

# Safety Data Sheet



## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** **DSP 009**

**Other name(s):** Isopropyl ethyl thiocarbamate; IPETC.

**Recommended Use of the Chemical and Restrictions on Use** Mineral flotation collector.

**Supplier:** Ixom Operations Pty Ltd  
**ABN:** 51 600 546 512  
**Street Address:** Level 8, 1 Nicholson Street  
East Melbourne Victoria 3002  
Australia

**Telephone Number:** +61 3 9906 3000  
**Emergency Telephone:** **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

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

### Classification of the chemical:

Flammable liquids - Category 4  
Skin Sensitisation - Category 1  
Eye Irritation - Category 2A  
Carcinogenicity - Category 2

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 3  
Chronic Aquatic Toxicity - Category 3

**SIGNAL WORD:** WARNING



### Hazard Statement(s):

H227 Combustible liquid.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H351 Suspected of causing cancer.  
H412 Harmful to aquatic life with long lasting effects.

# Safety Data Sheet



## Precautionary Statement(s):

### 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.  
P261 Avoid breathing mist, vapours, spray.  
P264 Wash hands thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves / protective clothing / eye protection / face protection.  
P281 Use personal protective equipment as required.  
P273 Avoid release to the environment.

### Response:

P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).  
P363 Wash contaminated clothing before re-use.  
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 extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.

### Storage:

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

### Disposal:

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

**Poisons Schedule (SUSMP):** None allocated.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
O-Isopropyl ethyl thiocarbamate	141-98-0	>95%	H317 H412
Isopropyl alcohol	67-63-0	<2%	H225 H319 H336
1,3-Diethyl thiourea	105-55-5	<2%	H302 H317 H318 H351 H335 H412
Other ingredient(s)	-	2%	-

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

### Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

### Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water and soap. If swelling, redness, blistering or irritation occurs seek medical assistance.

# Safety Data Sheet

**Eye Contact:**

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

**Ingestion:**

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Seek medical advice.

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

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:**

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

**Unsuitable Extinguishing Media:**

Water jet.

**Specific hazards arising from the chemical:**

Combustible liquid. On burning will emit toxic fumes, including those of oxides of carbon . Environmentally hazardous.

**Special protective equipment and precautions for fire-fighters:**

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

**Emergency procedures/Environmental precautions:**

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

**Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:**

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

## 7. HANDLING AND STORAGE

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

**Precautions for safe handling:**

Avoid eye contact and repeated or prolonged skin contact. Take precautionary measures against static discharges.

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

Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Safety Data Sheet



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

Isopropyl alcohol: 8hr TWA = 983 mg/m<sup>3</sup> (400 ppm), 15 min STEL = 1230 mg/m<sup>3</sup> (500 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:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

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 (PPE):

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.



Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If determined by a risk assessment an inhalation risk exists, wear an air supplied respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

When handling this product in bulk quantities, and/or in Intermediate Bulk Containers (IBC's), wear overalls, safety shoes, impervious gloves, chemical goggles, and a face shield. If determined by a risk assessment an inhalation risk exists, wear appropriate respiratory protection as mentioned above.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Product Name: DSP 009  
Substance No: 00000004473

Issued: 27/11/2019  
Version: 8

# Safety Data Sheet



<b>Physical state:</b>	Clear , Oily Liquid
<b>Colour:</b>	Amber to Reddish
<b>Odour:</b>	Slight Pungent
<b>Solubility:</b>	Slightly soluble in water. Soluble in organic solvents
<b>Specific Gravity:</b>	0.99-0.994 @20°C
<b>Relative Vapour Density (air=1):</b>	Not available
<b>Vapour Pressure (20 °C):</b>	Not available
<b>Flash Point (°C):</b>	91 (main component)
<b>Flammability Limits (%):</b>	Not available
<b>Autoignition Temperature (°C):</b>	Not available
<b>Boiling Point/Range (°C):</b>	Not available
<b>Decomposition Point (°C):</b>	200
<b>pH:</b>	Not available
<b>Freezing Point/Range (°C):</b>	-30

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No information available.
<b>Chemical stability:</b>	Stable at ambient temperatures.
<b>Possibility of hazardous reactions:</b>	None known.
<b>Conditions to avoid:</b>	Avoid exposure to heat, sources of ignition, and open flame.
<b>Incompatible materials:</b>	Incompatible with strong oxidising agents , strong acids , copper , brass .
<b>Hazardous decomposition products:</b>	Oxides of carbon. Oxides of nitrogen. Oxides of sulfur.

## 11. TOXICOLOGICAL INFORMATION

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

<b>Ingestion:</b>	No adverse effects expected, however, large amounts may cause nausea and vomiting.
<b>Eye contact:</b>	An eye irritant.
<b>Skin contact:</b>	Contact with skin may result in irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.
<b>Inhalation:</b>	Breathing in vapour may produce respiratory irritation.
<b>Acute toxicity:</b>	
Oral LD50 (rat):	2324 mg/kg
Dermal LD50 (rabbit):	>2000 mg/kg
Inhalation LC50 (rat):	20 mg/L/4hr
<b>Skin corrosion/irritation:</b>	Non-irritant. The product has not been tested; the classification is based on the components of the mixture.

# Safety Data Sheet



**Serious eye damage/irritation:** Irritant. The product has not been tested; the classification is based on the components of the mixture.

**Respiratory or skin sensitisation:** A skin sensitiser (guinea pig).

**Chronic effects:**

**Mutagenicity:** No information available.

**Carcinogenicity:** Suspected of causing cancer.

**Reproductive toxicity:** No information available.

**Specific Target Organ Toxicity (STOT) - single exposure:** No information available.

**Specific Target Organ Toxicity (STOT) - repeated exposure:** No information available.

**Aspiration hazard:** No information available.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.

**Persistence/degradability:** No information available.

**Bioaccumulative potential:** No information available.

**Mobility in soil:** No information available.

**Aquatic toxicity:** Harmful to aquatic organisms. May cause long lasting harmful effects to aquatic life.

48hr LC50 (Daphnia magna): ca. 17 mg/L

96hr LC50 (rainbow trout): >50 mg/L

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods:

Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

## 14. TRANSPORT INFORMATION

### Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

### Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

### Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

## 15. REGULATORY INFORMATION

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**Classification:**

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

**Classification of the chemical:**

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Carcinogenicity - Category 2

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 3

Chronic Aquatic Toxicity - Category 3

**Hazard Statement(s):**

H227 Combustible liquid.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H412 Harmful to aquatic life with long lasting effects.

**Poisons Schedule (SUSMP):** None allocated.

## 16. OTHER INFORMATION

**Reason(s) for Issue:**

5 Yearly Revised Primary SDS

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.