

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>LPS® CFC Free (Aerosol)</b>
<b>Other means of identification</b>	
<b>Part Number</b>	03116
<b>Recommended use</b>	A fast drying industrial cleaning solvent designed to remove soil and other contaminants.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Manufacturer</b>	
<b>Company name</b>	ITW Pro Brands
<b>Address</b>	4647 Hugh Howell Rd. Tucker, GA 30084
<b>Country</b>	(U.S.A.) Tel: +1 770-243-8800
<b>In Case of Emergency</b>	1-800-424-9300 (inside U.S.) +001 703-527-3887 (outside U.S.)
<b>Website</b>	www.lpslabs.com
<b>E-mail</b>	lpsds@itwprobrands.com

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable aerosols	Category 1
	Gases under pressure	Compressed gas
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Reproductive toxicity (fertility)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	IF exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water/soap. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

<b>Storage</b>	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-Methylpentane		107-83-5	70 - 80
Isopropanol		67-63-0	5 - 15
Pentane		109-66-0	1 - 10
Carbon Dioxide		124-38-9	1 - 5
N-Hexane		110-54-3	0.1 - 1

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or Poison Control Center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes and mucous membranes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Narcosis. Behavioral changes. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Water fog. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	By heating and fire, harmful vapors/gases may be formed. Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Extremely flammable aerosol.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Consider initial downwind evacuation for at least 500 meters (1/3 mile). Immediately evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

### Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use foam to blanket spilled material. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

### Environmental precautions

Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS.

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

### Precautions for safe handling

Should be handled in closed systems, if possible. Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Use non-sparking tools and explosion-proof equipment.

Avoid contact during pregnancy/while nursing. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure.

Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

### Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Store locked up. Keep away from heat, sparks and open flame. Eliminate sources of ignition.

Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep in an area equipped with sprinklers.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	PEL	9000 mg/m3
Isopropanol (CAS 67-63-0)	PEL	5000 ppm
		980 mg/m3
N-Hexane (CAS 110-54-3)	PEL	400 ppm
		1800 mg/m3
Pentane (CAS 109-66-0)	PEL	500 ppm
		2950 mg/m3
		1000 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
2-Methylpentane (CAS 107-83-5)	STEL	1000 ppm
	TWA	500 ppm
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm
N-Hexane (CAS 110-54-3)	TWA	50 ppm
Pentane (CAS 109-66-0)	TWA	1000 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m3
	TWA	30000 ppm 9000 mg/m3
Isopropanol (CAS 67-63-0)	STEL	5000 ppm 1225 mg/m3
	TWA	500 ppm 980 mg/m3
N-Hexane (CAS 110-54-3)	TWA	400 ppm 180 mg/m3
	TWA	50 ppm 1800 mg/m3
Pentane (CAS 109-66-0)	Ceiling	610 ppm
	TWA	350 mg/m3 120 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Isopropanol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
N-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedio n, without hydrolysis	Urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

N-Hexane (CAS 110-54-3) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

N-Hexane (CAS 110-54-3) Can be absorbed through the skin.

**Appropriate engineering controls** Explosion-proof general and local exhaust ventilation. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended.

**Skin protection**

**Hand protection** For prolonged or repeated skin contact use suitable protective gloves. Chemical resistant gloves are recommended.

**Other** Avoid contact with the skin. Wear appropriate chemical resistant clothing.

**Respiratory protection** No personal respiratory protective equipment normally required. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

**Thermal hazards** None known.

**General hygiene considerations** When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Physical state</b>	Gas.
<b>Form</b>	Aerosol.
<b>Color</b>	Clear water-white
<b>Odor</b>	Solvent.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	140.9 °F (60.5 °C) dispensed liquid
<b>Flash point</b>	< 1.4 °F (< -17.0 °C) Tag Closed Cup
<b>Evaporation rate</b>	< 1 (Ethyl Ether = 1)
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	0.6 %
<b>Flammability limit - upper (%)</b>	7 %
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	352.53 mm Hg @ 38°C
<b>Vapor density</b>	~3 (air = 1)
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	< 10 % w/w
<b>Partition coefficient (n-octanol/water)</b>	> 1
<b>Auto-ignition temperature</b>	582.8 °F (306 °C)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	< 3 cSt @ 25°C
<b>Other information</b>	
<b>Heat of combustion</b>	> 30 kJ/g
<b>Percent volatile</b>	100 %
<b>Specific gravity</b>	0.64 - 0.67 @ 20°C
<b>VOC</b>	96.2 % per U.S, State and Federal Consumer Product Regulations; 669 g/L per SCAQMD Rule 102

