SAFETY DATA SHEET

Revision date: 16-Jul-2024



Revision Number 3

Section 1: Identification		
Product identifier		
Product Name	MIRAMER M200	
Product Code(s)	00000017101	
Other means of identification		
UN number or ID number	3082	
CAS No.	13048-33-4	
Recommended use of the chemical	and restrictions on use	
Recommended use	Industrial application of coatings and inks.	
Uses advised against	No information available.	
Details of manufacturer or importer		
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.		

Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

GHS Classification	
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 2

Label elements

Exclamation mark



Signal word WARNING

Hazard statements

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash hands thoroughly after handling.

Wash eyes thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/clothing and eye/face protection.

Use personal protective equipment as required.

Avoid release to the environment.

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: 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 or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Do NOT induce vomiting.

Collect spillage.

Precautionary Statements - Storage

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

Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
1,6-Hexanediol diacrylate	13048-33-4	<=100

Section 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.	
Inhalation	Remove to fresh air. (Call a physician if symptoms occur).	
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.	
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. (Call a physician if symptoms occur).	
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.	
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. See section 8 for more information.	
Most important symptoms and effects, both acute and delayed		
Symptoms	Irritation. May cause redness and tearing of the eyes. Erythema (skin redness). May cause allergic skin reaction. Rashes. Hives.	
Effects of Exposure	No information available.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically.	

Section 5: Firefighting measures

Suitable Extinguishing Media		
Suitable extinguishing media	Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal protein foam can be used.	
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.	
Specific hazards arising from the c	hemical	
Specific hazards arising from the chemical	Combustible liquid. Environmentally hazardous.	
Hazardous combustion products	Carbon oxides.	
Special protective actions for fire-fighters		
Special protective equipment and precautions 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	Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid	

	contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. See section 8 for more information.	
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.	
For emergency responders	Use personal protection recommended in Section 8.	
Environmental precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Refer to protective measures listed in Sections 7 and 8.	
Methods and material for containment and cleaning up		
Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.	
Methods for cleaning up	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.	

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling	Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Use personal protection equipment. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice. To facilitate product transfer from original container, product may be heated to 60°C for not more than 24 hours. Do not use direct steam or band heaters to heat product. Hot boxes or hot rooms are recommendable for heating the product.	
General hygiene considerations	Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.	
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 35 °C. Protect from sunlight. Store away from sources of heat or ignition. Keep container closed when not in use.	
	Classified as a C2 (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.	
Incompatible materials	Initiators. Strong alkalis. Peroxides. Curing agent. Reactive metals, Aluminium, Potassium,	

Section 8: Exposure controls and personal protection

Zinc.

Control parameters

Exposure Limits No value assigned for this specific material by Safe Work Australia.

Chemical name	European Union	United Kingdom	Germany DFG
1,6-Hexanediol diacrylate	-	-	skin sensitizer
13048-33-4			

Appropriate engineering controls

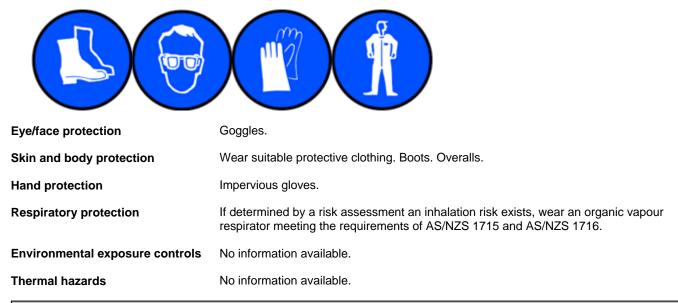
Engineering controls

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, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.



Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Appearance Color Odor Odor threshold	Liquid No information available Colourless Characteristic No information available	
Property	Values	Remarks • Method
pH	6-8	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	13°C	
Boiling point / boiling range	No data available	
Flash point	137°C	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 limits	No data available	
	No data available	
Vapor pressure	INU UALA AVAIIADIE	

Vapor density	No data available	
Relative density	1.02 @25°C	
Water solubility	No data available	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	5-15 cP @25°C	None known
Other information		

Section 10: Stability and reactivity	
Reactivity	
Reactivity	Non-reactive under normal conditions of use, storage and transport.
Chemical stability	
Stability	Stable under normal conditions.
Explosion data Sensitivity to mechanical impac Sensitivity to static discharge	t None. None.
Possibility of hazardous reactions	-
Possibility of hazardous reactions	Heating causes rise in pressure with risk of bursting.
Conditions to avoid	
Conditions to avoid	Heat, flames and sparks. Protect from light.
Incompatible materials	
Incompatible materials	Initiators. Strong alkalis. Peroxides. Curing agent. Reactive metals, Aluminium, Potassium, Zinc.
Hazardous decomposition products	<u>8</u>

Hazardous decomposition products Carbon oxides.

Section 11: Toxicological information

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.
Skin contact	Irritating to skin. May cause sensitization by skin contact.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms

Irritation. May cause redness and tearing of the eyes. Erythema (skin redness). May cause allergic skin reaction. Rashes. Hives.

Acute toxicity .

Numerical measures of toxicity - Product Information

On basis of test data	
Oral LD50	> 5000 mg/kg (rat)
Dermal LD50	3650 mg/kg (rabbit)

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,6-Hexanediol diacrylate	> 5 g/kg (Rat)	= 3650 mg/kg (Rabbit)	-

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	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	A skin sensitizer.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity	Keep out of waterways. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.
	LC50 - Fish 0.38 mg/l 96hrs, Oryzias latipes
	EC50 - Crustacea 2.7 mg/l 48hrs, Daphnia magna
	ErC50 algae 2.33 mg/l 72hrs, Scenedesmus subspicatus.

Terrestrial ecotoxicity	There is no data for this product.		
Persistence and degradability Persistence and degradability	Readily biodegradable.		
Bioaccumulative potential			
Bioaccumulation	There is no data for this product.		
Chemica	name	Partition coefficient	
1,6-Hexanedic	ol diacrylate	2.81	
<u>Mobility</u>			
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 in accordance with federal, state and local regulations.		
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.		
See section 8 for more information			
Section 14: Transport info	rmation		
ADG		by the criteria of the Australian Dangerous Goods Code ad and Rail; DANGEROUS GOODS.	
	are not subject to the provisions of	tances meeting the descriptions of UN 3077 or UN 3082 of the Australian Code for the Transport of Dangerous ansported by road or rail in: packagings that do not ng 500 kg(L); or IBCs.	
UN number or ID number Proper shipping name	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,6-Hexanediol diacrylate)		
Transport hazard class(es) Packing group Hazchem code	9 III •3Z		
<u>IATA</u>	Classified as Dangerous Goods b (IATA) Dangerous Goods Regula	by the criteria of the International Air Transport Association tions for transport by air; DANGEROUS GOODS.	
UN number	3082		

UN proper shipping name Transport hazard class(es) Packing group	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,6-Hexanediol diacrylate) 9 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 UN proper shipping name	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,6-Hexanediol diacrylate) MARINE POLLUTANT
Transport hazard class(es) Packing group IMDG EMS Fire IMDG EMS Spill Marine pollutant	9 III F-A S-F P

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

Section 15: Regulatory information

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

National regulations

<u>Australia</u>

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See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Poison Schedule Number Not applicable

Australian Industrial Chemicals Introduction Scheme (AICIS)

Contact supplier for inventory compliance status

	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
1,6-Hexanediol diacrylate - 13048-33-4	Present	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

International Inventories AIIC	This material is listed on the Australian Inventory of Industrial Chemicals.
NZIOC	Contact supplier for inventory compliance status.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.

Legend:

AllC- Australian Inventory of Industrial Chemicals
 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

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

Supplier Safety Data Sheet 04/2023

Reason(s) For Issue:	5 Yearly Revised Primary SDS Change to Transport Information Change from non-DG to DG
Prepared By	This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).
Revision date:	16-Jul-2024

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 SVHC: Substances of Very High Concern for Authorization: PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances STOT: Specific Target Organ Toxicity ATE: Acute Toxicity Estimate LC50: 50% Lethal Concentration LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	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

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) 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) National Institute of Technology and Evaluation (NITE) Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) 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) U.S. 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 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