



A CSW Industrials Company

# SAFETY DATA SHEET

Issuing Date 21-Jan-2019

Revision date 21-Jan-2019

Revision Number 1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifier

Product Name API-MODIFIED

Product Code 1392482

### Other means of identification

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.

UN number UN3082

### Recommended use of the chemical and restrictions on use

Recommended use Sealant Lubricants, Greases and Release Products

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### Manufacturer

Jet-Lube LLC.  
930 Whitmore Drive  
Rockwall Texas  
75087 US  
Phone: +1 972-771-1000  
Fax: +1 972-722-2108

#### Supplier

Blick Industrial Limited  
21 Kahu Crescent  
Te Rapa Hamilton  
3200 New Zealand  
Phone: +64 7 849 2366  
Email: sales@blick.group

### For further information, please contact

Contact Point Product Safety Department

E-mail address Regulatory@jetlube.com

### Emergency telephone number

Emergency Telephone CHEMTREC +1-703-741-5970 or 1-800-424-9300 (24/7)

Poisons Information Center, New Zealand: 0800 764 766

## SECTION 2: Hazards identification

EPA New Zealand HSNO approval code or group standard Lubricants (Toxic [6.7]) Group Standard 2017 - HSR002607

Dangerous Goods Class Hazard class 9 Packing group III

### GHS Classification

Acute toxicity - Oral	Category 4 (HSNO - 6.1D)
Acute toxicity - Inhalation (Gases)	Category 4 (HSNO - 6.1D)
Acute toxicity - Inhalation (Vapours)	Category 4 (HSNO - 6.1D)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 (HSNO - 6.1D)
Skin corrosion/irritation	Category 3 (HSNO - 6.3B)
Carcinogenicity	Category 1B (HSNO - 6.7A)
Reproductive toxicity	Category 1A (HSNO - 6.8A)
Effects on or via lactation	Yes (HSNO - 6.8C)
Specific target organ toxicity — repeated exposure	Category 1 (HSNO - 6.9A)
Acute aquatic toxicity	Category 1 (HSNO - 9.1A)
Chronic aquatic toxicity	Category 1 (HSNO - 9.1A)

**Label elements****Signal word**

Danger

**Hazard statements**

H302 - Harmful if swallowed  
H316 - Causes mild skin irritation  
H332 - Harmful if inhaled  
H350 - May cause cancer  
H360 - May damage fertility or the unborn child  
H362 - May cause harm to breast-fed children  
H372 - Causes damage to organs through prolonged or repeated exposure  
H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Do not breathe dust/fume/gas/mist/vapours/spray  
Avoid contact during pregnancy/while nursing  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Avoid release to the environment

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
If skin irritation occurs: Get medical advice/attention  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth  
Collect spillage

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards which do not result in classification**

No information available

**SECTION 3: Composition/information on ingredients****Substance**

Not applicable Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	74869-21-9	30 - <60
Lead	7439-92-1	30 - <60
Graphite	7782-42-5	10 - <30
Zinc	7440-66-6	10 - <30
Copper	7440-50-8	<10
Non-hazardous ingredients	Proprietary	Balance

**SECTION 4: First aid measures****Description of first aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, call a doctor. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids.
<b>Skin contact</b>	Wash skin with soap and water.
<b>Ingestion</b>	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapours or mists. Use personal protective equipment as required. See section 8 for more information.
<b>Symptoms</b>	Prolonged contact may cause redness and irritation. Coughing and/ or wheezing. Difficulty in breathing.

**Indication of any immediate medical attention and special treatment needed**

**Note to doctors** Treat symptomatically.

**SECTION 5: Firefighting measures****Suitable Extinguishing Media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient. Do not scatter spilled

material with high pressure water streams.

#### **Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** No information available.

**Hazardous combustion products** Carbon oxides.

#### **Special protective actions for fire-fighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**Hazchem code** •3Z.

### **SECTION 6: Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid breathing vapours or mists.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

#### **Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

#### **Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

#### **Precautions to prevent secondary hazards**

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### **SECTION 7: Handling and storage**

#### **Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Ensure adequate ventilation. Avoid breathing vapours or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

#### **Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

**Incompatible materials** None known based on information supplied.

## SECTION 8: Exposure controls/Personal protection

### Control parameters

#### Exposure Limits

Chemical name	New Zealand	ACGIH TLV	United Kingdom	Australia
Lead 7439-92-1	TWA: 0.1 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup> STEL: 0.45 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>
Graphite 7782-42-5	TWA: 3 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> respirable particulate matter all forms except graphite fibers	TWA: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup> STEL: 30 mg/m <sup>3</sup> STEL: 12 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>
Copper 7440-50-8	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> fume	TWA: 1 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup> STEL: 0.6 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> 0.2 mg/m <sup>3</sup>

