Safety Data Sheet

Martrex, Inc.

Section 1: Chemical Product and Company Information

Product name: Xylene

Supplier/ Further Information: **Martrex, Inc.**

1107 Hazeltine Blvd,
Suite 535 MD 27,
Chaska, Minnesota 55318

Phone: 952/933-5000
Toll Free: 800/328-3627
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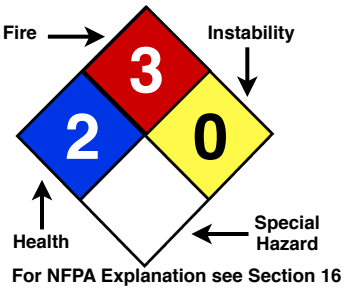
Web: www.martrexinc.com



For NFPA Explanation see Section 16

EPA Registration Number: 9768-18
CAS#: 1330-20-7
Chemical Name: Xylene
Synonyms: dimethylbenzene, methyltoluene, xylol, xylene
Chemical Family: Aromatic Hydrocarbon
SDS Number: 4562
Intended Uses: Chemical feedstock, Solvent

24 Hour Emergency Phone - Chemtrec Transport: 1-800-424-9300; Medical: 1-800-441-3637

Section 2: Hazards Identification

Emergency Overview

Danger! **IARC determined EthylBenzene is a Possible Human Carcinogen.** IARC Vol. 77 (2000)(p.227)

Xylene is suspected of being a carcinogen. Though no definite conclusion appears to have been made on this issue, Err on the side of caution. IARC Sci Publ. 1988;(85):3-18.

Causes serious eye irritation and possible damage. Causes skin and respiratory tract irritation. May be fatal if swallowed and enters airways

GHS Classification:

Aspiration hazard.	Category 1	(H304)
Carcinogenicity.	Category 2	(H351)
Flammable liquids	Category 3	(H226)
Acute toxicity, Inhalation	Category 4,	(H332)
Acute toxicity, Dermal	Category 4,	(H312)
Serious eye damage/eye irritation.	Category 2	(H319)
Skin corrosion/irritation	Category 2	(H315)
Hazardous to the aquatic environment, acute hazard	Category 2	(H401)
Hazardous to the aquatic environment, long-term hazard	Category 2	(H411)

GHS Label, Hazards and Precautionary Statements

GHS Pictogram:

(GHS Pictogram Hazards Definitions See Section 16)

Label Signal Word: Warning

Hazard Statements:

May be fatal if swallowed and enters airways.	(H304)
Suspected of causing cancer.	(H351)

Flammable liquid and vapor. (H226)
Harmful if inhaled (H332)
Harmful in contact with skin (H312)
Causes skin irritation. (H315)
Causes serious eye irritation. (H319)
Toxic to aquatic life with long lasting effects. (H411)

Precautionary Statements:

Prevention:

Obtain special instructions before use. (P201)
Do not handle until all safety precautions have been read and understood. (P202)
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. (P210)
Keep container tightly closed. (P233)
Ground/bond container and receiving equipment. (P240)
Use explosion-proof electrical/ ventilating/ lighting/ equipment. (P241)
Use only non-sparking tools. (P242)
Take action to prevent static discharge. (P243)
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. (P261)
Wash skin thoroughly after handling. (P264)
Use only outdoors or in a well-ventilated area. (P271)
Avoid release to the environment. (P273)
Wear protective gloves/ protective clothing/ eye protection/ face protection. (P280)

Response:

IF EXPOSED OR CONCERNED: get medical advice/attention. (P308+P313)
IF SWALLOWED: Immediately call a POISON CENTER / doctor. Do Not Induce Vomiting. ↳(P301+P310+P331)
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
Call a POISON CENTER or doctor/ physician if you feel unwell. (P312)
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with plenty of water/shower. (P303+P361+P352+P353)
Call a POISON CENTER or doctor/ physician if you feel unwell. (P312)
Specific Treatment see Section 4: First Aid Measures, Skin Exposure on this label. (P321)
If skin irritation occurs: Get medical advice/ attention (P332+P313)
Take off contaminated clothing and wash before reuse. (P362+P364)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
If Eye irritation persists: Get Medical advice / attention. (P337+P313)
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. (P370+P378)
Collect spillage. (P391)

Storage:

Store in a well-ventilated place. Keep cool. (P403+P235)
Store locked up. P405)

Disposal Considerations:

Dispose of content/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. (P501)

Main hazards: **Caution!** This material is considered to be hazardous according to regulatory guidelines (see Section 15 Regulatory Information). **NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Potential Health Effects: Irritating to skin. May cause cancer. May cause harm to the unborn child. If swallowed, may be aspirated and cause lung damage. May be irritating to the eyes, nose, throat, and lungs.

