

STEEL - CHEMICAL COMPATIBILITY GUIDE #5

CHEMICAL RESISTANCE FOR STEEL PRODUCTS

CHEMICAL	RATING	Butadiene	N	Ethanol	N	Heptane	Y	Methyl Isobutyl Ketone	Y
Acetic Acid (50%)	N	2-Butanone	Y	Ethyl Acetate	N	Hexane	Y	Pentane	Y
Acetone	Y	Butylene	Y	Ethyl Ether	Y	Kerosene	Y	Petroleum Ether	Y
Aniline	N	Chlorofluorocarbons	N	Ethylene Glycol	N	Methanol	N	Toluene	Y
Benzene	N	Cyclohexane	Y	Fuel Oil	Y	Methylene Chloride	N	Trichloroethylene	N
		Cyclohexanone	N	Gasoline	Y	Methyl Ethyl Ketone	Y	Xylene	Y

CODES AND REGULATIONS



DOT 49 CFR 173.3 (c) Salvage Drums:

SUMMARY: Packages of hazardous materials that are damaged, defective, or found leaking and hazardous materials that have spilled or leaked may be placed in a metal or plastic removable head salvage drum that is compatible with lading and shipped for repackaging or disposal under the following conditions:

- Drum must be a UN 1A2, 1B2, 1N2 or 1H2 tested and marked for Packing Group III or higher performance standards for liquids or solids and a leakproof test of 20 kPa (3 psi).
- Capacity of the drum may not exceed 450 L (119 gallons).
- Each drum shall be provided when necessary with sufficient cushioning and absorption material to prevent excessive movement of the damaged package and to eliminate the presence of any free liquid at the time the salvage drum is closed. All cushioning and absorbent material used in the drum must be compatible with the hazardous material.
- Packaging must be marked "SALVAGE" or "SALVAGE DRUM".

(The overpack requirements of Section 173.25 do not apply to drums used in accordance with this paragraph.)



EPA 40 CFR 264.175 Containment:

Ref (b)(3) The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater.

EPA 40 CFR 112 Spill Prevention, Control and Countermeasure (SPCC):

SUMMARY: The purpose of the SPCC regulation is prevention of oil discharge into navigable waters and related areas, rather than cleanup after a spill has occurred. The regulation generally affects all facilities with at least 1,320 gallons above ground storage capacity, or 42,000+ gallons underground storage capacity. The SPCC requires affected facilities to prepare and file an action plan (the SPCC Plan).

Some affected facilities include: onshore and offshore drilling, platforms, barges and mobile facilities; fixed and mobile onshore or offshore production; oil refining and storage; any industrial, commercial, agricultural or public facility that uses or stores oil; some waste treatment operations; loading racks, transfer hoses and related equipment; vehicles and pipelines. Oils, fats and greases of any kind or in any form are specifically included in the regulation.

The SPCC Plan must include elements such as: Operating procedures to prevent oil spills; Control measures to prevent spilled oil from entering surface water; Countermeasures such as Secondary Containment for spills and bulk storage compliance; Professional Engineer certification; Management approval; Facility inspections; Security; Training and more. **More information is available at www.epa.gov/oilspill.**



EPA 40 CFR 122.26 Stormwater Regulations, National Pollutant Discharge Elimination System (NPDES):

SUMMARY: The NPDES permit program controls water pollution by regulating point sources and non-point sources that discharge pollutants into United States waters. These regulations are a key component of EPA's Clean Water Act. The goal is to protect the quality of waterways by reducing the discharge of sediment, oil and chemicals into storm drains, surface and ground waters.

NPDES requires Minimum Control Measures to be put into place by activities in affected Urbanized Areas (UA). Visit www.epa.gov/owm (US EPA Office of Wastewater Management), Appendix 6 to determine particular affected places.

This program includes the development and implementation of the Stormwater Pollution Prevention Plan (SWPPP). The SWPPP identifies: Potential Sources of Pollution and Exposed Materials; a history of past spills and leaks; BMPs; Non-Structural controls (Good Housekeeping Practices, Spill Prevention and Response); Structural controls such as Containment including Pollution Incident Prevention Plans (PIPP) and Spill Prevention, Control, and Countermeasures (SPCC) plans.

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response:

SUMMARY: Suitable quantities of proper absorbents shall be kept available and used in areas where spills, leaks or ruptures may occur.

29 CFR 1910.22 Workplace Housekeeping:

SUMMARY: Every workroom floor shall be maintained in a clean and, so far as possible, a dry condition.

29 CFR 1910.1450

SUMMARY: Laboratories must have containment and clean-up materials for spills and leaks to reduce occupational exposure to hazardous chemicals.

29 CFR 1910.178(g)(2)

SUMMARY: Facilities shall be provided for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from damage by trucks, and for adequate ventilation for dispersal of fumes from gassing batteries. (Battery Storage)