirconium suspended in a liquid	500	1100
2-Amino-4,6-Dinitrophenol, wetted <i>with not less than 20 percent water by mass</i>	500	1100
4-Nitrophenylhydr azine, <i>with not less than 30% water, by mass</i>	500	1100
Alkali metal alloys, liquid, n.o.s.	500	1100
Alkali metal amalgam, liquid	500	1100
Alkali metal amalgam, solid	500	1100
Alkali metal dispersions, or Alkaline earth metal dispersions	500	1100
Alkaline earth metal amalgams	500	1100
Aluminum alkyl halides	500	1100
Aluminum alkyl hydrides	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Aluminum alkyls	500	1100
Aluminum borohydride <i>or</i> Aluminum borohydride in devices	500	1100
Aluminum hydride	500	1100
Aluminum phosphide	500	1100
Ammonium picrate, wetted <i>with not less than 10 percent water, by mass</i>	500	1100
Barium alloys, pyrophoric	500	1100
Barium azide, wetted <i>with not less than 50 percent water, by mass</i>	500	1100
Boron trifluoride dimethyl etherate	500	1100
Calcium carbide	500	1100
Calcium hydride	500	1100
Calcium phosphide	500	1100
Calcium, pyrophoric <i>or</i> Calcium alloys, pyrophoric	500	1100
Cesium <i>or</i> Caesium	500	1100
Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	500	1100
Diethylzinc	500	1100
Dimethylzinc	500	1100
Dinitrophenol, wetted <i>with not less than 15 percent water, by mass</i>	500	1100
Dinitrophenolates, wetted <i>with not less than 15 percent water, by mass</i>	500	1100
Dinitroresorcinol, wetted <i>with not less than 15 percent water, by mass</i>	500	1100
Dipicryl sulfide, wetted <i>with not less than 10 percent water, by mass</i>	500	1100
Ethylchlorosilane	500	1100
Hafnium powder, dry	500	1100
Lithium	500	1100
Lithium alkyls	500	1100
Lithium aluminum hydride	500	1100
Lithium aluminum hydride, ethereal	500	1100
Lithium borohydride	500	1100
Lithium hydride	500	1100
Lithium nitride	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u>	<u>TQ Quantity,</u>
	<u>kg</u>	<u>lbs</u>
Magnesium alkyls	500	1100
Magnesium aluminum phosphide	500	1100
Magnesium diphenyl	500	1100
Magnesium hydride	500	1100
Magnesium phosphide	500	1100
Magnesium, powder or Magnesium alloys, powder	500	1100
Metal alkyl halides, water-reactive n.o.s. or Metal aryl halides, water-reactive, n.o.s.	500	1100
Metal alkyl hydrides, water-reactive, n.o.s. or Metal aryl hydrides, water-reactive, n.o.s.	500	1100
Metal alkyls, water-reactive, n.o.s. or Metal aryls, water-reactive n.o.s.	500	1100
Metal catalyst, dry	500	1100
Metal hydrides, water reactive, n.o.s.	500	1100
Metallic substance, water-reactive, n.o.s.	500	1100
Metallic substance, water-reactive, self-heating, n.o.s.	500	1100
Methyl magnesium bromide, in ethyl ether	500	1100
Methyldichlorosilane	500	1100
Nitroguanidine, wetted or Picrite, wetted with not less than 20 percent water, by mass	500	1100
Nitrostarch, wetted with not less than 20 percent water, by mass	500	1100
Organometallic compound or Compound solution or Compound dispersion, water-reactive, flammable, n.o.s.	500	1100
Organometallic compound, solid, water-reactive, flammable, n.o.s.	500	1100
Phosphorus white, molten	500	1100
Phosphorus, white dry or Phosphorus, white, under water or Phosphorus white, in solution or Phosphorus yellow dry or Phosphorus, yellow, under water or Phosphorus, yellow, in solution	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u>	<u>TQ Quantity,</u>
	<u>kg</u>	<u>lbs</u>
Potassium	500	1100
Potassium borohydride	500	1100
Potassium phosphide	500	1100
Potassium sodium alloys	500	1100
Potassium, metal alloys	500	1100
Pyrophoric liquid, inorganic, n.o.s.	500	1100
Pyrophoric liquids, organic, n.o.s.	500	1100
Pyrophoric metals, n.o.s., or Pyrophoric alloys, n.o.s.	500	1100
Pyrophoric organometallic compound, water-reactive, n.o.s.	500	1100
Pyrophoric solid, inorganic, n.o.s.	500	1100
Pyrophoric solids, organic, n.o.s.	500	1100
Rubidium	500	1100
Silver picrate, wetted <i>with not less than 30 percent water, by mass</i>	500	1100
Sodium	500	1100
Sodium borohydride	500	1100
Sodium dinitro-o-cresolate, wetted <i>with not less than 15 percent water, by mass</i>	500	1100
Sodium dinitro-o-cresolate, wetted, <i>with not less than 10% water by mass</i>	500	1100
Sodium hydride	500	1100
Sodium phosphide	500	1100
Sodium picramate, wetted <i>with not less than 20 percent water, by mass</i>	500	1100
Stannic phosphide	500	1100
Strontium phosphide	500	1100
tert-Butyl hypochlorite	500	1100
Titanium powder, dry	500	1100
Titanium trichloride, pyrophoric or Titanium trichloride mixtures, pyrophoric	500	1100
Tributylphosphane	500	1100
Trichlorosilane	500	1100
Trinitrobenzene, wetted <i>with not less than 30 percent water, by mass</i>	500	1100
Trinitrobenzene, wetted, <i>with not less than 10% water by mass</i>	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u>	<u>TQ Quantity,</u>
	<u>kg</u>	<u>lbs</u>
Trinitrobenzoic acid, wetted <i>with not less than 30 percent water, by mass</i>	500	1100
Trinitrobenzoic acid, wetted, <i>with not less than 10% water by mass</i>	500	1100
Trinitrochlorobenzene (picryl chloride), wetted, <i>with not less than 10% water by mass</i>	500	1100
Trinitrophenol (picric acid), wetted, <i>with not less than 10% water by mass</i>	500	1100
Trinitrophenol, wetted <i>with not less than 30 percent water, by mass</i>	500	1100
Trinitrotoluene (TNT), wetted, <i>with not less than 10% water by mass</i>	500	1100
Trinitrotoluene, wetted <i>with not less than 30 percent water, by mass</i>	500	1100
Urea nitrate, wetted <i>with not less than 20 percent water, by mass</i>	500	1100
Urea nitrate, wetted, <i>with not less than 10% water by mass</i>	500	1100
Water-reactive liquid, corrosive, n.o.s.	500	1100
Water-reactive liquid, n.o.s.	500	1100
Water-reactive liquid, toxic, n.o.s.	500	1100
Water-reactive solid, corrosive, n.o.s.	500	1100
Water-reactive solid, flammable, n.o.s.	500	1100
Water-reactive solid, n.o.s.	500	1100
Water-reactive solid, self-heating, n.o.s.	500	1100
Water-reactive solid, toxic, n.o.s.	500	1100
Zinc phosphide	500	1100
Zinc powder or Zinc dust	500	1100
Zirconium picramate, wetted <i>with not less than 20 percent water, by mass</i>	500	1100
Zirconium powder, dry	500	1100
Hydrogen peroxide, stabilized or Hydrogen peroxide aqueous solutions, stabilized <i>with more than 60 percent hydrogen peroxide</i>	500	1100
Iodine pentafluoride	500	1100
Oxidizing liquid, corrosive, n.o.s.	500	1100
Oxidizing liquid, n.o.s.	500	1100
Oxidizing liquid, toxic, n.o.s.	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Oxidizing solid, corrosive, n.o.s.	500	1100
Oxidizing solid, flammable, n.o.s.	500	1100
Oxidizing solid, n.o.s.	500	1100
Oxidizing solid, toxic, n.o.s.	500	1100
Perchloric acid <i>with more than 50 percent but not more than 72 percent acid, by mass</i>	500	1100
Potassium peroxide	500	1100
Potassium superoxide	500	1100
Sodium peroxide	500	1100
Sodium superoxide	500	1100
Alkaloids, liquid, n.o.s., or Alkaloid salts, liquid, n.o.s.	500	1100
Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. <i>poisonous</i>	500	1100
Arsenic acid, liquid	500	1100
Arsenic compounds, liquid, n.o.s <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s</i>	500	1100
Arsenic compounds, solid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>	500	1100
Barium cyanide	500	1100
Bromobenzyl cyanides, <i>liquid</i>	500	1100
Bromobenzyl cyanides, <i>solid</i>	500	1100
Brucine	500	1100
Cadmium compounds	500	1100
Calcium cyanide	500	1100
Cyanide solutions, n.o.s.	500	1100
Cyanides, inorganic, solid, n.o.s.	500	1100
Cyanogen bromide	500	1100
Dichlorodimethyl ether, symmetrical	500	1100
Diphenylamine chloroarsine	500	1100
Diphenylchloroarsine, liquid	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Diphenylchloroarsine, solid	500	1100
Epibromohydrin	500	1100
Fluoroacetic acid	500	1100
Mercuric potassium cyanide	500	1100
Mercury compounds, liquid, n.o.s.	500	1100
Mercury compounds, solid, n.o.s.	500	1100
Methyl chloroacetate	500	1100
Methyl orthosilicate	500	1100
Methylhydrazine	500	1100
Motor fuel anti-knock mixtures	500	1100
Nicotine compounds, liquid, n.o.s. <i>or</i>	500	1100
Nicotine preparations, liquid, n.o.s.		
Nicotine compounds, solid, n.o.s. <i>or</i>	500	1100
Nicotine preparations, solid, n.o.s.		
