# SAFETY DATA SHEET

**Revision date:** 27-Apr-2022

**Revision Number** 1

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product identifier**

**Product Name** DSR-101

**Product Code(s)** 000000054170

**Other means of identification**

**UN number** 2055

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

**Recommended use** Mining chemical.

**Uses advised against** No information available.

**Supplier**
Ixom Operations Pty Ltd
ABN: 51 600 546 512
Level 8, 1 Nicholson Street
Melbourne 3000
Australia

Telephone Number: +61 3 9906 3000

**Emergency telephone number**

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

**GHS Classification**

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

| | |
|---|---|
| **Flammable liquids** | Category 3 |
| **Aspiration hazard** | Category 1 |
| **Acute toxicity - Inhalation (Dusts/Mists)** | Category 4 |
| **Skin corrosion/irritation** | Category 2 |
| **Serious eye damage/eye irritation** | Category 2 |
| **Germ cell mutagenicity** | Category 2 |
| **Carcinogenicity** | Category 2 |
| **Reproductive toxicity** | Category 2 |
| **Specific target organ toxicity (single exposure)** | Category 3 |
| **Specific target organ toxicity (repeated exposure)** | Category 1 |

| | |
|---|---|
| **Acute aquatic toxicity** | Category 2 |
| **Chronic aquatic toxicity** | Category 2 |

**SIGNAL WORD**
Danger

**Label elements**

Flame
Health hazard
Exclamation mark
Environment


**Hazard statements**
H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H341 - Suspected of causing genetic defects
H351 - Suspected of causing cancer
H361d - Suspected of damaging the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:
H411 - 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
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical, ventilating, lighting equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Do not breathe fume, gas, mist, vapours, spray
Wash face, hands and any exposed skin thoroughly after handling
Use only outdoors or in a well-ventilated area
Wear protective gloves / protective clothing / eye protection / face protection
Use personal protective equipment as required
Avoid release to the environment
**Precautionary Statements - Response**
If exposed or concerned: Get medical advice/attention
Specific treatment (see First aid on this SDS)
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 ON SKIN: Wash with plenty of soap and water
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Rinse mouth
Do NOT induce vomiting
In case of fire: Use CO2, dry chemical, or foam for extinction
Collect spillage

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed
Store in a well-ventilated place. Keep cool
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

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

**Poisons Schedule (SUSMP)** 6

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Mixture**

| Chemical name | CAS No. | Weight-% |
|---|---|---|
| Styrene | 100-42-5 | 30-60 |
| Tetrachloroethylene | 127-18-4 | to 100 |

## 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice** For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Show this safety data sheet to the doctor in attendance.

**Inhalation** Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water. Call a physician if symptoms occur.

**Ingestion** ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Aspiration risk: may cause lung damage if swallowed. Irritation. May cause redness and tearing of the eyes. Erythema (skin redness). Coughing and/ or wheezing. Difficulty in breathing. Drowsiness. Dizziness.

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

**Note to physicians** Aspiration hazard. Aspiration may cause pulmonary edema and pneumonitis. Effects may be delayed. Symptoms may be delayed.

Adrenaline and similar sympathomimetic drugs should be avoided following exposure to tetrachloroethylene. Complications may include cardiac arrhythmia and cardiac arrest. Gastric lavage may be effective and should preferably be undertaken within one hour.

Aspiration of this material into the lungs must be avoided. Following ingestion, adsorbents such as activated charcoal may be useful.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media**

**Suitable Extinguishing Media** Dry chemical, CO2, water spray or regular foam.

**Unsuitable extinguishing media** High volume water jet.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Flammable. Most vapors are heavier than air. Vapors may spread along ground and collect in low or confined areas (sewers, basements, tanks). Flash back possible over considerable distance. May form explosive mixtures with air. Cool drums with water spray. Environmentally hazardous.

**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** 3Y

## 6. ACCIDENTAL RELEASE MEASURES

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

**Personal precautions** All equipment used when handling the product must be grounded. Remove all sources of ignition. Take precautionary measures against static discharges. Avoid contact with skin, eyes, and clothing. Do not touch or walk through spilled material. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment as required. Wash thoroughly after handling.

**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** Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use non-sparking tools.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Avoid breathing vapors or mists. Avoid contact with skin, eyes, and clothing. Do not eat, drink or smoke when using this product. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion proof. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or

weld containers. Remove all sources of ignition. Take precautionary measures against static discharges. Keep out of reach of children.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at a temperature not exceeding 25 °C. Store away from foodstuffs and sources of heat or ignition. Protect from direct sunlight. Keep container closed when not in use.

This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.

**Packaging materials** Do not store in aluminium containers.

**Incompatible materials** Strong oxidizing agents. Copper.

Tetrachloroethylene is incompatible with finely powdered metals, strong bases, strong oxidising agents, potassium, sodium, amines, nitrogen dioxide, inorganic alkalis, strong acids, barium, beryllium.