#### Biological occupational exposure limits

Chemical name	New Zealand	ACGIH
Lead 7439-92-1	1.5 µmol/L blood not critical Lead	200 µg/L

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

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

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

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

Physical state	Paste / Gel; Liquid
Colour	bronze
Odour	Petroleum.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7	
Melting point / freezing point	No data available	None known
Boiling point / boiling range	260 °C	
Flash point	221 °C	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapour pressure	No data available	None known
Vapour density	No data available	None known
Relative density	2.0	
Water solubility	negligible	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidising properties	No information available.	
<b><u>9.2. Other information</u></b>		
Softening point	No information available	
Molecular weight	No information available	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk density	No information available	

## **SECTION 10: Stability and reactivity**

### **Reactivity**

Reactivity No information available.

### **Chemical stability**

Stability Stable under normal conditions.

### **Explosion data**

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

### **Possibility of hazardous reactions**

Hazardous polymerisation Hazardous polymerisation does not occur.

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid**

**Conditions to avoid** Excessive heat.

**Incompatible materials**

**Incompatible materials** None known based on information supplied.

**Hazardous decomposition products**

**Hazardous decomposition products** Carbon oxides.

**SECTION 11: Toxicological information**

**Acute toxicity**

**Information on likely routes of exposure**

**Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes mild skin irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

**Symptoms** Prolonged contact may cause redness and irritation. Coughing and/ or wheezing.

**Acute toxicity**

**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	817.90 mg/kg
<b>ATEmix (inhalation-gas)</b>	4,624.20 mg/l
<b>ATEmix (inhalation-vapour)</b>	11.30 mg/l
<b>ATEmix (inhalation-dust/mist)</b>	1.54 mg/l

**Unknown acute toxicity**

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	= 2280 mg/kg ( Rat )	-	-
Zinc	= 630 mg/kg ( Rat )	-	-

See section 16 for terms and abbreviations

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. May cause skin irritation.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Sensitisation</b>	No information available.
<b>Respiratory or skin sensitisation</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	New Zealand	IARC
Lead - 7439-92-1	Suspected carcinogen	Group 2A

#### Legend

##### IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

<b>Reproductive toxicity</b>	Classification based on data available for ingredients. May damage fertility or the unborn child. May cause harm to breast-fed children.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	No information available.

## **SECTION 12: Ecological information**

### Ecotoxicity

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	-	LC50: >2000mg/L (96h, Salmo gairdneri)	-
Lead	-	LC50: =0.44mg/L (96h, Cyprinus carpio) LC50: =1.17mg/L (96h, Oncorhynchus mykiss) LC50: =1.32mg/L (96h, Oncorhynchus mykiss)	EC50: =600µg/L (48h, water flea)
Zinc	EC50: 0.11 - 0.271mg/L (96h, Pseudokirchneriella subcapitata) EC50: 0.09 - 0.125mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 2.16 - 3.05mg/L (96h, Pimephales promelas) LC50: =0.59mg/L (96h, Oncorhynchus mykiss) LC50: =0.41mg/L (96h,	EC50: 0.139 - 0.908mg/L (48h, Daphnia magna)



		Oncorhynchus mykiss) LC50: =2.66mg/L (96h, Pimephales promelas) LC50: 0.211 - 0.269mg/L (96h, Pimephales promelas) LC50: =0.45mg/L (96h, Cyprinus carpio) LC50: =7.8mg/L (96h, Cyprinus carpio) LC50: =3.5mg/L (96h, Lepomis macrochirus) LC50: =0.24mg/L (96h, Oncorhynchus mykiss) LC50: =30mg/L (96h, Cyprinus carpio)	
Copper	EC50: 0.0426 - 0.0535mg/L (72h, Pseudokirchneriella subcapitata) EC50: 0.031 - 0.054mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 0.0068 - 0.0156mg/L (96h, Pimephales promelas) LC50: <0.3mg/L (96h, Pimephales promelas) LC50: =0.2mg/L (96h, Pimephales promelas) LC50: =0.052mg/L (96h, Oncorhynchus mykiss) LC50: =1.25mg/L (96h, Lepomis macrochirus) LC50: =0.3mg/L (96h, Cyprinus carpio) LC50: =0.8mg/L (96h, Cyprinus carpio) LC50: =0.112mg/L (96h, Poecilia reticulata)	EC50: =0.03mg/L (48h, Daphnia magna)

**Persistence and degradability**

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation** No information available.