Organometallic compound, toxic n.o.s.	500	1100
Organophosphorus compound, toxic n.o.s.	500	1100
Organotin compounds, liquid, n.o.s.	500	1100
Organotin compounds, solid, n.o.s.	500	1100
Osmium tetroxide	500	1100
Phenylmercuric compounds, n.o.s.	500	1100
Potassium cyanide	500	1100
Potassium fluoroacetate	500	1100
Selenates <i>or</i> Selenites	500	1100
Selenium compound, n.o.s.	500	1100
Sodium cuprocyanide, solid	500	1100
Sodium cuprocyanide, solution	500	1100
Sodium cyanide	500	1100
Sodium fluoroacetate	500	1100
Strychnine <i>or</i> Strychnine salts	500	1100
Tellurium compound, n.o.s.	500	1100
Vanadium compound, n.o.s.	500	1100
Zinc cyanide	500	1100
Alkylphenols, liquid, n.o.s. (<i>including C2- C12 homologues</i>)	500	1100
Alkylphenols, solid, n.o.s. (<i>including C2- C12 homologues</i>)	500	1100

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Amines, liquid, corrosive, flammable, n.o.s. or Polyamines, liquid, corrosive, flammable, n.o.s.	500	1100
Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s.	500	1100
Amines, solid, corrosive, n.o.s., or Polyamines, solid, corrosive n.o.s.	500	1100
Benzyl chloroformate	500	1100
Boron trifluoride diethyl etherate	500	1100
Chromium oxychloride	500	1100
Chromosulfuric acid	500	1100
Fluorosulfonic acid	500	1100
Hydrazine aqueous solution, with more than 37% hydrazine, by mass	500	1100
Hydrazine, anhydrous	500	1100
Hydrofluoric acid and Sulfuric acid mixtures	500	1100
Hydrofluoric acid, with more than 60 percent strength	500	1100
Morpholine	500	1100
Nitrating acid mixtures with more than 50 percent nitric acid	500	1100
Nitrating acid mixtures, spent with more than 50 percent nitric acid	500	1100
Nitric acid other than red fuming, with more than 70 percent nitric acid	500	1100
Nitrohydrochloric acid	500	1100
Piperidine	500	1100
Selenic acid	500	1100
Selenium oxychloride	500	1100
Sulfuric acid, fuming with less than 30 percent free sulfur trioxide	500	1100
Thionyl chloride	500	1100
Trifluoroacetic acid	500	1100
Vanadium tetrachloride	500	1100
1,1-Dichloroethane	1000	2200
1,1-Dimethoxyethane	1000	2200
1,2,3,6-Tetrahydropyridine	1000	2200
1,2-Butylene oxide, stabilized	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
1,2-Di-(dimethylamino)ethane	1000	2200
1,2-Dichloroethylene	1000	2200
1,2-Dichloropropane	1000	2200
1,2-Dimethoxyethane	1000	2200
1,3-Dimethylbutylamine	1000	2200
1-Bromobutane	1000	2200
1-Chloropropane	1000	2200
1-Ethylpiperidine	1000	2200
1-Hexene	1000	2200
1-Methylpiperidine	1000	2200
2,3-Dihydropyran	1000	2200
2,3-Dimethylbutane	1000	2200
2-Bromobutane	1000	2200
2-Bromoethyl ethyl ether	1000	2200
2-Bromopentane	1000	2200
2-Dimethylaminoacetonitrile	1000	2200
2-Ethylbutyraldehyde	1000	2200
2-Iodobutane	1000	2200
2-Methyl-2-butene	1000	2200
2-Methylbutanal	1000	2200
2-Methylfuran	1000	2200
3,3-Diethoxypropene	1000	2200
3-Bromopropyne	1000	2200
3-Methylbutan-2-one	1000	2200
4-Methylmorpholine or n-methylmorpholine	1000	2200
Acetal	1000	2200
Acetone	1000	2200
Acetone oils	1000	2200
Acetonitrile	1000	2200
Acetyl chloride	1000	2200
Aldehydes, flammable, toxic, n.o.s.	1000	2200
Aldehydes, n.o.s.	1000	2200
Allyl acetate	1000	2200
Allyl ethyl ether	1000	2200
Allyl iodide	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u>	<u>TQ Quantity,</u>
	<u>kg</u>	<u>lbs</u>
alpha-Methylvaleraldehyde	1000	2200
Amines, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s.	1000	2200
Amyl chlorides	1000	2200
Amyl mercaptans	1000	2200
Amyl nitrites	1000	2200
Amylamines	1000	2200
Benzene	1000	2200
Benzotrifluoride	1000	2200
Bicyclo 2,2,1 hepta-2,5-diene, stabilized or 2,5-Norbornadiene, stabilized	1000	2200
Bromomethylpropanes	1000	2200
Bromopropanes	1000	2200
Butanedione	1000	2200
Butanols	1000	2200
Butyl acetates	1000	2200
Butyl mercaptans	1000	2200
Butyl methyl ether	1000	2200
Butyl nitrites	1000	2200
Butyl vinyl ether, stabilized	1000	2200
Butyraldehyde	1000	2200
Butyronitrile	1000	2200
Butyryl chloride	1000	2200
Chlorobutanes	1000	2200
Chloromethyl ethyl ether	1000	2200
Chlorosilanes, flammable, corrosive, n.o.s.	1000	2200
Coal tar distillates, flammable	1000	2200
Coating solution (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)	1000	2200
Cycloheptane	1000	2200
Cycloheptatriene	1000	2200
Cycloheptene	1000	2200
Cyclohexane	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Cyclohexene	1000	2200
Cyclooctatetraene	1000	2200
Cyclopentane	1000	2200
Cyclopentene	1000	2200
Diacetone alcohol	1000	2200
Diallylamine	1000	2200
Diallylether	1000	2200
Dichloropropenes	1000	2200
Diethoxymethane	1000	2200
Diethyl ketone	1000	2200
Diethyl sulfide	1000	2200
Diethylamine	1000	2200
Diisobutylene, isomeric compounds	1000	2200
Diisopropyl ether	1000	2200
Diisopropylamine	1000	2200
Dimethyl carbonate	1000	2200
Dimethyl disulfide	1000	2200
Dimethyl sulfide	1000	2200
Dimethylamine solution	1000	2200
Dimethylcyclohexanes	1000	2200
Dimethyldichlorosilane	1000	2200
Dimethyldiethoxysilane	1000	2200
Dimethyldioxanes	1000	2200
Dimethyl-N-propylamine	1000	2200
Di-n-propyl ether	1000	2200
Dioxane	1000	2200
Dioxolane	1000	2200
Dipropylamine	1000	2200
Esters, n.o.s.	1000	2200
Ethanol or Ethyl alcohol or Ethanol solutions or Ethyl alcohol solutions	1000	2200
Ethers, n.o.s.	1000	2200
Ethyl acetate	1000	2200
Ethyl acrylate, stabilized	1000	2200
Ethyl borate	1000	2200
Ethyl butyl ether	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Ethyl crotonate	1000	2200
Ethyl formate	1000	2200
Ethyl isobutyrate	1000	2200
Ethyl methacrylate, stabilized	1000	2200
Ethyl methyl ketone or Methyl ethyl ketone	1000	2200
Ethyl propionate	1000	2200
Ethyl propyl ether	1000	2200
Ethylamine, aqueous solution <i>with not less than 50 percent but not more than 70 percent ethylamine</i>	1000	2200
Ethylbenzene	1000	2200
Ethylene dichloride	1000	2200
Ethylene glycol diethyl ether	1000	2200
Ethyltrichlorosilane	1000	2200
Extracts, aromatic, liquid	1000	2200
Extracts, flavoring, liquid	1000	2200
Fluorobenzene	1000	2200
Fluorotoluenes	1000	2200
Fuel, aviation, turbine engine	1000	2200
Fusel oil	1000	2200
Gasohol <i>gasoline mixed with ethyl alcohol, with not more than 20 percent alcohol</i>	1000	2200
Gasoline	1000	2200
Glycidaldehyde	1000	2200
Heptanes	1000	2200
Hexadienes	1000	2200
Hexamethyleneimine	1000	2200
Hexanes	1000	2200
Hydrocarbons, liquid, n.o.s.	1000	2200
Iodomethylpropanes	1000	2200
Isobutyl acetate	1000	2200
Isobutyl formate	1000	2200
Isobutylamine	1000	2200
Isobutyraldehyde or Isobutyl aldehyde	1000	2200
Isobutyronitrile	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Isobutyryl chloride	1000	2200
Isoheptenes	1000	2200
Isohexenes	1000	2200
Isooctenes	1000	2200
Isopropanol or Isopropyl alcohol	1000	2200
Isopropenyl acetate	1000	2200
Isopropyl acetate	1000	2200
Isopropyl isobutyrate	1000	2200
Isopropyl nitrate	1000	2200
Isopropyl propionate	1000	2200
Ketones, liquid, n.o.s.	1000	2200
Medicine, liquid, flammable, toxic, n.o.s.	1000	2200
Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixture, liquid, flammable, n.o.s.	1000	2200
Mercaptans, liquid, flammable, toxic, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	1000	2200
Methacrylaldehyde, stabilized	1000	2200
Methanol	1000	2200
Methanol	1000	2200
Methyl acetate	1000	2200
Methyl acrylate, stabilized	1000	2200
Methyl allyl chloride	1000	2200
Methyl butyrate	1000	2200
Methyl isobutyl ketone	1000	2200
Methyl isopropenyl ketone, stabilized	1000	2200
Methyl isovalerate	1000	2200
Methyl methacrylate monomer, stabilized	1000	2200
Methyl propionate	1000	2200
Methyl propyl ether	1000	2200
Methyl propyl ketone	1000	2200
Methyl tert-butyl ether	1000	2200
Methylal	1000	2200
Methylamine, aqueous solution	1000	2200
Methylcyclohexane	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Methylcyclopentane	1000	2200
Methylpentadienes	1000	2200
Methyltetrahydrofuran	1000	2200
n-Butyl formate	1000	2200
n-Butylamine	1000	2200
n-Heptene	1000	2200
Nitriles, flammable, toxic, n.o.s.	1000	2200
Nitrocellulose, solution, flammable <i>with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose</i>	1000	2200
Nitroglycerin mixture, desensitized, liquid, n.o.s. <i>with not more than 30% nitroglycerin, by mass</i>	1000	2200
Nitroglycerin solution in alcohol <i>with not more than 1 percent nitroglycerin</i>	1000	2200
Nitroglycerin, solution in alcohol, <i>with more than 1 percent but not more than 5 percent nitroglycerin</i>	1000	2200
Nitromethane	1000	2200
N-Methylbutylamine	1000	2200
n-Propanol or Propyl alcohol, normal	1000	2200
n-Propyl acetate	1000	2200
n-Propyl nitrate	1000	2200
Octadiene	1000	2200
Octanes	1000	2200
Pentanes	1000	2200
Pentanols	1000	2200
Perfumery products <i>with flammable solvents</i>	1000	2200
Petroleum crude oil	1000	2200
Petroleum distillates, n.o.s. or Petroleum products, n.o.s.	1000	2200
Petroleum oil	1000	2200
Propanethiols	1000	2200
Propionaldehyde	1000	2200
Propionitrile	1000	2200
