SAFETY DATA SHEET

Revision date: 21-Jan-2022



Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier		
Product Name	MSA SOLUTION 70%	
Product Code(s)	00000054143	
Other means of identification		
UN number	3265	
Recommended use of the chemical and restrictions on use		
Recommended use	Descalant.	
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).

Corrosive to metals	Category 1
Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

SIGNAL WORD Danger

Label elements

Corrosion Exclamation mark

Hazard statements

H290 - May be corrosive to metals H302 - Harmful if swallowed H312 - Harmful in contact with skin H314 - Causes severe skin burns and eye damage H335 - May cause respiratory irritation

Precautionary Statements - Prevention

Keep only in original container Do not breathe fume, gas, mist, vapours, spray 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 Wear protective gloves / protective clothing / eye protection / face protection **Precautionary Statements - Response** Specific treatment (see First aid on this SDS) Specific measures (see First aid on this label) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician IF ON SKIN: Wash with plenty of water and soap IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower 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: Rinse mouth. DO NOT induce vomiting IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Absorb spillage to prevent material damage **Precautionary Statements - Storage** Store in a well-ventilated place. Keep container tightly closed Store locked up Store in corrosive resistant container with a resistant inner liner **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) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Chemical name	CAS No.	Weight-%
Methane sulfonic acid	75-75-2	69-71
Non hazardous component(s)	-	to 100

4. FIRST AID MEASURES

Description of first aid measures

Description of first and 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	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. Immediately call a POISON CENTER or doctor/physician.	
Ingestion	Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. 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/Corrosion. May cause redness and tearing of the eyes.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically. Can cause corneal burns.	
5. FIRE FIGHTING MEASU	RES	
Suitable Extinguishing Media		
Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam.	
Unsuitable extinguishing media	No information available.	
Specific hazards arising from the chemical		
Specific hazards arising from the chemical	Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Non-combustible.	
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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

2X

Personal precautions	Do not breathe fume, gas, mist, vapours, spray. Ensure adequate ventilation. Evacuate personnel to safe areas. Stop leak if you can do it without risk. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
For emergency responders	Use personal protection recommended in Section 8.

Environmental precautions		
Environmental precautions	Local authorities should be advised if significant spillages cannot be contained.	
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. After cleaning, flush away traces with water.	
7. HANDLING AND STORAGE		
Precautions for safe handling		

Advice on safe handling	Do not breathe fume, gas, mist, vapours, spray. Avoid contact with skin, eyes, and clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Use personal protection equipment. Wash thoroughly after handling.
Conditions for safe storage, includi	ing any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use.
Incompatible materials	Ethyl vinyl ether. Bases. Metals.
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.

Appropriate engineering controls

Engineering controls Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

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, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



Eye/face protection	Tight sealing safety goggles. Face protection shield.
Skin and body protection	Boots. Apron. Overalls.
Hand protection	Impervious gloves.
Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear a suitable mist 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

Filysical state	Elquid	
Appearance	No information available.	
Color	Colourless to Slightly Yellow	
Odor	Characteristic	
Odor threshold	No information available.	
Property_	Values_	Remarks • Method
pH	<0.5	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	-60°C	None known
Boiling point / boiling range	No data available	None known
Flash point	Not applicable	None known
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	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Vapor pressure	No data available	None known
Vapor density	3.3 (air=1)	None known
Relative density	1.345-1.360 @20°C	None known
Water solubility	Miscible in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	log Kow = -2.38 (calculated)	None known
Autoignition temperature	No data available	None known
Decomposition temperature	>215°C	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 metals.
Chemical stability	
Stability	Stable under normal conditions.
Explosion data	

Sensitivity to mechanical impact None.		
Sensitivity to static discharge	None.	
Possibility of hazardous reactions		
Possibility of hazardous reactions	Corrosive to metals.	
Conditions to avoid		
Conditions to avoid	Heat.	
Incompatible materials		
Incompatible materials	Ethyl vinyl ether. Bases. Metals.	
Hazardous decomposition products		
Hazardous decomposition products Carbon 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	Irritating to respiratory system.	
Eye contact	Corrosive to the eyes and may cause severe damage including blindness.	
Skin contact	Contact causes severe skin irritation and possible burns.	
Ingestion	Can burn mouth, throat, and stomach.	
Symptoms	Irritation/Corrosion. May cause redness and tearing of the eyes.	

Numerical measures of toxicity - Product Information

On basis of test data

Oral LD50 1158 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

Skin corrosion/irritation Ca	auses burns.
------------------------------	--------------

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization Not a skin sensitizer. (guinea pig).

Germ cell mutagenicity Not mutagenic in AMES Test.

Carcinogenicity	No information available.
Reproductive toxicity	Not known to cause reproductive or developmental toxicity.
STOT - single exposure	May cause respiratory irritation.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Keep out of waterways. Harmful to algae.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Methane sulfonic acid	EC50: =12-24mg/L (72h,	LC50: =73mg/L (96h,	-	-
	Selenastrum	Oncorhynchus mykiss)		
	capricornutum)			

Persistence and degradability

leadily biodegradable.
his chemical shows a low bioaccumulation potential.
lo information available.

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 should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

<u>ADG</u>

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	3265
Proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS METHANE SULPHONIC
	ACID)
Hazard class	8

Packing group	II
Hazchem code	2X

<u>IATA</u>

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 UN proper shipping name	3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS METHANE SULPHONIC ACID)
Transport hazard class(es)	8
Packing group	11

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	3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS METHANE SULPHONIC
	ACID)
Transport hazard class(es)	8
Packing group	II
IMDG EMS Fire	F-A
IMDG EMS Spill	S-B
Marine pollutant	No

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

International Inventories AIIC

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

Legend:

AllC - 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 Safety Data Sheet 10/2016

Reason(s) For Issue: First Issue Primary SDS

Issuing Date: 21-Jan-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 Sec	tion 8: EXPOSURE CONTROLS/PERSONAL	<u>PROTECTION</u>	
TŴA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
С	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

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