**Other information** Inhibitor levels must be maintained.

**Poisons Schedule (SUSMP)** 6

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Limits** No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Styrene, monomer: 8hr TWA = 213 mg/m $^3$ (50 ppm), 15 min STEL = 426 mg/m$^3$ (100 ppm)
Perchloroethylene (Tetrachloroethylene): 8hr TWA = 340 mg/m $^3$ (50 ppm), 15 min STEL = 1020 mg/m$^3$ (150 ppm)

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Appropriate engineering controls**

**Engineering controls** Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal

Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

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

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

| | |
|---|---|
| **Eye/face protection** | Goggles. |
| **Skin and body protection** | Antistatic boots. Wear fire/flame resistant/retardant clothing. Overalls. |
| **Hand protection** | Impervious gloves. |
| **Respiratory protection** | If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. |
| **Environmental exposure controls** | No information available. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical state** | Liquid |
| **Appearance** | No information available. |
| **Color** | Colourless to Yellowish |
| **Odor** | Aromatic Hydrocarbon , Ether |
| **Odor threshold** | No information available. |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **pH** | No data available | None known |
| **pH (as aqueous solution)** | No data available | None known |
| **Melting point / freezing point** | No data available | None known |
| **Boiling point / boiling range** | >100°C | None known |
| **Flash point** | 44.0°C ± 1.0°C | Pensky-Martens Closed Cup (PMCC) |
| **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** | 6.1% (V) (for styrene) | |
| **Lower flammability or explosive limits** | 1.1% (V) (for styrene) | |
| **Vapor pressure** | No data available | None known |
| **Vapor density** | >1 | None known |
| **Relative density** | No data available | None known |
| **Water solubility** | Slightly miscible | None known |
| **Solubility(ies)** | No data available | None known |
| **Partition coefficient** | No data available | None known |
| **Autoignition temperature** | 490°C (for styrene) | None known |
| **Decomposition temperature** | No data available | None known |
| **Kinematic viscosity** | No data available | None known |

| | | |
|---|---|---|
| **Dynamic viscosity** | No data available | None known |

**Other information**

## 10. STABILITY AND REACTIVITY

**Reactivity**

**Reactivity** Reacts with strong oxidising agents.

**Chemical stability**

**Stability** Stable under normal conditions. Stabilizer can lose its effectiveness if stored over a long period of time.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** Yes.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** May react violently with metals such as sodium, potassium and barium, particularly if they are finely divided. May react with freshly galvanised surfaces to produce highly toxic dichloroacetylene. Contact with hot surfaces, sparks or naked flames may generate toxic fumes of phosgene and hydrogen chloride.

**Hazardous polymerization** Hazardous polymerization may occur.

**Conditions to avoid**

**Conditions to avoid** Heat, flames and sparks. UV-radiation/sunlight. Exposure to air. Static discharge (electrostatic discharge).

**Incompatible materials**

**Incompatible materials** Strong oxidizing agents. Copper.

Tetrachloroethylene is incompatible with finely powdered metals, strong bases, strong oxidising agents, potassium, sodium, amines, nitrogen dioxide, inorganic alkalis, strong acids, barium, beryllium.

**Hazardous decomposition products**

**Hazardous decomposition products** Carbon oxides. Formaldehyde. Phosgene. Hydrogen chloride.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

**Information on likely routes of exposure**

**Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

**Inhalation** Irritating to respiratory system. May cause drowsiness or dizziness. Harmful if inhaled.

**Eye contact** Causes serious eye irritation.

**Skin contact** Causes skin irritation.

**Ingestion** Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Symptoms** Aspiration risk: may cause lung damage if swallowed. Irritation. May cause redness and tearing of the eyes. Erythema (skin redness). Coughing and/ or wheezing. Difficulty in breathing. Drowsiness. Dizziness.

**Numerical measures of toxicity - Product Information**

Refer to component information below.

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Styrene | >5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | = 11.7 mg/L ( Rat ) 4 h |
| Tetrachloroethylene | = 2629 mg/kg ( Rat ) | - | = 27.8 mg/L ( Rat ) 4 h |

*See section 16 for terms and abbreviations*

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

**Skin corrosion/irritation** Irritating to skin. Classification is based on mixture calculation methods based on component data.

**Serious eye damage/eye irritation** Causes serious eye irritation. Classification is based on mixture calculation methods based on component data.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** Suspected of causing genetic defects. Classification is based on mixture calculation methods based on component data.

**Carcinogenicity** Suspected of causing cancer. Classification is based on mixture calculation methods based on component data. Refer to 'Chronic effects' section below.

| Chemical name | Australia |
|---|---|
| Tetrachloroethylene - 127-18-4 | Carc. 2 |

**Reproductive toxicity** H361d - Suspected of damaging the unborn child. Classification is based on mixture calculation methods based on component data.

**STOT - single exposure** May cause respiratory irritation. May cause drowsiness or dizziness. Classification is based on mixture calculation methods based on component data.