Propionyl chloride	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Propyl formates	1000	2200
Propylamine	1000	2200
Pyridine	1000	2200
Pyrrolidine	1000	2200
Resin solution, <i>flammable</i>	1000	2200
Rosin oil	1000	2200
Rubber solution	1000	2200
Shale oil	1000	2200
Sodium methylate solutions <i>in alcohol</i>	1000	2200
Tars, liquid <i>including road asphalt and oils, bitumen and cut backs</i>	1000	2200
Tetrahydrofuran	1000	2200
Tetrahydrothiophene	1000	2200
Thioacetic acid	1000	2200
Thiophene	1000	2200
Tinctures, medicinal	1000	2200
Toluene	1000	2200
Triethylamine	1000	2200
Triisopropyl borate	1000	2200
Trimethyl borate	1000	2200
Trimethylamine, aqueous solutions <i>with not more than 50 percent trimethylamine by mass</i>	1000	2200
Trimethylchlorosilane	1000	2200
Tripropylene	1000	2200
Turpentine substitute	1000	2200
Valeraldehyde	1000	2200
Vinyl acetate, stabilized	1000	2200
Vinyl butyrate, stabilized	1000	2200
Vinyl isobutyl ether, stabilized	1000	2200
Wood preservatives, liquid	1000	2200
Xylenes	1000	2200
Zirconium suspended in a liquid	1000	2200
9-Phosphabicyclononanes <i>or</i> Cyclooctadiene phosphines	1000	2200
Alkali metal alcoholates, self-heating, corrosive, n.o.s.	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Alkali metal amides	1000	2200
Alkaline earth metal alcoholates, n.o.s.	1000	2200
Alkaline earth metal alloys, n.o.s.	1000	2200
Aluminum carbide	1000	2200
Aluminum ferrosilicon powder	1000	2200
Aluminum powder, coated	1000	2200
Aluminum powder, uncoated	1000	2200
Aluminum smelting by-products or Aluminum remelting by-products	1000	2200
Azodicarbonamide	1000	2200
Barium	1000	2200
Batteries, containing sodium	1000	2200
Calcium	1000	2200
Calcium carbide	1000	2200
Calcium dithionite or Calcium hydrosulfite	1000	2200
Calcium silicide	1000	2200
Carbon, <i>animal or vegetable origin</i>	1000	2200
Cells, containing sodium	1000	2200
Cerium, <i>slabs, ingots, or rods</i>	1000	2200
Cerium, <i>turnings or gritty powder</i>	1000	2200
Decaborane	1000	2200
Ferrocium	1000	2200
Fish meal, unstabilized or Fish scrap, unstabilized	1000	2200
Hafnium powder, dry	1000	2200
Hafnium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i>	1000	2200
Isosorbide dinitrate mixture <i>with not less than 60 percent lactose, mannose, starch or calcium hydrogen phosphate</i>	1000	2200
Lead phosphite, dibasic	1000	2200
Lithium ferrosilicon	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Lithium hydride, fused solid	1000	2200
Lithium silicon	1000	2200
Magnesium diamide	1000	2200
Magnesium silicide	1000	2200
Magnesium, powder or Magnesium alloys, powder	1000	2200
Metal catalyst, dry	1000	2200
Metal catalyst, wetted with a visible excess of liquid	1000	2200
Metal hydrides, flammable, n.o.s.	1000	2200
Metal hydrides, water reactive, n.o.s.	1000	2200
Metal powder, self-heating, n.o.s.	1000	2200
Metal powders, flammable, n.o.s.	1000	2200
Metal salts of organic compounds, flammable, n.o.s.	1000	2200
Metallic substance, water-reactive, n.o.s.	1000	2200
Metallic substance, water-reactive, self-heating, n.o.s.	1000	2200
Nitrocellulose membrane filters, with not more than 12.6% nitrogen, by dry mass	1000	2200
Nitrocellulose with alcohol with not less than 25 percent alcohol by mass, and with not more than 12.6 percent nitrogen, by dry mass	1000	2200
Nitrocellulose with water with not less than 25 percent water, by mass	1000	2200
Nitrocellulose, with not more than 12.6 percent nitrogen, by dry mass, or Nitrocellulose mixture with pigment or Nitrocellulose mixture with plasticizer or Nitrocellulose mixture with pigment and plasticizer	1000	2200
Nitroglycerin mixture, desensitized, solid, n.o.s. with more than 2 percent but not more than 10 percent nitroglycerin, by mass	1000	2200
Organic pigments, self-heating	1000	2200
Organometallic compound or Compound solution or Compound dispersion, water-reactive, flammable,	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
n.o.s.		
Organometallic compound, solid, water-reactive, flammable, n.o.s	1000	2200
Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s. <i>with more than 10 percent but not more than 20 percent PETN, by mass</i>	1000	2200
Phosphorus heptasulfide, <i>free from yellow or white phosphorus</i>	1000	2200
Phosphorus pentasulfide, <i>free from yellow or white phosphorus</i>	1000	2200
Phosphorus sesquisulfide, <i>free from yellow or white phosphorus</i>	1000	2200
Phosphorus trisulfide, <i>free from yellow or white phosphorus</i>	1000	2200
p-Nitrosodimethylaniline	1000	2200
Potassium dithionite or Potassium hydrosulfite	1000	2200
Potassium sulfide, anhydrous or Potassium sulfide <i>with less than 30 percent water of crystallization</i>	1000	2200
Rubber scrap or Rubber shoddy, powdered or granulated, <i>not exceeding 840 microns and rubber content exceeding 45%</i>	1000	2200
Sodium aluminum hydride	1000	2200
Sodium dithionite or Sodium hydrosulfite	1000	2200
Sodium hydrosulfide, <i>with less than 25 percent water of crystallization</i>	1000	2200
Sodium methylate	1000	2200
Sodium sulfide, anhydrous or Sodium sulfide <i>with less than 30 percent water of crystallization</i>	1000	2200
Solids containing flammable liquid, n.o.s.	1000	2200
Thiourea dioxide	1000	2200
Titanium hydride	1000	2200
Titanium powder, dry	1000	2200
Titanium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a)</i>	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
<i>mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i>		
Water-reactive liquid, corrosive, n.o.s.	1000	2200
Water-reactive liquid, n.o.s.	1000	2200
Water-reactive liquid, toxic, n.o.s.	1000	2200
Water-reactive solid, corrosive, n.o.s.	1000	2200
Water-reactive solid, flammable, n.o.s.	1000	2200
Water-reactive solid, n.o.s.	1000	2200
Water-reactive solid, self-heating, n.o.s.	1000	2200
Water-reactive solid, toxic, n.o.s.	1000	2200
Water-reactive, solid, oxidizing, n.o.s.	1000	2200
Xanthates	1000	2200
Zinc powder or Zinc dust	1000	2200
Zirconium hydride	1000	2200
Zirconium powder, dry	1000	2200
Zirconium powder, wetted with not less than 25 percent water (a visible excess of water must be present) (a)	1000	2200
<i>mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i>		
Ammonium dichromate	1000	2200
Ammonium nitrate emulsion or Ammonium nitrate suspension or Ammonium nitrate gel, intermediate for blasting explosives	1000	2200
Ammonium perchlorate	1000	2200
Barium bromate	1000	2200
Barium chlorate	1000	2200
Barium hypochlorite with more than 22 percent available chlorine	1000	2200
Barium nitrate	1000	2200
Barium perchlorate	1000	2200
Barium permanganate	1000	2200
Barium peroxide	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Beryllium nitrate	1000	2200
Bromates, inorganic, aqueous solution, n.o.s.	1000	2200
Bromates, inorganic, n.o.s.	1000	2200
Calcium chlorate	1000	2200
Calcium chlorate aqueous solution	1000	2200
Calcium chlorite	1000	2200
Calcium hypochlorite, dry or Calcium hypochlorite mixtures dry with more than 39 percent available chlorine (8.8 percent available oxygen)	1000	2200
Calcium hypochlorite, hydrated or Calcium hypochlorite, hydrated mixtures, with not less than 5.5 percent but not more than 16 percent water	1000	2200
Calcium perchlorate	1000	2200
Calcium permanganate	1000	2200
Calcium peroxide	1000	2200
Chlorate and borate mixtures	1000	2200
Chlorate and magnesium chloride mixtures	1000	2200
Chlorates, inorganic, aqueous solution, n.o.s.	1000	2200
Chlorates, inorganic, n.o.s.	1000	2200
Chloric acid aqueous solution, with not more than 10 percent chloric acid	1000	2200
Chlorine dioxide, hydrate, frozen	1000	2200
Chlorites, inorganic, n.o.s.	1000	2200
Chromium trioxide, anhydrous	1000	2200
Copper chlorate	1000	2200
Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts	1000	2200
Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water and not more than 5 percent peroxyacetic acid	1000	2200
Hydrogen peroxide, aqueous solutions with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary)	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Hydrogen peroxide, aqueous solutions <i>with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)</i>	1000	2200
Hypochlorites, inorganic, n.o.s.	1000	2200
Lead nitrate	1000	2200
Lead perchlorate, solid	1000	2200
Lead perchlorate, solution	1000	2200
Lithium hypochlorite, dry <i>with more than 39% available chlorine (8.8% available oxygen)</i> or Lithium hypochlorite mixtures, dry <i>with more than 39% available chlorine (8.8% available oxygen)</i>	1000	2200
Lithium peroxide	1000	2200
Magnesium bromate	1000	2200
Magnesium chlorate	1000	2200
Magnesium perchlorate	1000	2200
Magnesium peroxide	1000	2200
Nitrates, inorganic, aqueous solution, n.o.s.	1000	2200
Nitrates, inorganic, n.o.s.	1000	2200
Nitrites, inorganic, aqueous solution, n.o.s.	1000	2200
Nitrites, inorganic, n.o.s.	1000	2200
Organic peroxide type B, liquid	1000	2200