Primary Routes of Exposure / Entry: Inhalation (breathing), eye contact, skin contact.

Target Organs: Skin

Acute Exposure Symptoms

Inhalation: May cause respiratory tract irritation.
Eye Contact: May cause eye irritation.
Skin Contact: May cause skin irritation.
Ingestion: If swallowed, may be aspirated and cause lung damage.

Chronic Exposure Symptoms: see section 11 Toxicological Information

Medical Conditions Aggravated By Long-Term Exposure: see section 11 Toxicological Information

Section 3: Composition/Information on Ingredients

Hazardous Components	CAS#	%	OSHA PEL	OSHA STEL	OSHA TWL
Xylene	1330-20-7	80-90%	no data	no data	no data
	OTHER LIMITS	**RTECS#**	**ACGIH TLV**	**ACGIH STEL**	**ACGIH CEIL**
	See Section 15	no data	not listed	150 ppm	100 ppm
Hazardous Components	**CAS#**	**%**	**OSHA PEL**	**OSHA STEL**	**OSHA TWL**
Ethyl Benzene	100-41-4	10- 20%	no data	no data	no data
	OTHER LIMITS	**RTECS#**	**ACGIH TLV**	**ACGIH STEL**	**ACGIH CEIL**
	See Section 15	no data	not listed	125 ppm	100 ppm

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

Section 4: First Aid Measures

Inhalation: Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, **seek immediate medical assistance**. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation. **Get medical assistance.**

Eye Exposure: Flush thoroughly with water for at least 15 minutes. **Get medical assistance.**

Skin Exposure: Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

Ingestion: **Seek immediate medical attention. Do not induce vomiting.**

NOTE TO THE PHYSICIAN: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. This light hydrocarbon material, or a component, may be associated with cardiac sensitization following very high exposures (well above occupational exposure limits) or with concurrent exposure to high stress levels or heart-stimulating substances like epinephrine. Administration of such substances should be avoided.

Section 5: Fire Fighting Measures

Flamibility Classification:

NFPA= (estimated) Health: 2; Flammability: 3; Instability: 0
DOT= see Section 14
Flash Point [Method]**:** 30°C (86F) [ASTM D-56]
Auto-ignition Temperature: >450°C (842°F)
Lower explosion limit (LEL): 1.1
Upper explosion limit (UEL): 7.0

Extinguishing Media: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Inappropriate Extinguishing Media: Straight streams of water

Unusual Fire and Explosive Hazards: Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Decomposition Materials: no data

Fire-Fighting Instructions: **FLAMMABLE**. Evacuate area. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Use water spray to cool fire exposed surfaces and to protect personnel.

Personal Protective Equipment: Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Section 6: Accidental Release Measures

Spill and Leak Procedures:

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled materiaL Prevent entry into waterways, sewer, basements or confined areas. A vapor-suppressing foam may be used to reduce vapor. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapor, but may not prevent ignition in enclosed spaces. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do so without risk. Eliminate sources of ignition. Warn other shipping. If the Flash Point exceeds the Ambient Temperature by 10°C or more, use containment booms and remove from the surface by skimming or with suitable absorbents when conditions permit. If the Flash Point does not exceed the Ambient Air Temperature by at least 10°C, use booms as a barrier to protect shorelines and allow material to evaporate. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted.

Environmental and Regulatory Reporting: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. Follow local/state/national regulations.

Note: Local regulations may prescribe or limit action to be taken.

