multi-chem®
A HALLIBURTON SERVICE

SAFETY DATA SHEET

Product Trade Name: **MC C-6028**

Revision Date: 09-Jun-2016 **Revision Number:** 2

1. Identification

1.1. Product Identifier

Product Trade Name: MC C-6028
Synonyms None
Chemical Family: Blend
Internal ID Code MC000666

1.2 Recommended use and restrictions on use

Application: Corrosion Inhibitor
Uses advised against Consumer use

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier
Multi-Chem Group LLC
424 S Chadbourne St, San Angelo, TX 76903
Phone: 1 325 223 6200
Emergency Phone Number: 1-866-519-4752 (US, Canada, Mexico) or 1-760-476-3962

Halliburton Energy Services
645 - 7th Ave SW Suite 1800
Calgary, AB
T2P 4G8
Canada

Prepared By Chemical Stewardship
Telephone: 1-281-871-6107
e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number

Emergency Telephone Number: 1-866-519-4752 or 1-760-476-3962

2. Hazard(s) Identification

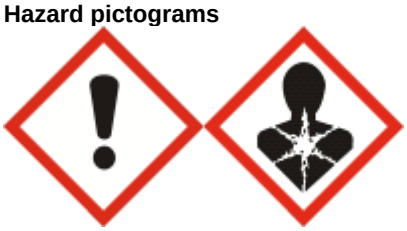
2.1 Classification in accordance with paragraph (d) of §1910.1200

Skin Corrosion / Irritation	Category 2 - H315
Serious Eye Damage/Irritation	Category 2 - H319
Germ Cell Mutagenicity	Category 1B - H340
Carcinogenicity	Category 1B - H350
Reproductive Toxicity	Category 1B - H360
Specific Target Organ Toxicity - (Single Exposure)	Category 1 - H370
Specific Target Organ Toxicity - (Repeated Exposure)	Category 1 - H372
Acute Aquatic Toxicity	Category 3 - H402

Chronic Aquatic Toxicity	Category 3 - H412
Flammable liquids.	Category 4 - H227

2.2. Label Elements

Hazard pictograms



Signal Word: Danger

Hazard Statements

H227 - Combustible liquid
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H340 - May cause genetic defects
H350 - May cause cancer
H360 - May damage fertility or the unborn child
H370 - Causes damage to organs
H372 - Causes damage to organs through prolonged or repeated exposure
H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

Prevention

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention
P308 + P313 - IF exposed or concerned: Get medical advice/attention
P370 + P378 - In case of fire: Use CO2, dry chemical, or foam

Storage

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

Disposal

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Light aromatic solvent	64742-95-6	5 - 10%	Skin Irrit. 2 (H315)

			Muta. 1 (H340) Carc. 1B (H350) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412) Flam. Liq. 3 (H226)
1,2,4 Trimethylbenzene	95-63-6	1 - 5%	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT RE 1 (H372) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411) Flam. Liq. 3 (H226)
Methanol	67-56-1	1 - 5%	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Repr. 1B (H360) STOT SE 1 (H370) Flam. Liq. 2 (H225)
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	1 - 5%	Skin Corr. 1C (H314) Eye Corr. 1 (H318) STOT SE 3 (H335)

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First-Aid Measures

4.1. Description of first aid measures

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek immediate medical attention/advice.

Eyes Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

Skin In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.

Ingestion Following ingestion, onset of symptoms may be delayed by 12 to 24 hours. Admission to hospital should be the first priority even if symptoms are absent.

4.2 Most important symptoms/effects, acute and delayed

Causes skin irritation. Causes eye irritation May cause heritable genetic damage. Carcinogen. Potential reproductive hazard. May cause birth defects. May cause damage to internal organs. Prolonged or repeated exposure may cause damage to organs.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Gastric lavage or emesis should be performed as soon as possible to minimize absorption, and is recommended within 4 hours of ingestion. Ethanol may be given intravenously to prevent build-up of toxic effects of methanol metabolites. Visual disturbances and metabolic acidosis may occur and dialysis, preferably hemodialysis may be employed to treat these complications.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

Do NOT spray pool fires directly with water. A solid stream of water directed into hot burning liquid can cause splattering.