Organic peroxide type B, liquid, temperature controlled	1000	2200
Organic peroxide type B, solid	1000	2200
Organic peroxide type B, solid, temperature controlled	1000	2200
Organic peroxide type C, liquid	1000	2200
Organic peroxide type C, liquid, temperature controlled	1000	2200
Organic peroxide type C, solid	1000	2200
Organic peroxide type C, solid, temperature controlled	1000	2200
Organic peroxide type D, liquid	1000	2200
Organic peroxide type D, liquid,	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
temperature controlled		
Organic peroxide type D, solid	1000	2200
Organic peroxide type D, solid, temperature controlled	1000	2200
Organic peroxide type E, liquid	1000	2200
Organic peroxide type E, liquid, temperature controlled	1000	2200
Organic peroxide type E, solid	1000	2200
Organic peroxide type E, solid, temperature controlled	1000	2200
Organic peroxide type F, liquid	1000	2200
Organic peroxide type F, liquid, temperature controlled	1000	2200
Organic peroxide type F, solid	1000	2200
Organic peroxide type F, solid, temperature controlled	1000	2200
Oxidizing liquid, corrosive, n.o.s.	1000	2200
Oxidizing liquid, n.o.s.	1000	2200
Oxidizing liquid, toxic, n.o.s.	1000	2200
Oxidizing solid, corrosive, n.o.s.	1000	2200
Oxidizing solid, n.o.s.	1000	2200
Oxidizing solid, self-heating, n.o.s.	1000	2200
Oxidizing solid, toxic, n.o.s.	1000	2200
Oxygen generator, chemical (<i>including when contained in associated equipment, e.g., passenger service units (PSUs), portable breathing equipment (PBE), etc.</i>)	1000	2200
Perchlorates, inorganic, aqueous solution, n.o.s.	1000	2200
Perchlorates, inorganic, n.o.s.	1000	2200
Permanganates, inorganic, aqueous solution, n.o.s.	1000	2200
Permanganates, inorganic, n.o.s.	1000	2200
Peroxides, inorganic, n.o.s.	1000	2200
Potassium bromate	1000	2200
Potassium chlorate	1000	2200
Potassium chlorate, aqueous solution	1000	2200
Potassium nitrate and sodium nitrite	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
mixtures		
Potassium nitrite	1000	2200
Potassium perchlorate, solid	1000	2200
Potassium perchlorate, solution	1000	2200
Potassium permanganate	1000	2200
Silver nitrate	1000	2200
Sodium bromate	1000	2200
Sodium chlorate	1000	2200
Sodium chlorate, aqueous solution	1000	2200
Sodium chlorite	1000	2200
Sodium perchlorate	1000	2200
Sodium permanganate	1000	2200
Sodium peroxoborate, anhydrous	1000	2200
Strontium chlorate	1000	2200
Strontium perchlorate	1000	2200
Strontium peroxide	1000	2200
Thallium chlorate	1000	2200
Trichloroisocyanuric acid, dry	1000	2200
Zinc ammonium nitrite	1000	2200
Zinc chlorate	1000	2200
Zinc nitrate	1000	2200
Zinc permanganate	1000	2200
Zinc peroxide	1000	2200
1,1,2,2-Tetrachloroethane	1000	2200
1,1-Dichloro-1-nitroethane	1000	2200
1,2-Dibromobutan-3-one	1000	2200
1,3-Dichloroacetone	1000	2200
1,3-Dichloropropanol-2	1000	2200
2,2'-Dichlorodiethyl ether	1000	2200
2-Amino-4-chlorophenol	1000	2200
2-Chloropyridine	1000	2200
2-Dimethylaminoethyl acrylate	1000	2200
2-Dimethylaminoethyl methacrylate	1000	2200
2-Ethylhexyl chloroformate	1000	2200
3-Chloro-4-methylphenyl isocyanate	1000	2200
3-Nitro-4-chlorobenzotrifluoride	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
3-Trifluoromethylaniline	1000	2200
Aldol	1000	2200
Alkaloids, liquid, n.o.s., or Alkaloid salts, liquid, n.o.s.	1000	2200
Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. <i>poisonous</i>	1000	2200
Allyl isothiocyanate, stabilized	1000	2200
Aminopyridines (<i>o</i> -; <i>m</i> -; <i>p</i> -)	1000	2200
Ammonium arsenate	1000	2200
Ammonium dinitro- <i>o</i> -cresolate	1000	2200
Ammonium metavanadate	1000	2200
Ammonium polyvanadate	1000	2200
Ammunition, tear-producing, non- explosive, <i>without burster or expelling</i> <i>charge, non-fuzed</i>	1000	2200
Ammunition, toxic, non-explosive, <i>without burster or expelling charge, non-</i> <i>fuzed</i>	1000	2200
Aniline	1000	2200
Arsenic	1000	2200
Arsenic acid, solid	1000	2200
Arsenic bromide	1000	2200
Arsenic compounds, solid, n.o.s. <i>inorganic, including arsenates, n.o.s.;</i> <i>arsenites, n.o.s.; arsenic sulfides, n.o.s.;</i> <i>and organic compounds of arsenic,</i> <i>n.o.s.</i>	1000	2200
Arsenic pentoxide	1000	2200
Arsenic trioxide	1000	2200
Arsenical dust	1000	2200
Barium compounds, n.o.s.	1000	2200
Benzidine	1000	2200
Benzonitrile	1000	2200
Benzoquinone	1000	2200
Benzyl bromide	1000	2200
Benzyl chloride	1000	2200
Benzyl chloride <i>unstabilized</i>	1000	2200
Benzyl iodide	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Benzylidene chloride	1000	2200
Beryllium compounds, n.o.s.	1000	2200
Beryllium, powder	1000	2200
beta-Naphthylamine	1000	2200
Cacodylic acid	1000	2200
Cadmium compounds	1000	2200
Calcium arsenate	1000	2200
Calcium arsenate and calcium arsenite, mixtures, solid	1000	2200
Carbon tetrachloride	1000	2200
Chloral, anhydrous, stabilized	1000	2200
Chloroacetic acid, molten	1000	2200
Chloroacetic acid, solid	1000	2200
Chloroacetic acid, solution	1000	2200
Chloroacetophenone (CN), liquid	1000	2200
Chloroacetophenone (CN), solid	1000	2200
Chloroanilines, liquid	1000	2200
Chloroanilines, solid	1000	2200
Chlorocresols, liquid	1000	2200
Chlorocresols, solid	1000	2200
Chlorodinitrobenzenes, liquid	1000	2200
Chlorodinitrobenzenes, solid	1000	2200
Chloroformates, toxic, corrosive, n.o.s.	1000	2200
Chloromethyl chloroformate	1000	2200
Chloronitrobenzene, ortho, liquid	1000	2200
Chloronitrobenzenes meta or para, solid	1000	2200
Chlorosilanes, toxic, corrosive, flammable, n.o.s	1000	2200
Chlorosilanes, toxic, corrosive, n.o.s	1000	2200
Copper acetoarsenite	1000	2200
Copper arsenite	1000	2200
Copper cyanide	1000	2200
Cresols, liquid	1000	2200
Cresols, solid	1000	2200
Cresylic acid	1000	2200
Cyanide solutions, n.o.s.	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Cyanides, inorganic, solid, n.o.s.	1000	2200
Cyclobutyl chloroformate	1000	2200
Dichloroanilines, liquid	1000	2200
Dichloroanilines, solid	1000	2200
Dichloroisopropyl ether	1000	2200
Dichlorophenyl isocyanates	1000	2200
Diethyl sulfate	1000	2200
Dimethyl thiophosphoryl chloride	1000	2200
Dinitroanilines	1000	2200
Dinitrobenzenes, <i>liquid</i>	1000	2200
Dinitrobenzenes, <i>solid</i>	1000	2200
Dinitro-o-cresol, <i>solid</i>	1000	2200
Dinitro-o-cresol, <i>solution</i>	1000	2200
Dinitrophenol solutions	1000	2200
Dinitrotoluenes, <i>liquid</i>	1000	2200
Dinitrotoluenes, molten	1000	2200
Dinitrotoluenes, <i>solid</i>	1000	2200
Epichlorohydrin	1000	2200
Ethyl bromide	1000	2200
Ethyl bromoacetate	1000	2200
Ethyl chloroacetate	1000	2200
Ferric arsenate	1000	2200
Ferric arsenite	1000	2200
Ferrous arsenate	1000	2200
Furaldehydes	1000	2200
Hexaethyl tetraphosphate, <i>liquid</i>	1000	2200
Hexaethyl tetraphosphate, <i>solid</i>	1000	2200
Hexafluoroacetone hydrate	1000	2200
Hexamethylene diisocyanate	1000	2200
Hydrocyanic acid, aqueous solutions <i>with less than 5 percent hydrogen cyanide</i>	1000	2200
Isocyanates, toxic, flammable, n.o.s. <i>or</i> Isocyanate solutions, toxic, flammable, n.o.s., <i>flash point not less than 23 degrees C but not more than 61 degrees C and boiling point less than</i>	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
300 degrees C		
Isocyanates, toxic, n.o.s. or Isocyanate solutions, toxic, n.o.s., <i>flash point more than 61 degrees C and boiling point less than 300 degrees C</i>	1000	2200
Lead arsenates	1000	2200
Lead arsenites	1000	2200
Lead cyanide	1000	2200
London purple	1000	2200
Magnesium arsenate	1000	2200
Malononitrile	1000	2200
Medicine, liquid, toxic, n.o.s	1000	2200
Medicine, solid, toxic, n.o.s.	1000	2200
Mercaptans, liquid, toxic, flammable, n.o.s. or Mercaptan mixtures, liquid, toxic, flammable, n.o.s., <i>flash point not less than 23 degrees C</i>	1000	2200
Mercuric arsenate	1000	2200
Mercuric chloride	1000	2200
Mercuric nitrate	1000	2200
Mercurous nitrate	1000	2200
Mercury acetate	1000	2200
Mercury ammonium chloride	1000	2200
Mercury benzoate	1000	2200
Mercury bromides	1000	2200
Mercury compounds, liquid, n.o.s.	1000	2200
Mercury compounds, solid, n.o.s.	1000	2200
Mercury cyanide	1000	2200
Mercury gluconate	1000	2200
Mercury iodide, <i>solid</i>	1000	2200
Mercury iodide, <i>solution</i>	1000	2200
Mercury nucleate	1000	2200
Mercury oleate	1000	2200
Mercury oxide	1000	2200
Mercury oxycyanide, desensitized	1000	2200
Mercury potassium iodide	1000	2200
Mercury salicylate	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Mercury sulfates	1000	2200
Mercury thiocyanate	1000	2200
Metal carbonyls, n.o.s.	1000	2200
Methyl bromoacetate	1000	2200
N,N-Dimethylaniline	1000	2200
Naphthylthiourea	1000	2200
Naphthylurea	1000	2200
N-Butylaniline	1000	2200
N-Ethyltoluidines	1000	2200
Nickel cyanide	1000	2200
Nicotine	1000	2200
Nicotine compounds, liquid, n.o.s. <i>or</i>	1000	2200
Nicotine preparations, liquid, n.o.s.		
Nicotine compounds, solid, n.o.s. <i>or</i>	1000	2200
Nicotine preparations, solid, n.o.s.		