**Mobility**

**Mobility in soil** No information available.

**Mobility** No information available.

**Other adverse effects**

**Other adverse effects** No information available.

**SECTION 13: Disposal considerations****Waste treatment methods****Waste from residues/unused products**

Dispose of product in packaging in a way that is consistent with the Hazardous Substances (Disposal) Notice 2017 and the Act.

Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste.

Class 6 and 8 substances – may be discharged into the environment if a tolerable exposure limit has been set for the substance (or a component of that substance); and the discharge does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the tolerable exposure limit. If there is not tolerable exposure limit for the substance, then it may only be discharged into the environment if the substance is very rapidly converted to substances that are not hazardous substances.

Class 9.1 substances – if the substance, or if it contains a component that is bioaccumulative and not rapidly degradable must be removed. The product may only be discharged into the environment if an environmental exposure limit has been set for the substance (or a

component of the substance); and the discharge does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the environmental exposure limit.

**Contaminated packaging**

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from.

Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance).

**SECTION 14: Transport information****Road transport****ADG**

UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.
Hazard class	9
Packing group	III
Environmental hazard	Yes
Special Provisions	274, 331, 335, 375, AU01
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.(ZINC, COPPER), 9, III
Hazchem code	*3Z

**IATA**

UN number	UN3082
UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s.
Transport hazard class(es)	9
Packing group	III
ERG Code	9L
Description	UN3082, Environmentally hazardous substances, liquid, n.o.s.(Zinc, Copper), 9, III

**IMDG**

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
EmS-No	F-A, S-F
Special Provisions	274, 335, 969
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S., (ZINC, COPPER), Marine pollutant, 9, III

**Transport in bulk according to Annex II of MARPOL and the IBC Code**

No information available

**SECTION 15: Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****New Zealand****National regulations**

See section 8 for national exposure control parameters

This SDS may not cover all of the controls relevant for this substance or mixture. The Environmental Protection Authority of New Zealand (EPA) and Hazardous Substances notices should be consulted for a comprehensive list of controls and reference to the regulations

**Certified handlers, tracking and controlled substance licence requirements**

Certified handlers are required for some substances. This includes for substances requiring a controlled substance licence, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information.

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.

Controlled substance licences are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at Work Regulation 2017 for more information.

**EPA New Zealand HSNO approval code or group standard** Lubricants (Toxic [6.7]) Group Standard 2017 - HSR002607

Chemical name	New Zealand HSNO Chemical Classification
Lead - 7439-92-1	6.1C (All),6.1C (O),6.6B,6.7B,6.8A,6.8C,6.9A (All),6.9A (D),6.9A (I),6.9B (All),6.9B (O),9.1A (All),9.1A (C),9.1B (F),9.1B (A),9.3B 6.1D (All),6.1D (O),6.6B,6.7B,6.8A,6.8C,6.9B (O),6.9A (All),6.9A (D),6.9A (I),9.1C (F),9.1B (All),9.1B (C),9.1C (A),9.3C
Zinc - 7440-66-6	4.2A,6.1E (I),9.1A (All),9.1A (A),9.1A (C),9.1A (F) 4.2B,4.3A,6.1E (I),9.1A (All),9.1A (A),9.1A (C),9.1A (F) 4.2B,4.3B,6.1E (I),9.1A (All),9.1A (A),9.1A (C),9.1A (F) 4.2C,4.3C,6.1E (I),9.1A (All),9.1A (A),9.1A (C),9.1A (F) 4.3B,6.1E (I),9.1A (All),9.1A (A),9.1A (C),9.1A (F)
Copper - 7440-50-8	6.1B (All),6.1B (I),6.1B (O),6.4A,6.5B,6.6A,6.9B (All),6.9B (I),6.9B (O),9.1A (All),9.1A (A),9.1A (C),9.1A (F),9.1A,9.2D,9.3A

**International Inventories**

<b>NZIoC</b>	Complies
<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AICS</b>	Contact supplier for inventory compliance status.

**Legend:**

- NZIoC** - New Zealand Inventory of Chemicals
- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

The Rotterdam Convention Not applicable

## SECTION 16: Other information

**Issuing Date** 21-Jan-2019  
**Revision date** 21-Jan-2019  
**Revision Note** Not applicable.

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
 Organisation for Economic Co-operation and Development Screening Information Data Set  
 RTECS (Registry of Toxic Effects of Chemical Substances)  
 World Health Organization

### Disclaimer

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**End of Safety Data Sheet**