5.2 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use appropriate protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Remove sources of ignition. Take precautionary measures against static discharges All equipment used when handling the product must be grounded Avoid contact with skin, eyes and clothing.
See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Remove ignition sources and work with non-sparking tools.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Use appropriate protective equipment. Remove sources of ignition. Ground and bond containers when transferring from one container to another. Avoid contact with eyes, skin, or clothing.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store in a cool well ventilated area. Keep from heat, sparks, and open flames.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Light aromatic solvent	64742-95-6	Not applicable	Not applicable
1,2,4 Trimethylbenzene	95-63-6	Not applicable	25 ppm
Methanol	67-56-1	TWA: 200 ppm	TWA: 200 ppm STEL: 250 ppm
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	Not applicable	Not applicable

8.2 Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

8.3 Individual protection measures, such as personal protective equipment

Personal Protective Equipment If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the

specific application of this product.

Respiratory Protection	If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.
Hand Protection	Use gloves which are suitable for the chemicals present in this product as well as other environmental factors in the workplace.
Skin Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron, rain jacket, pants or coverall, as appropriate, to prevent skin contact.
Eye Protection	Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles, Face-shield.
Other Precautions	Eyewash fountains and safety showers must be easily accessible.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State:	Liquid	**Color**	Milky Amber to Black
Odor:	Pungent	**Odor Threshold:**	No information available

Property Remarks/ - Method	Values
pH:	3.91-6.91 (10% in 1:1 IPA:H2O)
Freezing Point / Range	No data available
Melting Point / Range	No data available
Boiling Point / Range	No data available
Flash Point	62.2 °C / 144 °F (SFCC)
Flammability (solid, gas)	No data available
Upper flammability limit	No data available
Lower flammability limit	No data available
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	0.9697 - 0.9947
Water Solubility	No data available
Solubility in other solvents	Oil soluble
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

9.2. Other information

VOC Content (%)	No data available
Liquid Density	8.08-8.29 lbs/gal

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions
Will Not Occur

10.4. Conditions to avoid
Keep away from heat, sparks and flame.

10.5. Incompatible materials
Strong oxidizers. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products
Carbon oxides. Oxides of nitrogen. Oxides of sulfur.

11. Toxicological Information

11.1 Information on likely routes of exposure
Principle Route of Exposure Inhalation. Skin contact. Eye contact. Ingestion.

11.2 Symptoms related to the physical, chemical and toxicological characteristics
Acute Toxicity

Inhalation May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Eye Contact Causes serious eye irritation.

Skin Contact Causes skin irritation.

Ingestion Ingestion of this product may cause blindness due to the presence of methanol.

Chronic Effects/Carcinogenicity May cause heritable genetic damage. Contains known or suspected carcinogens. May cause birth defects. Contains known or suspected reproductive toxins. Causes damage to organs through prolonged or repeated exposure.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	**LD50 Oral**	**LD50 Dermal**	**LC50 Inhalation**
Light aromatic solvent	64742-95-6	8400 mg/kg (Rat) >5000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	5.2 mg/L (Rat) 4h 3400 ppm (Rat) 4h >8.53 mg/L (Rat) 4h
1,2,4 Trimethylbenzene	95-63-6	3415 mg/kg-bw (rat)	>3440 mg/kg-bw (rat) (similar substance)	>10.2 mg/L (rat, 4 h, aerosol) (similar substance)
Methanol	67-56-1	300 mg/kg-bw (human) < 790 to 13,000 mg/kg (rat)	1000 mg/kg-bw (human) 17,100 mg/kg (rabbit)	10 mg/L (human, vapor, 4h)
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	>4000 mg/kg (Rat)	No data available	No data available

Substances	**CAS Number**	**Skin corrosion/irritation**
Light aromatic solvent	64742-95-6	Causes moderate skin irritation. (Rabbit)
1,2,4 Trimethylbenzene	95-63-6	Irritating to skin. (Rabbit) Causes moderate skin irritation. (similar substances)
Methanol	67-56-1	Non-irritating to the skin (Rabbit)
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	Causes severe skin irritation with tissue destruction.