Nicotine hydrochloride <i>or</i> Nicotine hydrochloride solution	1000	2200
Nicotine salicylate	1000	2200
Nicotine sulfate, <i>solid</i>	1000	2200
Nicotine sulfate, <i>solution</i>	1000	2200
Nicotine tartrate	1000	2200
Nitroanilines (<i>o</i> -; <i>m</i> -; <i>p</i> -;)	1000	2200
Nitrobenzene	1000	2200
Nitrobenzotrifluorides	1000	2200
Nitrotoluenes, <i>liquid o</i> -; <i>m</i> -; <i>p</i> -;	1000	2200
Nitrotoluenes, <i>solid m</i> -, <i>or p</i> -	1000	2200
Nitroxylens, (<i>o</i> -; <i>m</i> -; <i>p</i> -)	1000	2200
N-n-Butyl imidazole	1000	2200
Organometallic compound, toxic n.o.s.	1000	2200
Organophosphorus compound, toxic n.o.s.	1000	2200
Organotin compounds, liquid, n.o.s.	1000	2200
Organotin compounds, solid, n.o.s.	1000	2200
Pentachloroethane	1000	2200
Pentachlorophenol	1000	2200
Phenacyl bromide	1000	2200
Phenol solutions	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Phenol, molten	1000	2200
Phenol, solid	1000	2200
Phenyl chloroformate	1000	2200
Phenylhydrazine	1000	2200
Phenylmercuric acetate	1000	2200
Phenylmercuric compounds, n.o.s.	1000	2200
Phenylmercuric hydroxide	1000	2200
Phenylmercuric nitrate	1000	2200
Potassium arsenate	1000	2200
Potassium arsenite	1000	2200
Potassium cuprocyanide	1000	2200
Potassium metavanadate	1000	2200
Propylene chlorohydrin	1000	2200
Regulated medical waste	1000	2200
Selenium compound, n.o.s.	1000	2200
Selenium disulfide	1000	2200
Silver arsenite	1000	2200
Silver cyanide	1000	2200
Sodium ammonium vanadate	1000	2200
Sodium arsenate	1000	2200
Sodium arsenite, aqueous solutions	1000	2200
Sodium arsenite, solid	1000	2200
Sodium azide	1000	2200
Sodium cacodylate	1000	2200
Sodium pentachlorophenate	1000	2200
Solids containing toxic liquid, n.o.s.	1000	2200
Strontium arsenite	1000	2200
Tellurium compound, n.o.s.	1000	2200
Tetraethyl dithiopyrophosphate	1000	2200
Thallium compounds, n.o.s.	1000	2200
Thallium nitrate	1000	2200
Thioglycol	1000	2200
Thiolactic acid	1000	2200
Toluene diisocyanate	1000	2200
Toluidines <i>liquid</i>	1000	2200
Toluidines <i>solid</i>	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Tributylamine	1000	2200
Trichlorobutene	1000	2200
Tricresyl phosphate <i>with more than 3 percent ortho isomer</i>	1000	2200
Tris-(1-aziridinyl)phosphine oxide, solution	1000	2200
Vanadium compound, n.o.s.	1000	2200
Vanadyl sulfate	1000	2200
Vinyl chloroacetate	1000	2200
Vinylpyridines, stabilized	1000	2200
Xylenols	1000	2200
Xylidines, liquid	1000	2200
Xylidines, solid	1000	2200
Xylyl bromide	1000	2200
Zinc arsenate <i>or</i> Zinc arsenite <i>or</i> Zinc arsenate and zinc arsenite mixtures	1000	2200
1,2-Propylenediamine	1000	2200
1-Pentol	1000	2200
2-Diethylaminoethanol	1000	2200
2-Dimethylaminoethanol	1000	2200
Acetic acid solution, <i>not less than 50 percent but not more than 80 percent acid, by mass</i>	1000	2200
Acetic acid, glacial <i>or</i> Acetic acid solution, <i>with more than 80 percent acid, by mass</i>	1000	2200
Acetic anhydride	1000	2200
Acetyl bromide	1000	2200
Acetyl iodide	1000	2200
Acrylic acid, stabilized	1000	2200
Alkyl sulfonic acids, liquid <i>or</i> Aryl sulfonic acids, liquid <i>with more than 5 percent free sulfuric acid</i>	1000	2200
Alkyl sulfonic acids, solid <i>or</i> Aryl sulfonic acids, solid, <i>with more than 5 percent free sulfuric acid</i>	1000	2200
Alkylphenols, liquid, n.o.s. (<i>including C2-C12 homologues</i>)	1000	2200
Alkylphenols, solid, n.o.s. (<i>including C2-</i>	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
<i>C12 homologues)</i>		
Alkylsulfuric acids	1000	2200
Allyltrichlorosilane, stabilized	1000	2200
Aluminum bromide, anhydrous	1000	2200
Aluminum chloride, anhydrous	1000	2200
Amines, liquid, corrosive, flammable, n.o.s. or Polyamines, liquid, corrosive, flammable, n.o.s.	1000	2200
Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s.	1000	2200
Amines, solid, corrosive, n.o.s., or Polyamines, solid, corrosive n.o.s.	1000	2200
Ammonium hydrogen sulfate	1000	2200
Ammonium hydrogendifluoride, solid	1000	2200
Ammonium hydrogendifluoride, solution	1000	2200
Ammonium polysulfide, solution	1000	2200
Ammonium sulfide solution	1000	2200
Amyltrichlorosilane	1000	2200
Anisoyl chloride	1000	2200
Antimony pentachloride, liquid	1000	2200
Antimony pentachloride, solutions	1000	2200
Antimony pentafluoride	1000	2200
Antimony trichloride, liquid	1000	2200
Antimony trichloride, solid	1000	2200
Battery fluid, acid	1000	2200
Battery fluid, alkali	1000	2200
Benzotrachloride	1000	2200
Benzoyl chloride	1000	2200
Benzylidimethylamine	1000	2200
Bisulfate, aqueous solution	1000	2200
Bombs, smoke, non-explosive, <i>with corrosive liquid, without initiating device</i>	1000	2200
Boron trifluoride acetic acid complex	1000	2200
Boron trifluoride dihydrate	1000	2200
Boron trifluoride propionic acid complex	1000	2200
Bromoacetic acid, <i>solid</i>	1000	2200
Bromoacetic acid, <i>solution</i>	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Bromoacetyl bromide	1000	2200
Butyltrichlorosilane	1000	2200
Caesium hydroxide	1000	2200
Caesium hydroxide solution	1000	2200
Caustic alkali liquids, n.o.s.	1000	2200
Chlorite solution	1000	2200
Chlorophenyltrichlorosilane	1000	2200
Chlorosilanes, corrosive, flammable, n.o.s.	1000	2200
Chlorosilanes, corrosive, n.o.s.	1000	2200
Chromic acid solution	1000	2200
Chromic fluoride, solid	1000	2200
Chromic fluoride, solution	1000	2200
Cupriethylenediamine solution	1000	2200
Cyanuric chloride	1000	2200
Cyclohexenyltrichlorosilane	1000	2200
Cyclohexylamine	1000	2200
Cyclohexyltrichlorosilane	1000	2200
Dibenzylchlorosilane	1000	2200
Dichloroacetic acid	1000	2200
Dichloroacetyl chloride	1000	2200
Dichlorophenyltrichlorosilane	1000	2200
Diethyldichlorosilane	1000	2200
Diethylenetriamine	1000	2200
Diethylthiophosphoryl chloride	1000	2200
Diffluorophosphoric acid, anhydrous	1000	2200
Dimethylcarbonyl chloride	1000	2200
Di-n-butylamine	1000	2200
Diphenyldichlorosilane	1000	2200
Diphenylmethyl bromide	1000	2200
Dodecyltrichlorosilane	1000	2200
Ethylenediamine	1000	2200
Ethylphenyldichlorosilane	1000	2200
Ferrous chloride, solid	1000	2200
Ferrous chloride, solution	1000	2200
Fire extinguisher charges, <i>corrosive</i>	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
<i>liquid</i>		
Fluoroboric acid	1000	2200
Fluorophosphoric acid anhydrous	1000	2200
Fluorosilicic acid	1000	2200
Formic acid	1000	2200
Fumaryl chloride	1000	2200
Hexadecyltrichlorosilane	1000	2200
Hexafluorophosphoric acid	1000	2200
Hexamethylenediamine solution	1000	2200
Hexyltrichlorosilane	1000	2200
Hydrazine aqueous solution, <i>with more than 37% hydrazine, by mass</i>	1000	2200
Hydriodic acid	1000	2200
Hydrobromic acid, <i>with more than 49 percent hydrobromic acid</i>	1000	2200
Hydrobromic acid, <i>with not more than 49 percent hydrobromic acid</i>	1000	2200
Hydrochloric acid	1000	2200
Hydrofluoric acid, <i>with not more than 60 percent strength</i>	1000	2200
Hydrogendifluorides, n.o.s. <i>solid</i>	1000	2200
Hydrogendifluorides, n.o.s. <i>solutions</i>	1000	2200
Hypochlorite solutions	1000	2200
Iodine monochloride	1000	2200
Lead sulfate <i>with more than 3 percent free acid</i>	1000	2200
Lithium hydroxide	1000	2200
Lithium hydroxide, solution	1000	2200
Methacrylic Acid, stabilized	1000	2200
Methylphenyldichlorosilane	1000	2200
N,N-Diethylethylenediamine	1000	2200
N,N-Dimethylcyclohexylamine	1000	2200
Nitrating acid mixtures <i>spent with not more than 50 percent nitric acid</i>	1000	2200
Nitrating acid mixtures <i>with not more than 50 percent nitric acid</i>	1000	2200
Nitric acid <i>other than red fuming, with not more than 70 percent nitric acid</i>	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Nitrobenzenesulfonic acid	1000	2200
Nitrosylsulfuric acid	1000	2200
Nonyltrichlorosilane	1000	2200
Octadecyltrichlorosilane	1000	2200
Octyltrichlorosilane	1000	2200
Paint or Paint related material	1000	2200
Perchloric acid <i>with not more than 50 percent acid by mass</i>	1000	2200
Phenolsulfonic acid, liquid	1000	2200
Phenyl phosphorus dichloride	1000	2200
Phenyl phosphorus thiodichloride	1000	2200
Phenylacetyl chloride	1000	2200
Phenyltrichlorosilane	1000	2200
Phosphorus oxybromide	1000	2200
Phosphorus oxybromide, molten	1000	2200
Phosphorus pentabromide	1000	2200
Phosphorus pentachloride	1000	2200
Phosphorus pentoxide	1000	2200
Phosphorus tribromide	1000	2200
Potassium hydrogen sulfate	1000	2200
Potassium hydrogendifluoride, <i>solid</i>	1000	2200
Potassium hydrogendifluoride, <i>solution</i>	1000	2200
Potassium hydroxide, solid	1000	2200
Potassium hydroxide, solution	1000	2200
Potassium monoxide	1000	2200
Potassium sulfide, hydrated <i>with not less than 30 percent water of crystallization</i>	1000	2200
Propyltrichlorosilane	1000	2200
Pyrosulfuryl chloride	1000	2200
Rubidium hydroxide	1000	2200
Rubidium hydroxide solution	1000	2200
Silicon tetrachloride	1000	2200
Sludge, acid	1000	2200
Sodium aluminate, solution	1000	2200