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Risk of ignition. Instability caused by elevated temperatures.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point.
<b>Incompatible materials</b>	Strong oxidizing agents. Isocyanates. Acids. Chlorine.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
<b>Skin contact</b>	Causes skin irritation. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

**Eye contact** Causes serious eye irritation.

**Ingestion** May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** Skin irritation. Defatting of the skin. Irritating to eyes and respiratory system. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**Information on toxicological effects**

**Acute toxicity** Narcotic effects.

Components	Species	Test Results
Isopropanol (CAS 67-63-0)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	4.7 g/kg
N-Hexane (CAS 110-54-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg, 4 Hours
Pentane (CAS 109-66-0)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**ACGIH Carcinogens**

Isopropanol (CAS 67-63-0) A4 Not classifiable as a human carcinogen.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.

**Specific target organ toxicity - single exposure** Narcotic effects.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not likely, due to the form of the product.

**Chronic effects** None known.

**Further information** None known.

**12. Ecological information**

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Isopropanol (CAS 67-63-0)		
<b>Aquatic</b>		
Fish	LC50 Bluegill ( <i>Lepomis macrochirus</i> )	> 1400 mg/l, 96 hours

Components	Species	Test Results
N-Hexane (CAS 110-54-3)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) 2.101 - 2.981 mg/l, 96 hours
<b>Persistence and degradability</b>	Not inherently biodegradable.	
<b>Bioaccumulative potential</b>	No data available for this product.	
<b>Partition coefficient n-octanol / water (log Kow)</b>		
LPS® CFC Free (Aerosol)		> 1
2-Methylpentane		3.74
Isopropanol		0.05
N-Hexane		3.9
Pentane		3.39
<b>Mobility in soil</b>	Readily absorbed into soil.	
<b>Other adverse effects</b>	None known.	
<b>13. Disposal considerations</b>		
<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.	
<b>Hazardous waste code</b>	D001: Waste Flammable material with a flash point <140 F D003: Waste Reactive material	
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).	
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.	
<b>14. Transport information</b>		
<b>DOT</b>		
<b>UN number</b>	UN1950	
<b>UN proper shipping name</b>	Aerosols, flammable	
<b>Transport hazard class(es)</b>		
<b>Class</b>	2.1	
<b>Subsidiary risk</b>	-	
<b>Label(s)</b>	2.1	
<b>Packing group</b>	Not available.	
<b>Environmental hazards</b>		
<b>Marine pollutant</b>	No	
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.	
<b>Packaging exceptions</b>	306	
<b>Packaging non bulk</b>	None	
<b>Packaging bulk</b>	None	
<b>IATA</b>		
<b>UN number</b>	UN1950	
<b>UN proper shipping name</b>	Aerosols, flammable	
<b>Transport hazard class(es)</b>		
<b>Class</b>	2.1	
<b>Subsidiary risk</b>	-	
<b>Packing group</b>	Not available.	
<b>Environmental hazards</b>	No.	
<b>ERG Code</b>	2X	
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.	
<b>Other information</b>		
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.	

**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**UN number** UN1950  
**UN proper shipping name** AEROSOLS, flammable, MARINE POLLUTANT  
**Transport hazard class(es)**  
**Class** 2.1  
**Subsidiary risk** -  
**Label(s)** 2.1  
**Packing group** Not available.  
**Environmental hazards**  
**Marine pollutant** Yes  
**EmS** F-D, S-U  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

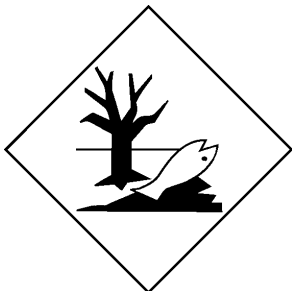
**DOT**



**IATA; IMDG**



**Marine pollutant**



**General information** IMDG Regulated Marine Pollutant.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

N-Hexane (CAS 110-54-3) Listed.



**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

N-Hexane (CAS 110-54-3)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Pentane (CAS 109-66-0)

**Safe Drinking Water Act (SDWA)** Not regulated.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Isopropanol (CAS 67-63-0)

Low priority

**US state regulations****US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Isopropanol (CAS 67-63-0)

N-Hexane (CAS 110-54-3)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 05-18-2016  
**Revision date** 08-21-2017  
**Version #** 03

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision information**

Regulatory Information: Risk Phrases - Labeling  
GHS: Classification