

# SAFETY DATA SHEET



Revision date: 17-Jan-2023

Revision Number 1

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### Product identifier

**Product Name** DL-ASPARTIC ACID, N-(3-CARBOXY-1-OXO-3-SULFOPROPYL)-N-OCTADECYL-, TETRASODIUM SALT MIXTURE

**Product Code(s)** 000000054428

### Other means of identification

**UN number** 1170

### 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).

<b>Flammable liquids</b>	Category 3
<b>Serious eye damage/eye irritation</b>	Category 2

### **SIGNAL WORD**

Warning

### Label elements

Flame

Exclamation mark



#### Hazard statements

H226 - Flammable liquid and vapor  
H319 - Causes serious eye irritation

#### Precautionary Statements - Prevention

Avoid breathing dust / fume / gas / mist / vapours / spray  
Wash eyes thoroughly after handling.  
Wear protective gloves / protective clothing / eye protection / face protection  
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

#### Precautionary Statements - Response

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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.

#### Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

#### 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

Harmful to aquatic life

#### General Hazards

Poisons Schedule (SUSMP) None allocated

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture

Chemical name	CAS No.	Weight-%
DL-Aspartic acid, N-(3-carboxy-1-oxo-3-sulfopropyl)-N-octadecyl-, tetrasodium salt	38916-42-6	30-<40
Ethyl alcohol (Ethanol)	64-17-5	1-<5
Other component(s)	-	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.

<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. Call a physician if symptoms occur.
<b>Ingestion</b>	Clean mouth with water. Drink 1 or 2 glasses of water. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

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

**Symptoms** Irritation. May cause redness and tearing of the eyes.

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

**Note to physicians** Treat symptomatically.

**5. FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media**

**Suitable Extinguishing Media** Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine water spray or water fog can be used.

**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). Pay attention to flashback. Cool drums with water spray.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides. Oxides of sulfur.

**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** •2Y

**6. ACCIDENTAL RELEASE MEASURES**

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

**Personal precautions** Avoid contact with skin and eyes. Avoid breathing vapors or mists. Evacuate personnel to safe areas. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges. Do not touch or walk through spilled material. 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** Keep out of drains, sewers, ditches and waterways. Stop leak if you can do it without risk.

**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 only non-sparking tools.

## **7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin, eyes, and clothing. Use personal protection equipment. Wash thoroughly after handling. 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. Take precautionary measures against static discharges.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from sources of heat or ignition. Keep container closed when not in use.

**Incompatible materials** Oxidizing agents.

**Poisons Schedule (SUSMP)** None allocated

## **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):

Ethyl alcohol (Ethanol): 8hr TWA = 1880 mg/m<sup>3</sup> (1000 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.

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**

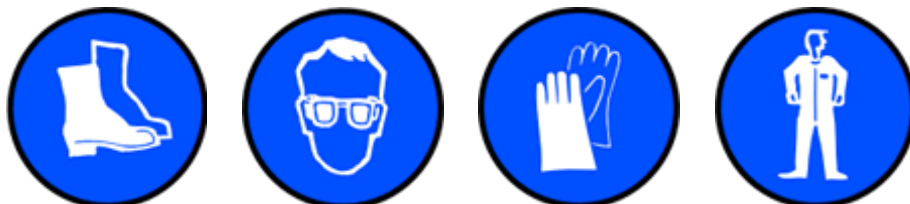
Apply technical measures to comply with the occupational exposure limits.

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.



**Eye/face protection**

Goggles.

**Skin and body protection**

Boots. Wear suitable protective 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**

<b>Physical state</b>	Liquid
<b>Appearance</b>	No information available.
<b>Color</b>	Tan
<b>Odor</b>	Soap -like
<b>Odor threshold</b>	Not determined

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	7.0-8.0	None known
<b>pH (as aqueous solution)</b>	No data available	None known
<b>Melting point / freezing point</b>	< 10°C	None known
<b>Boiling point / boiling range</b>	78°C	None known
<b>Flash point</b>	54°C	Pensky-Martens Closed Cup (PMCC)
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	

Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.12	None known
Water solubility	Miscible in water	None known
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

Other information

## 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 Yes.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Static discharge (electrostatic discharge).

Incompatible materials

Incompatible materials Oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides. Oxides of sulfur.

## 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 May cause irritation.

Eye contact Causes serious eye irritation.

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<b>Skin contact</b>	Non irritant.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
<b>Symptoms</b>	Irritation. May cause redness and tearing of the eyes.

**Numerical measures of toxicity - Product Information**

**On basis of test data**

<b>Oral LD50</b>	> 5000 mg/kg (rat)
<b>Dermal LD50</b>	> 3500 mg/kg (rabbit)

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl alcohol (Ethanol)	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4h

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>	Not classified.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	Not a skin sensitizer.
<b>Germ cell mutagenicity</b>	Non-mutagenic (bacteria and/or yeast).
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

<b>Ecotoxicity</b>	Keep out of waterways. Harmful to aquatic life.
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**Persistence and degradability**

<b>Persistence and degradability</b>	No information available.
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**Bioaccumulative potential**

<b>Bioaccumulation</b>	No information available.
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#### Component Information

Chemical name	Partition coefficient
Ethyl alcohol (Ethanol)	-0.32

#### Mobility

**Mobility in soil** No information available.

#### Other adverse effects

### 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.

### 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** 1170  
**Proper shipping name** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**Hazard class** 3  
**Packing group** III  
**Hazchem code** •2Y

#### 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** 1170  
**UN proper shipping name** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**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** 1170  
**UN proper shipping name** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**Transport hazard class(es)** 3  
**Packing group** III  
**IMDG EMS Fire** F-E  
**IMDG EMS Spill** S-D

### 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)** None allocated

#### **Major hazard (accident/incident planning) regulation**

Verify that license requirements are met

#### Hazardous chemical

Liquids that meet the criteria for Class 3 Packing Group II or III

Threshold quantity (T)

50 000

#### **National pollutant inventory**

Subject to reporting requirement

Chemical name	National pollutant inventory
Ethyl alcohol (Ethanol) - 64-17-5	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**

Supplier Material Safety Data Sheet 12/ 2022

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

**Issuing Date:** 17-Jan-2023

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

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