Section 7: Handling and Storage

Minimum/maximum Storage Temperature: no data

HANDLING: Avoid contact with skin. Avoid contact with eyes. Prevent exposure to ignition sources, for example use non-sparking tools and explosion-proof equipment. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

Loading/Unloading Temperature: [Ambient]

Transport Temperature: [Ambient]

Transport Pressure: [Ambient]

Static Accumulator: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semi-conductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semi-conductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

STORAGE Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. The container choice, for example storage vessel, may effect static accumulation and dissipation. Keep container closed. Handle containers with care Open slowly in order to control possible pressure release Store in a

cool, well-ventilated area. Outside or detached storage preferred. Storage containers should be earthed and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

Storage Temperature: [Ambient]

Storage Pressure: [Ambient]

Suitable Containers/Packing: Tankers; Drums; Tank Trucks; Barges; Tank Cars

Suitable Materials and Coatings (Chemical Compatibility)**:** Carbon Steel; Polyester; Stainless Steel; Teflon

Unsuitable Materials and Coatings: Natural Rubber; Butyl Rubber; Ethylene-proplyene-diene monomer (EPDM); Polystyrene; Polyethylene; Polypropylene; PVC; Polyvinyl Alcohol; Polyacrylonitrile; Compatibility with plastics will vary

REGULATORY REQUIREMENTS: See Section 8 for employee exposure controls and Section 15 for other regulatory requirements.

Section 8: Exposure Controls / Personal Protection

Exposure Limits:

Hazardous Component	Form	ACGIH STEL	ACGIH TWA	Note
Xylene		150 ppm	100 ppm	
Ethyl Benzene		125 ppm	100 ppm	

***NOTE:** Limits/standards shown for guidance only. Follow applicable regulations.

Ventilation Protection: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: Adequate ventilation should be provided so that exposure limits are not exceeded. **Use explosion-proof ventilation equipment.**

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regUlatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator.

For high airborne concentrations: use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Eye Protection: Wear appropriate protective eyeglasses with side shields or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: **Chemical resistant gloves are recommended.**

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: **Chemical/oil resistant clothing is recommended.**

Other Protective Clothing and Equipment: no other data.

Hygienic Work Practices: 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. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Environmental Controls: See Sections 6, 7, 12, 13.

Section 9: Physical and Chemical Properties

Chemical Name: Xylene

Physical State: Liquid

Color and Appearance: Clear and colorless.

Odor: Aromatic

Odor Threshold: no data

pH (in water): no data
Specific Gravity: no data
Vapor Pressure: [no data at 20°C] 2.5 kPa (18.75 mm Hg) at 38°C
Vapor Density (Air = 1): < 1 at 101 kPa
Relative Density (@15ºC)**:** 0.869
Density (@15ºC): 870 kg/m^3 (7.26 lbs/gal, 0.87 kg/dm^3)
Flash Point [Method]: 30°C (86F) [ASTM D-56]
Auto-ignition Temperature: >450°C (842°F)
Lower explosion limit (LEL): LEL: 1.1
Upper explosion limit (UEL): 7.0
Volatiles by Volume: no data
Boiling Point / Range: 137ºC (279ºF) - 143ºC (289ºF)
Softening Point: no data
Freezing: -54°C (-65°F)
Evaporation Rate(n-butyl acetate = 1): 0.75
Solubility in water: negligible
Other Solubilities: no data
Viscosity: [no data at 40°C] 0.8 cSt (0.8 mm2/sec) at 25C
Coefficient of Thermal Expansion: 0.00086 V/V/DEG C
Chemical Formula: no data
Formula Wt: 106

Section 10: Stability and Reactivity

Chemical Stability: Stable__X__ Unstable____ Material is stable under normal conditions.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Avoid heat, sparks, open flames and other ignition sources.
Chemical Incompatibility: Strong oxidizing agents.
Hazardous Decomposition Products: Material does not decompose at ambient temperatures.

Section 11: Toxicological Information

Acute Toxicity

Route of Exposure	Conclusions / Remarks
Inhalation	
LC50> 5000 ppm	Minimally Toxic. Based on available literature
Irritation: Data available.	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs. Based on available literature.
Ingestion	
Toxicity: LD50 > 4300 mg/kg	Minimally Toxic. Based on available literature
Skin	
Toxicity: LD50 > 4320 mg/kg	Minimally Toxic. Based on available literature
Irritation: Data available	Irritating to the skin. Based on available literature
Eye	
Irritation: Data available	Moderately irritating to the eyes. Based on test data for the material.