Substances	**CAS Number**	**Serious eye damage/irritation**
Light aromatic solvent	64742-95-6	Non-irritating to rabbit's eye
1,2,4 Trimethylbenzene	95-63-6	Irritating to eyes (Rabbit) May cause moderate eye irritation.
Methanol	67-56-1	Non-irritating to the eye (Rabbit)
Fatty acids, tall-oil, reaction products with	61790-69-0	Causes severe eye irritation. Will damage tissue.

diethylenetriamine		

Substances	CAS Number	Skin Sensitization
Light aromatic solvent	64742-95-6	Did not cause sensitization on laboratory animals (guinea pig)
1,2,4 Trimethylbenzene	95-63-6	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Methanol	67-56-1	Did not cause sensitization on laboratory animals (guinea pig)
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	As a precaution the product should be treated as a sensitizer

Substances	CAS Number	Respiratory Sensitization
Light aromatic solvent	64742-95-6	No information available
1,2,4 Trimethylbenzene	95-63-6	No information available
Methanol	67-56-1	No information available
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available

Substances	CAS Number	Mutagenic Effects
Light aromatic solvent	64742-95-6	Some in vivo tests have shown mutagenic effects. In vitro tests have shown mutagenic effects
1,2,4 Trimethylbenzene	95-63-6	In vivo tests did not show mutagenic effects. In vitro tests did not show mutagenic effects.
Methanol	67-56-1	The weight of evidence from available in vitro and in vivo studies indicates that this substance is not expected to be mutagenic.
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available

Substances	CAS Number	Carcinogenic Effects
Light aromatic solvent	64742-95-6	Contains a known or suspected carcinogen
1,2,4 Trimethylbenzene	95-63-6	No information available
Methanol	67-56-1	No data of sufficient quality are available.
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available

Substances	CAS Number	Reproductive toxicity
Light aromatic solvent	64742-95-6	No data of sufficient quality are available.
1,2,4 Trimethylbenzene	95-63-6	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances) Adverse developmental effects were only observed at maternally toxic doses.
Methanol	67-56-1	Experiments have shown reproductive toxicity effects on laboratory animals
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available

Substances	CAS Number	STOT - single exposure
Light aromatic solvent	64742-95-6	May cause headache, dizziness, and other central nervous system effects.
1,2,4 Trimethylbenzene	95-63-6	May cause respiratory irritation. No information available
Methanol	67-56-1	May cause disorder and damage to the Central Nervous System (CNS)
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available

Substances	CAS Number	STOT - repeated exposure
Light aromatic solvent	64742-95-6	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
1,2,4 Trimethylbenzene	95-63-6	Causes damage to organs through prolonged or repeated exposure if inhaled: (Hematopoietic System) Central Nervous System (CNS) (Central nervous system)
Methanol	67-56-1	No data of sufficient quality are available.
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available

Substances	CAS Number	Aspiration hazard
Light aromatic solvent	64742-95-6	May be fatal if swallowed and enters airways
1,2,4 Trimethylbenzene	95-63-6	Risk of serious damage to the lungs (by aspiration) Aspiration can be a hazard if this material is swallowed.

Methanol	67-56-1	Not applicable
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	Not applicable

12. Ecological Information

12.1. Toxicity

Ecotoxicity effects

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Light aromatic solvent	64742-95-6	EL50 (72h) 3.1 mg/L (Pseudokirchnerella subcapitata)	LC50 (96h) 1.03 mg/L (Oncorhynchus mykiss)	No information available	EC50 (48h) 1.2 mg/L (Daphnia magna)
1,2,4 Trimethylbenzene	95-63-6	No information available	LC50 (96 h) 7.72 mg/L (Pimephales promelas)	No information available	LC50 (48 h) 3.6 mg/L (Daphnia magna) Chronic Value (ChV) (16 d) 0.367 mg/L (Daphnia sp.)
Methanol	67-56-1	EC50 (96 h) =22000 mg/L (Pseudokirchnerella subcapitata) NOEC (8 d) =8000 mg/L (Scenedesmus quadricauda)	LC50 (96 h) =15400 mg/L (Lepomis macrochirus) EC50 (200 h) =14536 mg/L (Oryzias latipes)	IC50 (3h) > 1000 mg/L (activated sludge)	EC50 (96 h) =18260 mg/L (Dapnia magna) NOEC (21 d) =208 mg/L (Dapnia magna)
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available	No information available	No information available	No information available