**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure. Classification is based on mixture calculation methods based on component data.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects:** There is sufficient evidence in experimental animals for the carcinogenicity of styrene. There is limited evidence in humans for the carcinogenicity of styrene. Styrene has been classified by the International Agency for Research on Cancer (IARC) as a Group 2A agent - The agent is probably carcinogenic to humans.

Tetrachloroethylene: Inhalational Lowest Toxic Concentration (human): 96 ppm/7hr - effects on peripheral and central nervous system and eye irritation.

Human data:
50 ppm - odour threshold to unacclimatised persons.
600 ppm - dizziness and incoordination after 10 minutes
2,000 ppm - mild narcosis in 5 minutes.

Evidence from animal studies have shown this compound to cause liver and kidney damage at exposure levels well above the occupational exposure limit.

Studies in rats and mice at high doses indicate that tetrachloroethylene is an animal carcinogen. Evaluations of possible mechanisms have led to the conclusion that they are of little relevance to humans even at exposure levels well above the occupational exposure limit. Studies in workers have failed to demonstrate a relationship between exposure to tetrachloroethylene and cancer. Tetrachloroethylene has been classified by the International Agency for Research on Cancer (IARC) as a Group 2A agent - The agent is probably carcinogenic to humans.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Ecotoxicity** Keep out of waterways. Toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Styrene | EC50: =1.4mg/L (72h, Pseudokirchneriella subcapitata) EC50: =0.72mg/L (96h, Pseudokirchneriella subcapitata) EC50: 0.46 - 4.3mg/L (72h, Pseudokirchneriella subcapitata) EC50: 0.15 - 3.2mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 3.24 - 4.99mg/L (96h, Pimephales promelas) LC50: 19.03 - 33.53mg/L (96h, Lepomis macrochirus) LC50: 6.75 - 14.5mg/L (96h, Pimephales promelas) LC50: 58.75 - 95.32mg/L (96h, Poecilia reticulata) | - | EC50: 3.3 - 7.4mg/L (48h, Daphnia magna) |
| Tetrachloroethylene | EC50: >500mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 12.4 - 14.4mg/L (96h, Pimephales promelas) LC50: 8.6 - 13.5mg/L (96h, Pimephales promelas) LC50: 11.0 - 15.0mg/L (96h, Lepomis macrochirus) LC50: 4.73 - 5.27mg/L (96h, Oncorhynchus mykiss) | - | EC50: 6.1 - 9.0mg/L (48h, Daphnia magna) |

**Persistence and degradability**

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation** This chemical shows a low bioaccumulation potential.

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| Styrene | 2.95 |
| Tetrachloroethylene | 2.53 - 2.88 |

**Mobility**

**Mobility in soil** No information available.

**Other adverse effects**

**Endocrine Disruptor Information**

| Chemical name | EU - Endocrine Disrupters Candidate List | EU - Endocrine Disruptors - Evaluated Substances | Endocrine disrupting potential |
|---|---|---|---|
| Styrene | Group I Chemical | High Exposure Concern | - |
| Tetrachloroethylene | Group II Chemical | - | - |

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

**ADG**
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

**UN number** 2055
**Proper shipping name** STYRENE MONOMER, STABILIZED MIXTURE
**Hazard class** 3
**Packing group** III
**Hazchem code** 3Y

**IATA**
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

**UN number** 2055
**UN proper shipping name** STYRENE MONOMER, STABILIZED MIXTURE
**Transport hazard class(es)** 3
**Packing group** III

**IMDG**
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

**UN number** 2055
**UN proper shipping name** STYRENE MONOMER, STABILIZED MIXTURE MARINE POLLUTANT
**Transport hazard class(es)** 3
**Packing group** III
**IMDG EMS Fire** F-E
**IMDG EMS Spill** S-D
**Marine pollutant** Yes

## 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**National regulations**

**Australia**
Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

**Poisons Schedule (SUSMP)** 6

**Major hazard (accident/incident planning) regulation**
Verify that license requirements are met
Liquids that meet the criteria for Class 3 Packing Group II or III 50 000
**National pollutant inventory**
Subject to reporting requirement

| Chemical name | National pollutant inventory |
|---|---|
| Styrene - 100-42-5 | 10 tonne/yr Threshold category 1 |
| Tetrachloroethylene - 127-18-4 | 10 tonne/yr Threshold category 1 |

**International Inventories**

| | |
|---|---|
| **AIIC** | All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals. |

**Legend:**
**AIIC - Australian Inventory of Industrial Chemicals**

**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

## 16. OTHER INFORMATION

Ixom Operations Pty Ltd Safety Data Sheet 03/ 2021

**Reason(s) For Issue:** First Issue Primary SDS

**Issuing Date:** 27-Apr-2022

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

**Revision Note:**
The symbol (*) in the margin of this SDS indicates that this line has been revised.

**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**

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
Australian Industrial Chemicals Introduction Scheme (AICIS)
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)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

**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 This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.**

**Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**End of Safety Data Sheet**