Sodium borohydride and sodium hydroxide solution, <i>with not more than</i>	1000	2200

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
<i>12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass</i>		
Sodium hydrogendifluoride solution	1000	2200
Sodium hydrogendifluoride, solid	1000	2200
Sodium hydrosulfide with not less than 25 percent water of crystallization	1000	2200
Sodium hydroxide solution	1000	2200
Sodium hydroxide, solid	1000	2200
Sodium monoxide	1000	2200
Sodium sulfide, hydrated with not less than 30 percent water	1000	2200
Solids containing corrosive liquid, n.o.s.	1000	2200
Stannic chloride, anhydrous	1000	2200
Sulfuric acid with more than 51 percent acid	1000	2200
Sulfuric acid with not more than 51% acid	1000	2200
Sulfuric acid, spent	1000	2200
Sulfurous acid	1000	2200
Tetramethylammonium hydroxide	1000	2200
Thioglycolic acid	1000	2200
Thiophosphoryl chloride	1000	2200
Titanium trichloride mixtures	1000	2200
Trichloroacetic acid	1000	2200
Trichloroacetic acid, solution	1000	2200
Triethylenetetramine	1000	2200
Valeryl chloride	1000	2200
Vanadium oxytrichloride	1000	2200
1,1,1,2-Tetrafluoroethane or Refrigerant gas R 134a	2000	4400
1,2-Dichloro-1,1,2,2- tetrafluoroethane or Refrigerant gas R 114	2000	4400
1-Chloro-1,2,2,2-tetrafluoroethane or Refrigerant gas R 124	2000	4400
1-Chloro-2,2,2-trifluoroethane or Refrigerant gas R 133a	2000	4400
Air, compressed	2000	4400
Air, refrigerated liquid, (cryogenic liquid)	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Air, refrigerated liquid, (<i>cryogenic liquid</i>) <i>non-pressurized</i>	2000	4400
Ammonia solution, <i>relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia</i>	2000	4400
Ammonia solutions, <i>relative density less than 0.880 at 15 degrees C in water, with more than 35 percent but not more than 50 percent ammonia</i>	2000	4400
Ammonia, anhydrous	2000	4400
Argon, compressed	2000	4400
Argon, refrigerated liquid (<i>cryogenic liquid</i>)	2000	4400
Articles, pressurized pneumatic or hydraulic <i>containing non-flammable gas</i>	2000	4400
Bromotrifluoromethane or Refrigerant gas, R 13B1.	2000	4400
Carbon dioxide	2000	4400
Carbon dioxide and nitrous oxide mixtures	2000	4400
Carbon dioxide and oxygen mixtures, compressed	2000	4400
Carbon dioxide, refrigerated liquid	2000	4400
Chlorodifluorobromomethane or Refrigerant gas R 12B1	2000	4400
Chlorodifluoromethane and chloropentafluoroethane mixture or Refrigerant gas R 502 <i>with fixed boiling point, with approximately 49 percent chlorodifluoromethane</i>	2000	4400
Chlorodifluoromethane or Refrigerant gas R 22	2000	4400
Chloropentafluoroethane or Refrigerant gas R 115	2000	4400
Chlorotrifluoromethane and trifluoromethane azeotropic mixture or Refrigerant gas R 503 <i>with approximately 60 percent chlorotrifluoromethane</i>	2000	4400
Chlorotrifluoromethane or Refrigerant gas R 13	2000	4400
Compressed gas, n.o.s.	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Compressed gas, oxidizing, n.o.s.	2000	4400
Dichlorodifluoromethane and difluoroethane azeotropic mixture <i>or</i> Refrigerant gas R 500 <i>with approximately 74 percent dichlorodifluoromethane</i>	2000	4400
Dichlorodifluoromethane <i>or</i> Refrigerant gas R 12	2000	4400
Dichlorofluoromethane <i>or</i> Refrigerant gas R21	2000	4400
Ethylene oxide and carbon dioxide mixtures <i>with not more than 9 percent ethylene oxide</i>	2000	4400
Ethylene oxide and chlorotetrafluoroethane mixture <i>with not more than 8.8 percent ethylene oxide</i>	2000	4400
Ethylene oxide and dichlorodifluoromethane mixture, <i>with not more than 12.5 percent ethylene oxide</i>	2000	4400
Ethylene oxide and pentafluoroethane mixture <i>with not more than 7.9 percent ethylene oxide</i>	2000	4400
Ethylene oxide and tetrafluoroethane mixture <i>with not more than 5.6 percent ethylene oxide</i>	2000	4400
Fertilizer ammoniating solution <i>with free ammonia</i>	2000	4400
Fire extinguishers <i>containing compressed or liquefied gas</i>	2000	4400
Helium, compressed	2000	4400
Helium, refrigerated liquid (<i>cryogenic liquid</i>)	2000	4400
Heptafluoropropane <i>or</i> Refrigerant gas R 227	2000	4400
Hexafluoroethane , <i>or</i> Refrigerant gas R116	2000	4400
Hexafluoropropylene compressed <i>or</i> Refrigerant gas R 1216	2000	4400
Insecticide gases, n.o.s.	2000	4400
Krypton, compressed	2000	4400
Krypton, refrigerated liquid (<i>cryogenic</i>)	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
<i>liquid)</i>		
Liquefied gas, n.o.s.	2000	4400
Liquefied gas, oxidizing, n.o.s.	2000	4400
Liquefied gases, <i>non-flammable</i> <i>charged with nitrogen, carbon dioxide or</i> <i>air</i>	2000	4400
Neon, compressed	2000	4400
Neon, refrigerated liquid (<i>cryogenic</i> <i>liquid</i>)	2000	4400
Nitrogen trifluoride	2000	4400
Nitrogen, compressed	2000	4400
Nitrogen, refrigerated liquid <i>cryogenic</i> <i>liquid</i>	2000	4400
Nitrous oxide	2000	4400
Nitrous oxide, refrigerated liquid	2000	4400
Octafluorobut-2-ene or Refrigerant gas R 1318	2000	4400
Octafluorocyclobutane, or Refrigerant gas RC 318	2000	4400
Octafluoropropane or Refrigerant gas R 218	2000	4400
Oxygen, compressed	2000	4400
Oxygen, refrigerated liquid (<i>cryogenic</i> <i>liquid</i>)	2000	4400
Pentafluoroethane or Refrigerant gas R 125	2000	4400
Rare gases and nitrogen mixtures, compressed	2000	4400
Rare gases and oxygen mixtures, compressed	2000	4400
Rare gases mixtures, compressed	2000	4400
Refrigerant gas R 404A	2000	4400
Refrigerant gas R 407A	2000	4400
Refrigerant gas R 407B	2000	4400
Refrigerant gas R 407C	2000	4400
Refrigerant gases, n.o.s.	2000	4400
Refrigerating machines, <i>containing non-</i> <i>flammable, non-toxic, liquefied or</i> <i>compressed gas or ammonia solution</i> <i>(UN2672)</i>	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Sulfur hexafluoride	2000	4400
Tetrafluoromethane, or Refrigerant gas R 14	2000	4400
Trifluoromethane or Refrigerant gas R 23	2000	4400
Trifluoromethane, refrigerated liquid	2000	4400
Xenon	2000	4400
Xenon, refrigerated liquid (<i>cryogenic liquids</i>)	2000	4400
1,2,3,6-Tetrahydrobenzaldehyde	2000	4400
1,2-Epoxy-3-ethoxypropane	2000	4400
1,3,5-Trimethylbenzene	2000	4400
1-Bromo-3-methylbutane	2000	4400
1-Methoxy-2-propanol	2000	4400
2-Ethylbutanol	2000	4400
2-Ethylbutyl acetate	2000	4400
2-Ethylhexylamine	2000	4400
2-Methylpentan-2-ol	2000	4400
3-Diethylamino-propylamine	2000	4400
4-Methoxy-4-methylpentan-2-one	2000	4400
5-Methylhexan-2-one	2000	4400
Acetaldehyde oxime	2000	4400
Acetyl methyl carbinol	2000	4400
Acrolein dimer, stabilized	2000	4400
Aldehydes, flammable, toxic, n.o.s.	2000	4400
Aldehydes, n.o.s.	2000	4400
Allyl glycidyl ether	2000	4400
alpha-Pinene	2000	4400
Amines, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s.	2000	4400
Amyl acetates	2000	4400
Amyl butyrates	2000	4400
Amyl formates	2000	4400
Amyl nitrate	2000	4400
Amylamines	2000	4400
Anisole	2000	4400
Asphalt, at or above its flash point	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Bromobenzene	2000	4400
Bromopropanes	2000	4400
Butanols	2000	4400
Butyl acetates	2000	4400
Butyl acrylates, stabilized	2000	4400
Butyl benzenes	2000	4400
Butyl nitrites	2000	4400
Butyl propionates	2000	4400
Butyraldoxime	2000	4400
Camphor oil	2000	4400
Chlorobenzene	2000	4400
Chlorobenzotrifluorides	2000	4400
Chlorotoluenes	2000	4400
Coal tar distillates, flammable	2000	4400
Coating solution (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)	2000	4400
Cyclohexanone	2000	4400
Cyclohexyl acetate	2000	4400
Cyclohexyl mercaptan	2000	4400
Cyclooctadienes	2000	4400
Cyclopentanol	2000	4400
Cyclopentanone	2000	4400
Cymenes	2000	4400
Decahydronaphthalene	2000	4400
Diacetone alcohol	2000	4400
Dibutyl ethers	2000	4400
Dichloropentanes	2000	4400
Dichloropropenes	2000	4400
Dicyclopentadiene	2000	4400
Diesel fuel	2000	4400
Diesel fuel	2000	4400
Diethyl carbonate	2000	4400
Diethylbenzene	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Diisobutyl ketone	2000	4400
Diisobutylamine	2000	4400
Dimethyldioxanes	2000	4400
Di-n-amylamine	2000	4400
Dipentene	2000	4400
Dipropyl ketone	2000	4400
Elevated temperature liquid, flammable, n.o.s., with flash point above 37.8 C, at or above its flash point	2000	4400
Esters, n.o.s.	2000	4400
Ethanol or Ethyl alcohol or Ethanol solutions or Ethyl alcohol solutions	2000	4400
Ethers, n.o.s.	2000	4400
Ethyl 2-chloropropionate	2000	4400
Ethyl amyl ketone	2000	4400
Ethyl butyrate	2000	4400
Ethyl lactate	2000	4400
Ethyl orthoformate	2000	4400
Ethylene glycol diethyl ether	2000	4400
Ethylene glycol monoethyl ether	2000	4400
Ethylene glycol monoethyl ether acetate	2000	4400
Ethylene glycol monomethyl ether	2000	4400
Ethylene glycol monomethyl ether acetate	2000	4400
Extracts, aromatic, liquid	2000	4400
Extracts, flavoring, liquid	2000	4400
Formaldehyde, solutions, flammable	2000	4400
Fuel oil (No. 1, 2, 4, 5, or 6)	2000	4400
Fuel, aviation, turbine engine	2000	4400
Furfurylamine	2000	4400