Chronic & Other Effects

For the product itself:

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Very high exposure (confined spaces / abuse) to light hydrocarbons may result in abnormal heart rhythm (arrhythmias). Concurrent high stress levels and/or co-exposure to high levels of hydrocarbons (above occupational exposure limits), and to heart-stimulating substances like epinephrine, nasal decongestants, asthma drugs, or cardiovascular drugs may initiate arrhythmia.

Contains:

ETHYLBENZENE: Caused cancer in laboratory animal studies. The relevance of these findings to humans is uncertain.

XYLENES: High exposures to xylenes in some animal studies have been reported to cause health effects on the developing embryo/fetus. These effects were often at levels toxic to the mother. The significance of these findings to humans has not been determined.

Chemical Name	CAS number	List Citations
Xylenes	1330-20-7	4
Ethylbenzene	100-41-4	34

Regulatory Lists Searched

1 = IARC 1 **3 = IARC 2B:** **5 = ACGIH A1:**
2 = IARC 2A: **4 = ACGIH ALL:** **6 = ACGIH A2:**

Section 12: Ecological Information

Information given is based on data available for the material, components of the material, and similar materials.

ECOTOXICITY

Material -- Expected to be toxic to aquatic organisms.

MOBILITY

Material -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Material -- Expected to be readily biodegradable.

Atmospheric Oxidation:

Material~= Expected to degrade rapidly in air

BIOACCUMULATION POTENTIAL

Material -- Potential to bioaccumulate is low.

OTHER ECOLOGICAL INFORMATION

VOC (EPA Method 24): 7.252 lbs/gal

Section 13: Disposal Considerations

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

Empty Container Warning: Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations.

DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Section 14: Transport Information

LAND (TDG)

Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S. (Xylenes, Ethylbenzene)
Hazard Class & Division: 3
UN Number: 1993
Packing Group: III
Special Provisions: 16

LAND (DOT)

Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S. (Xylenes, Ethylbenzene)
Hazard Class & Division: 3
ID Number: 1993
Packing Group: III
Product RQ: 100 LBS - XYLENES
ERG Number: 128
Label(s): 3
Transport Document Name:

SEA (IMDG)

Proper Shipping Name: XYLENES
Hazard Class & Division: 3
EMS Number: F-E, S-D
UN Number: 1307
Packing Group: III Label(s): 3
Transport Document Name:

AIR (IATA)

Proper Shipping Name: XYLENES
Hazard Class & Division: 3
UN Number: 1307
Packing Group: III
Label(s) / Mark(s): 3
Transport Document Name:

Section 15: Regulatory Information

WHMIS Classification: Class 8, Division 2: Flammable Liquids Class D, Division 2, Subdivision A: Very Toxic Material Class 0, Division 2, Subdivision B: Toxic Material

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the (M)SDS contains all the information required by the Controlled Products Regulations.

CEPA: All components of this material are either on the Canadian Domestic Substances List (DSL), exempt, or have been notified under CEPA.

NATIONAL CHEMICAL INVENTORY LISTING: AICS, IECSC, DSL, EINECS, ENCS, KECI, PICCS, TSCA

The Following Ingredients are Cited on the Lists Below:

Chemical Name	CAS number	List Citations
Xylenes	1330-20-7	156
Ethylbenzene	100-41-4	6