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Light aromatic solvent	64742-95-6	(77.05% @ 28d)
1,2,4 Trimethylbenzene	95-63-6	Readily biodegradable
Methanol	67-56-1	(95-97% @ 20d)
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Light aromatic solvent	64742-95-6	3.20 - 3.63 BCF = 119 - 142
1,2,4 Trimethylbenzene	95-63-6	LogPow 3.42
Methanol	67-56-1	-0.77 BCF = 1.0 – 4.5 (Cyprinus carpio) BCF < 10 (Leuciscus idus melanotus)
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available

12.4. Mobility in soil

Substances	CAS Number	Mobility
Light aromatic solvent	64742-95-6	KOC = 372 - 617
1,2,4 Trimethylbenzene	95-63-6	No information available
Methanol	67-56-1	No information available
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	No information available

12.5 Other adverse effects
No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal methods	Disposal should be made in accordance with federal, state, and local regulations.
Contaminated Packaging	Dispose of container according to national or local regulations.

14. Transport Information

US DOT

UN Number	Not restricted
UN proper shipping name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

Not Restricted when shipped in containers less than 119 gallons as authorized by 49 CFR 173.150(e)(1) and 49 CFR 173.150(f)(2).

US DOT Bulk
NA1993, Combustible Liquid, N.O.S. (Contains Light aromatic solvent, 1,2,4-Trimethylbenzene), Combustible Liquid, III

Canadian TDG

UN Number	Not restricted
UN proper shipping name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

IMDG/IMO

UN Number	Not restricted
UN proper shipping name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

IATA/ICAO

UN Number	Not restricted
UN proper shipping name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable
Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances	CAS Number	TSCA Significant New Use Rules - S5A2
Light aromatic solvent	64742-95-6	Not applicable
1,2,4 Trimethylbenzene	95-63-6	Not applicable
Methanol	67-56-1	Not applicable
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	Not applicable

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Light aromatic solvent	64742-95-6	Not applicable
1,2,4 Trimethylbenzene	95-63-6	Not applicable
Methanol	67-56-1	Not applicable
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	Not applicable

EPA SARA (311,312) Hazard Class

Acute Health Hazard
Chronic Health Hazard
Fire Hazard

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Light aromatic solvent	64742-95-6	Not applicable	Not applicable
1,2,4 Trimethylbenzene	95-63-6	1.0%	Not applicable
Methanol	67-56-1	1.0%	Not applicable
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	Not applicable	Not applicable

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Light aromatic solvent	64742-95-6	Not applicable
1,2,4 Trimethylbenzene	95-63-6	Not applicable
Methanol	67-56-1	5000 lb 2270 kg
Fatty acids, tall-oil, reaction products with diethylenetriamine	61790-69-0	Not applicable

EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65 The California Proposition 65 regulations apply to this product.

MA Right-to-Know Law One or more components listed.

NJ Right-to-Know Law One or more components listed.

PA Right-to-Know Law One or more components listed.

NFPA Ratings: Health 2, Flammability 2, Reactivity 0
HMIS Ratings: Health 2*, Flammability 2, Physical Hazard 0 , PPE: X

Canadian Regulations

Canadian Domestic Substances List (DSL) All components listed on inventory or are exempt.

16. Other information

Preparation Information

Prepared By Chemical Stewardship
Telephone: 1-281-871-6107
e-mail: fdunexchem@halliburton.com

Revision Date: 09-Jun-2016

Reason for Revision Update to Format

Additional information
For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet
bw – body weight
CAS – Chemical Abstracts Service
d - day
EC50 – Effective Concentration 50%
ErC50 – Effective Concentration growth rate 50%
h - hour
LC50 – Lethal Concentration 50%
LD50 – Lethal Dose 50%
LL50 – Lethal Loading 50%
mg/kg – milligram/kilogram
mg/L – milligram/liter
mg/m^3 - milligram/cubic meter
mm - millimeter
mmHg - millimeter mercury
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OEL – Occupational Exposure Limit
PEL – Permissible Exposure Limit
ppm – parts per million
STEL – Short Term Exposure Limit
TWA – Time-Weighted Average
UN – United Nations
w/w - weight/weight

Key literature references and sources for data
www.ChemADVISOR.com/

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End of Safety Data Sheet