Fusel oil	2000	4400
Heating oil, light	2000	4400
Hexaldehyde	2000	4400
Hexanols	2000	4400
Hydrocarbons, liquid, n.o.s.	2000	4400
Iodopropanes	2000	4400
Isobutanol or Isobutyl alcohol	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Isobutyl acrylate, stabilized	2000	4400
Isobutyl isobutyrate	2000	4400
Isobutyl methacrylate, stabilized	2000	4400
Isobutyl propionate	2000	4400
Isobutyric acid	2000	4400
Isopropenylbenzene	2000	4400
Isopropyl 2-chloropropionate	2000	4400
Isopropyl butyrate	2000	4400
Isopropyl chloroacetate	2000	4400
Isopropylbenzene	2000	4400
Kerosene	2000	4400
Ketones, liquid, n.o.s.	2000	4400
Medicine, liquid, flammable, toxic, n.o.s.	2000	4400
Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixture, liquid, flammable, n.o.s.	2000	4400
Mercaptans, liquid, flammable, toxic, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	2000	4400
Mesityl oxide	2000	4400
Methallyl alcohol	2000	4400
Methyl 2-chloropropionate	2000	4400
Methyl isobutyl carbinol	2000	4400
Methylamyl acetate	2000	4400
Methylcyclohexanols, <i>flammable</i>	2000	4400
Methylcyclohexanone	2000	4400
N,N-Dimethylformamide	2000	4400
n-Amyl methyl ketone	2000	4400
n-Butyl methacrylate, stabilized	2000	4400
n-Decane	2000	4400
n-Heptaldehyde	2000	4400
Nitrocellulose, solution, flammable <i>with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose</i>	2000	4400
Nitroethane	2000	4400
Nitropropanes	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Nonanes	2000	4400
n-Propanol or Propyl alcohol, normal	2000	4400
n-Propyl benzene	2000	4400
Octyl aldehydes	2000	4400
Paraldehyde	2000	4400
Pentamethylheptane	2000	4400
Pentane-2,4-dione	2000	4400
Pentanol	2000	4400
Perfumery products <i>with flammable solvents</i>	2000	4400
Petroleum crude oil	2000	4400
Petroleum distillates, n.o.s. or Petroleum products, n.o.s.	2000	4400
Petroleum oil	2000	4400
Picolines	2000	4400
Pine oil	2000	4400
Propylene tetramer	2000	4400
Resin solution, <i>flammable</i>	2000	4400
Rosin oil	2000	4400
Rubber solution	2000	4400
Shale oil	2000	4400
Sodium methylate solutions <i>in alcohol</i>	2000	4400
Styrene monomer, stabilized	2000	4400
Tars, liquid <i>including road asphalt and oils, bitumen and cut backs</i>	2000	4400
Terpene hydrocarbons, n.o.s.	2000	4400
Terpinolene	2000	4400
Tetraethyl silicate	2000	4400
Tetrahydrofurfurylamine	2000	4400
Tetrapropylorthotitanate	2000	4400
Tinctures, medicinal	2000	4400
Triallylamine	2000	4400
Triethyl phosphite	2000	4400
Triisobutylene	2000	4400
Triisopropyl borate	2000	4400
Trimethyl phosphite	2000	4400
Trimethylamine, aqueous solutions <i>with</i>	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
<i>not more than 50 percent trimethylamine by mass</i>		
Tripropylamine	2000	4400
Tripropylene	2000	4400
Turpentine	2000	4400
Turpentine substitute	2000	4400
Undecane	2000	4400
Vinyltoluenes, stabilized	2000	4400
Wood preservatives, liquid	2000	4400
Xylenes	2000	4400
Zirconium suspended in a liquid	2000	4400
2-Bromo-2-nitropropane-1,3-diol	2000	4400
5-tert-Butyl-2,4,6-trinitro-m-xylene or Musk xylene	2000	4400
Alkali metal alcoholates, self-heating, corrosive, n.o.s.	2000	4400
Alkaline earth metal alcoholates, n.o.s.	2000	4400
Aluminum ferrosilicon powder	2000	4400
Aluminum powder, coated	2000	4400
Aluminum powder, uncoated	2000	4400
Aluminum resinate	2000	4400
Aluminum silicon powder, uncoated	2000	4400
Aluminum smelting by-products or Aluminum remelting by-products	2000	4400
Borneol	2000	4400
Calcium cyanamide <i>with more than 0.1 percent of calcium carbide</i>	2000	4400
Calcium manganese silicon	2000	4400
Calcium resinate	2000	4400
Calcium resinate, fused	2000	4400
Calcium silicide	2000	4400
Camphor, <i>synthetic</i>	2000	4400
Carbon, activated	2000	4400
Carbon, <i>animal or vegetable origin</i>	2000	4400
Celluloid, <i>in block, rods, rolls, sheets, tubes, etc., except scrap</i>	2000	4400
Celluloid, scrap	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u>	<u>TQ Quantity,</u>
	<u>kg</u>	<u>lbs</u>
Cobalt naphthenates, powder	2000	4400
Cobalt resinate, precipitated	2000	4400
Copra	2000	4400
Cotton waste, oily	2000	4400
Cotton, wet	2000	4400
Dicyclohexylammonium nitrite	2000	4400
Ferrosilicon, with 30 percent or more but less than 90 percent silicon	2000	4400
Ferrous metal borings or Ferrous metal shavings or Ferrous metal turnings or Ferrous metal cuttings in a form liable to self-heating	2000	4400
Fibers or Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s.	2000	4400
Fibers or Fabrics, animal or vegetable or Synthetic, n.o.s. with animal or vegetable oil	2000	4400
Fibers, animal or Fibers, vegetable burnt, wet or damp	2000	4400
Fibers, vegetable, dry	2000	4400
Films, nitrocellulose base, gelatine coated (except scrap)	2000	4400
Firelighters, solid with flammable liquid	2000	4400
Hafnium powder, dry	2000	4400
Hexamethylenetetramine	2000	4400
Iron oxide, spent, or Iron sponge, spent obtained from coal gas purification	2000	4400
Isosorbide-5-mononitrate	2000	4400
Lead phosphite, dibasic	2000	4400
Magnesium granules, coated, particle size not less than 149 microns	2000	4400
Magnesium or Magnesium alloys with more than 50 percent magnesium in pellets, turnings or ribbons	2000	4400
Magnesium, powder or Magnesium alloys, powder	2000	4400
Maneb or Maneb preparations with not less than 60 percent maneb	2000	4400
Maneb stabilized or Maneb preparations, stabilized against self-	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
<i>heating</i>		
Manganese resinate	2000	4400
Metal catalyst, dry	2000	4400
Metal hydrides, flammable, n.o.s.	2000	4400
Metal powder, self-heating, n.o.s.	2000	4400
Metal powders, flammable, n.o.s.	2000	4400
Metal salts of organic compounds, flammable, n.o.s.	2000	4400
Metaldehyde	2000	4400
Metallic substance, water-reactive, n.o.s.	2000	4400
Metallic substance, water-reactive, self- heating, n.o.s.	2000	4400
Naphthalene, crude or Naphthalene, refined	2000	4400
Naphthalene, molten	2000	4400
Nitronaphthalene	2000	4400
Organic pigments, self-heating	2000	4400
Organometallic compound or Compound solution or Compound dispersion, water-reactive, flammable, n.o.s.	2000	4400
Organometallic compound, solid, water- reactive, flammable, n.o.s	2000	4400
Paper, unsaturated oil treated <i>incompletely dried (including carbon paper)</i>	2000	4400
Paraformaldehyde	2000	4400
Phosphorus, amorphous	2000	4400
Plastics, nitrocellulose-based, self- heating, n.o.s.	2000	4400
Rags, oily	2000	4400
Seed cake <i>with more than 1.5 percent oil and not more than 11 percent moisture</i>	2000	4400
Seed cake <i>with not more than 1.5 percent oil and not more than 11 percent moisture</i>	2000	4400
Seed cake, <i>containing vegetable oil solvent extractions and expelled seeds,</i>	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
<i>with not more than 10 percent of oil and when the amount of moisture is higher than 11 percent, with not more than 20 percent of oil and moisture combined</i>		
Silicon powder, amorphous	2000	4400
Sulfur	2000	4400
Sulfur, molten	2000	4400
Textile waste, wet	2000	4400
Thiourea dioxide	2000	4400
Titanium disulphide	2000	4400
Titanium powder, dry	2000	4400
Titanium sponge granules or Titanium sponge powders	2000	4400
Water-reactive liquid, corrosive, n.o.s.	2000	4400
Water-reactive liquid, n.o.s.	2000	4400
Water-reactive liquid, toxic, n.o.s.	2000	4400
Water-reactive solid, corrosive, n.o.s.	2000	4400
Water-reactive solid, flammable, n.o.s.	2000	4400
Water-reactive solid, n.o.s.	2000	4400
Water-reactive solid, self-heating, n.o.s.	2000	4400
Water-reactive solid, toxic, n.o.s.	2000	4400
Water-reactive, solid, oxidizing, n.o.s.	2000	4400
Wool waste, wet	2000	4400
Xanthates	2000	4400
Zinc ashes	2000	4400
Zinc powder or Zinc dust	2000	4400
Zinc resinate	2000	4400
Zirconium powder, dry	2000	4400
Zirconium scrap	2000	4400
Zirconium, dry, coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)	2000	4400
Zirconium, dry, finished sheets, strip or coiled wire	2000	4400
Aluminum nitrate	2000	4400
Ammonium nitrate based fertilizer	2000	4400
Ammonium nitrate, with not more than 0.2% total combustible material,	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
<i>including any organic substance, calculated as carbon to the exclusion of any other added substance</i>		
Ammonium persulfate	2000	4400
Calcium chlorate aqueous solution	2000	4400
Calcium hypochlorite mixtures, dry, with more than 10 percent but not more than 39 percent available chlorine	2000	4400
Calcium nitrate	2000	4400
Cesium nitrate or Caesium nitrate	2000	4400
Chlorate and borate mixtures	2000	4400
Chlorate and magnesium chloride mixtures	2000	4400
Chromium nitrate	2000	4400
Didymium nitrate	2000	4400
Ferric nitrate	2000	4400
Guanidine nitrate	2000	4400
Hydrogen peroxide, aqueous solutions with not less than 8 percent but less than 20 percent hydrogen peroxide (stabilized as necessary)	2000	4400
Lead dioxide	2000	4400