Regulatory Lists Searched

1 = TSCA 4
2 = TSCA 5a2
3 = TSCA 5e
4 = TSCA 6
5 = TSCA 12b
6 = NPRI

Section 16: Other Information

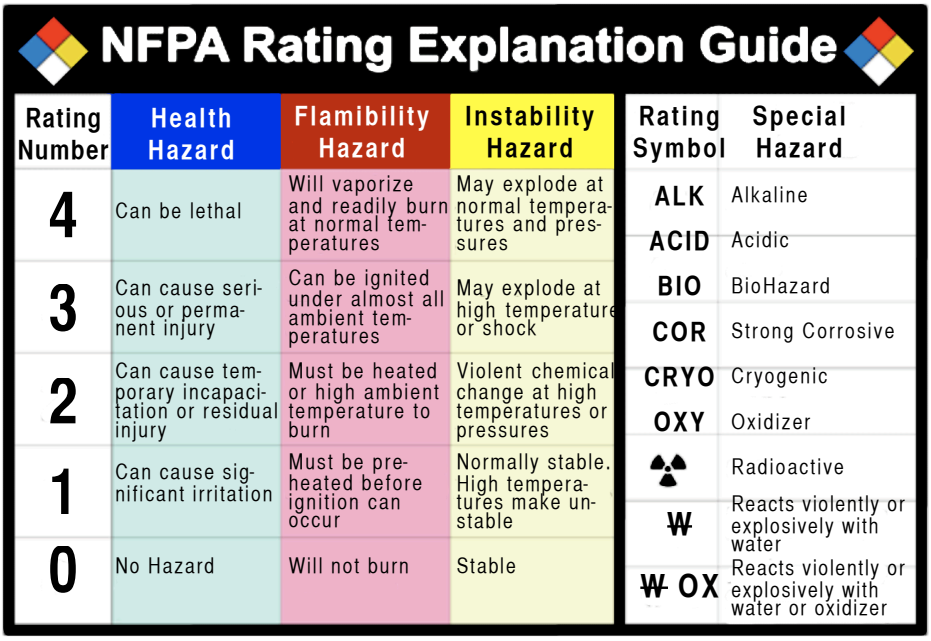
Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists
ANSI - American National Standards Institute
CAS - Chemical Abstracts Service
CERCLA - Comprehensive Environmental Response, Compensation & Liability Act of 1980
CFR - Code of Federal Regulations
CHEMTREC - Chemical Transportation Emergency Center
CPR - Controlled Products Regulations
CWC - Chemical Weapons Convention
DOT - U.S. Department of Transportation
DSL - Canadian Domestic Substance List
EHS - Extremely Hazardous Substance
EPA - U.S. Environmental Protection Agency
HMIS - Hazardous Material Identification System
IARC - International Agency for Research on Cancer
LEL/UEL - Lower and Upper Explosive Limit
mg/m³ - Milligrams per cubic meter
NAERG - North American Emergency Response Guidebook
NIOSH - National Institute of Occupational Safety and Health
NFPA - National Fire Protection Association
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limit (set by OSHA)
PPE - Personal Protective Equipment
RCRA - Resource Conservation and Recovery Act of 1976
SARA - Superfund Amendments and Reauthorization Act
SDS - Safety Data Sheet

GHS Pictograms and Hazards

Health Hazard  • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	**Flame**  • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides	**Exclamation Mark**  • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder  • Gases Under Pressure	**Corrosion**  • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals	**Exploding Bomb**  • Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle  • Oxidizers	**Environment** (Non-Mandatory)  • Aquatic Toxicity	**Skull and Crossbones**  • Acute Toxicity (fatal or toxic)

STEL - Concentration to which workers can be exposed continuously for a **short** period of time without suffering from irritation, irreversible tissue damage or narcosis of sufficient degree to increase the likelihood of accidental injury, impair self-rescue or materially reduce work efficiency.
TDG (Canadian)**:** Transport of Dangerous Goods Regulations
TLV - Threshold Limit Value (set by ACGIH)
TWA - 8-hour Time Weighted Average
TSCA - US Toxic Substance Control Act
WHMIS - Workplace Hazardous Material Information System



NFPA Rating Explanation Guide

Rating Number	Health Hazard	Flamibility Hazard	Instability Hazard
4	Can be lethal	Will vaporize and readily burn at normal temperatures	May explode at normal temperatures and pressures
3	Can cause serious or permanent injury	Can be ignited under almost all ambient temperatures	May explode at high temperature or shock
2	Can cause temporary incapacitation or residual injury	Must be heated or high ambient temperature to burn	Violent chemical change at high temperatures or pressures
1	Can cause significant irritation	Must be preheated before ignition can occur	Normally stable. High temperatures make unstable
0	No Hazard	Will not burn	Stable

Rating Symbol	Special Hazard
ALK	Alkaline
ACID	Acidic
BIO	BioHazard
COR	Strong Corrosive
CRYO	Cryogenic
OXY	Oxidizer
	Radioactive
W	Reacts violently or explosively with water
W OX	Reacts violently or explosively with water or oxidizer

SDS Issue Date: n/a
Revised Date: 9-10-2014
Supersedes: 3-26-2010

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