Lithium nitrate	2000	4400
Magnesium nitrate	2000	4400
Manganese nitrate	2000	4400
Nickel nitrate	2000	4400
Nickel nitrite	2000	4400
Nitrates, inorganic, aqueous solution, n.o.s.	2000	4400
Nitrates, inorganic, n.o.s.	2000	4400
Nitrites, inorganic, aqueous solution, n.o.s.	2000	4400
Oxidizing liquid, corrosive, n.o.s.	2000	4400
Oxidizing liquid, n.o.s.	2000	4400
Oxidizing liquid, toxic, n.o.s.	2000	4400
Oxidizing solid, corrosive, n.o.s.	2000	4400
Oxidizing solid, n.o.s.	2000	4400
Oxidizing solid, toxic, n.o.s.	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Perchlorates, inorganic, aqueous solution, n.o.s.	2000	4400
Perchlorates, inorganic, n.o.s.	2000	4400
Permanganates, inorganic, n.o.s.	2000	4400
Peroxides, inorganic, n.o.s.	2000	4400
Persulfates, inorganic, aqueous solution, n.o.s.	2000	4400
Persulfates, inorganic, n.o.s.	2000	4400
Potassium chlorate, aqueous solution	2000	4400
Potassium nitrate	2000	4400
Potassium persulfate	2000	4400
Sodium chlorate, aqueous solution	2000	4400
Sodium nitrate	2000	4400
Sodium nitrate and potassium nitrate mixtures	2000	4400
Sodium nitrite	2000	4400
Sodium persulfate	2000	4400
Strontium nitrate	2000	4400
Urea hydrogen peroxide	2000	4400
Zinc bromate	2000	4400
Zirconium nitrate	2000	4400
1,1,1-Trichloroethane	2000	4400
1,4-Butynediol	2000	4400
1,5,9-Cyclododecatriene	2000	4400
1-Bromo-3-chloropropane	2000	4400
2,4-Toluenediamine or 2,4-Toluenediamine	2000	4400
2-Amino-5-diethylaminopentane	2000	4400
2-Ethylaniline	2000	4400
2-Methyl-5-ethylpyridine	2000	4400
2-Trifluoromethylaniline	2000	4400
3-Chloropropanol-1	2000	4400
4,4'-Diaminodiphenyl methane	2000	4400
4-Chloro-o-toluidine hydrochloride	2000	4400
4-Thiapentanal	2000	4400
Acridine	2000	4400
Acrylamide	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Adiponitrile	2000	4400
alpha-Methylbenzyl alcohol	2000	4400
alpha-Naphthylamine	2000	4400
Aminophenols (o-; m-; p-)	2000	4400
Ammonium fluoride	2000	4400
Ammonium fluorosilicate	2000	4400
Aniline hydrochloride	2000	4400
Anisidines	2000	4400
Antimony lactate	2000	4400
Antimony potassium tartrate	2000	4400
Antimony powder	2000	4400
Barium oxide	2000	4400
Bromochloromethane	2000	4400
Bromoform	2000	4400
Butyltoluenes	2000	4400
Cadmium compounds	2000	4400
Carbon tetrabromide	2000	4400
Chloroanisidines	2000	4400
Chlorobenzyl chlorides	2000	4400
Chloroform	2000	4400
Chloronitroanilines	2000	4400
Chloronitrotoluenes, <i>liquid</i>	2000	4400
Chloronitrotoluenes, <i>solid</i>	2000	4400
Chlorophenols, liquid	2000	4400
Chlorophenols, solid	2000	4400
Chlorotoluidines <i>liquid</i>	2000	4400
Chlorotoluidines <i>solid</i>	2000	4400
Dibromochloropropane	2000	4400
Dibromomethane	2000	4400
Dibutylaminoethanol	2000	4400
Dichloromethane	2000	4400
Dinitrophenol solutions	2000	4400
Ethyl oxalate	2000	4400
Fluoroanilines	2000	4400
Furfuryl alcohol	2000	4400
Glycerol alpha-monochlorohydrin	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Hexachloroacetone	2000	4400
Hexachlorobenzene	2000	4400
Hexachlorobutadiene	2000	4400
Hexachlorophene	2000	4400
Hydrazine, aqueous solution <i>with not more than 37 percent hydrazine, by mass</i>	2000	4400
Hydroquinone	2000	4400
Isophorone diisocyanate	2000	4400
Lead acetate	2000	4400
Magnesium fluorosilicate	2000	4400
Methyl dichloroacetate	2000	4400
Methyl trichloroacetate	2000	4400
N, N-Diethylaniline	2000	4400
N-Ethylaniline	2000	4400
N-Ethylbenzyltoluidines liquid	2000	4400
N-Ethylbenzyltoluidines solid	2000	4400
N-Ethyl-N-benzylaniline	2000	4400
Nitroanisole	2000	4400
Nitrobromobenzenes <i>liquid</i>	2000	4400
Nitrobromobenzenes <i>solid</i>	2000	4400
Nitrocresols	2000	4400
Nitrophenols (<i>o-</i> ; <i>m-</i> ; <i>p-</i> ;))	2000	4400
Nitrotoluidines (mono)	2000	4400
N-Methylaniline	2000	4400
o-Dichlorobenzene	2000	4400
Organophosphorus compound, toxic n.o.s.	2000	4400
Phenetidines	2000	4400
Phenol solutions	2000	4400
Phenylacetonitrile, liquid	2000	4400
Phenylenediamines (<i>o-</i> , <i>m-</i> , <i>p-</i>)	2000	4400
Potassium fluoride	2000	4400
Potassium fluorosilicate	2000	4400
Quinoline	2000	4400
Resorcinol	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Sodium arsenilate	2000	4400
Sodium arsenite, aqueous solutions	2000	4400
Sodium chloroacetate	2000	4400
Sodium fluoride	2000	4400
Sodium fluorosilicate	2000	4400
tert-Butylcyclohexylchloroformate	2000	4400
Tetrabromoethane	2000	4400
Tetrachloroethylene	2000	4400
Triallyl borate	2000	4400
Trichlorobenzenes, liquid	2000	4400
Trichloroethylene	2000	4400
Trimethylhexamethylene diisocyanate	2000	4400
Tris-(1-aziridinyl)phosphine oxide, solution	2000	4400
Vanadium pentoxide, <i>non-fused form</i>	2000	4400
Zinc fluorosilicate	2000	4400
2-(2-Aminoethoxy) ethanol	2000	4400
2-Chloropropionic acid	2000	4400
3,3'-Iminodipropylamine	2000	4400
Acetic acid solution, <i>with more than 10 percent and less than 50 percent acid, by mass</i>	2000	4400
Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid <i>with not more than 5 percent free sulfuric acid</i>	2000	4400
Alkyl sulfonic acids, solid or Aryl sulfonic acids, solid <i>with not more than 5 percent free sulfuric acid</i>	2000	4400
Aluminum bromide, solution	2000	4400
Aluminum chloride, solution	2000	4400
Ammonia solutions, <i>relative density between 0.880 and 0.957 at 15 degrees C in water, with more than 10 percent but not more than 35 percent Ammonia</i>	2000	4400
Ammonium hydrogendifluoride, solution	2000	4400
Ammonium polysulfide, solution	2000	4400
Amyl acid phosphate	2000	4400
Antimony pentachloride, solutions	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Batteries, dry, containing potassium hydroxide solid, <i>electric, storage</i>	2000	4400
Batteries, wet, filled with acid, <i>electric storage</i>	2000	4400
Batteries, wet, filled with alkali, <i>electric storage</i>	2000	4400
Batteries, wet, non-spillable, <i>electric storage</i>	2000	4400
Benzene sulfonyl chloride	2000	4400
Bisulfate, aqueous solution	2000	4400
Butyl acid phosphate	2000	4400
Butyric acid	2000	4400
Butyric anhydride	2000	4400
Caesium hydroxide solution	2000	4400
Calcium oxide	2000	4400
Caproic acid	2000	4400
Caustic alkali liquids, n.o.s.	2000	4400
Chlorite solution	2000	4400
Chlorophenolates, liquid <i>or</i> Phenolates, liquid	2000	4400
Chlorophenolates, solid <i>or</i> Phenolates, solid	2000	4400
Chloroplatinic acid, solid	2000	4400
Chromic acid solution	2000	4400
Chromic fluoride, solution	2000	4400
Copper chloride	2000	4400
Crotonic acid <i>liquid</i>	2000	4400
Crotonic acid, <i>solid</i>	2000	4400
Cupriethylenediamine solution	2000	4400
Dicyclohexylamine	2000	4400
Diisooctyl acid phosphate	2000	4400
Disodium trioxosilicate	2000	4400
Ethanolamine <i>or</i> Ethanolamine solutions	2000	4400
Ferric chloride, anhydrous	2000	4400
Ferric chloride, solution	2000	4400
Formaldehyde, solutions, <i>with not less than 25 percent formaldehyde</i>	2000	4400
Gallium	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Hexamethylenediamine solution	2000	4400
Hexamethylenediamine, solid	2000	4400
Hydrazine aqueous solution, <i>with more than 37% hydrazine, by mass</i>	2000	4400
Hydriodic acid	2000	4400
Hydrobromic acid, <i>with more than 49 percent hydrobromic acid</i>	2000	4400
Hydrobromic acid, <i>with not more than 49 percent hydrobromic acid</i>	2000	4400
Hydrochloric acid	2000	4400
Hydroxylamine sulfate	2000	4400
Hypochlorite solutions	2000	4400
Isophoronediamine	2000	4400
Isopropyl acid phosphate	2000	4400
Lithium hydroxide, solution	2000	4400
Maleic anhydride	2000	4400
Mercury	2000	4400
Mercury <i>contained in manufactured articles</i>	2000	4400
Molybdenum pentachloride	2000	4400
N-Aminoethylpiperazine	2000	4400
Paint or Paint related material	2000	4400
Phosphoric acid, liquid	2000	4400
Phosphoric acid, solid	2000	4400
Phosphorous acid	2000	4400
Phosphorus trioxide	2000	4400
Phthalic anhydride <i>with more than .05 percent maleic anhydride</i>	2000	4400
Piperazine	2000	4400
Potassium hydroxide, solution	2000	4400
Propionic acid	2000	4400
Propionic anhydride	2000	4400
Rubidium hydroxide solution	2000	4400
Soda lime <i>with more than 4 percent sodium hydroxide</i>	2000	4400
Sodium aluminate, solid	2000	4400
Sodium aluminate, solution	2000	4400

<u>Chemical</u>	<u>TQ Quantity,</u> <u>kg</u>	<u>TQ Quantity,</u> <u>lbs</u>
Sodium borohydride and sodium hydroxide solution, <i>with not more than 12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass</i>	2000	4400
Sodium hydroxide solution	2000	4400
Stannic chloride pentahydrate	2000	4400
Sulfamic acid	2000	4400
Tetraethylenepentamine	2000	4400
Tetrahydrophthalic anhydrides <i>with more than 0.05 percent of maleic anhydride</i>	2000	4400
Titanium trichloride mixtures	2000	4400
Trichloroacetic acid, solution	2000	4400
Trimethylcyclohexylamine	2000	4400
Trimethylhexamethylenediamines	2000	4400
Vanadium trichloride	2000	4400
Zinc chloride, anhydrous	2000	4400
Zinc chloride, solution	2000	4400
Zirconium tetrachloride	2000	4400