SAFETY DATA SHEET

Revision date: 13-Feb-2024



Revision Number 3

Section 1: Identification	
Product identifier	
Product Name	F520
Product Code(s)	00000053178
Other means of identification	
CAS No.	136210-32-7
Recommended use of the chemica	l and restrictions on use
Recommended use	Polyurea coating.
Uses advised against	No information available.
Details of manufacturer or importe	<u>r</u>
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 identific	cation
(ADG).	accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).
GHS Classification Skin sensitization	Category 1
Label elements Exclamation mark	

Signal word WARNING

Hazard statements H317 - May cause an allergic skin reaction

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves and protective clothing. **Precautionary Statements - Response** Specific treatment (see First aid on this SDS). IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. **Precautionary Statements - Storage** No storage statements. **Precautionary Statements - Disposal** Dispose of contexts/container in accordance with local regional national and inter

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 with long lasting effects.

Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Aspartic acid,	136210-32-7	94-100
N,N"-(methylenebis(2-methyl-4,1-cyclohexanediyl))		
bis-, tetraethyl ester		
Non hazardous component(s)	-	0-6

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 thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
Ingestion	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. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms	Irritation. May cause allergic skin reaction. Redness. Rashes. Hives.
Effects of Exposure	No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. May cause sensitization by skin contact.

Section 5: Firefighting measures		
Suitable Extinguishing Media		
Suitable extinguishing media	Dry chemical or CO2. Dry sand. Foam.	
Large Fire	Water spray or fog.	
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.	
Specific hazards arising from the chemical		
Specific hazards arising from the chemical	Combustible liquid. Product is or contains a sensitizer. May cause sensitization by skin contact. Environmentally hazardous.	
Hazardous combustion products	Carbon oxides. Nitrogen oxides. Amines.	
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.	

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Do not touch or walk through spilled material. Evacuate personnel to safe areas. 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	Dike far ahead of liquid spill for later disposal. 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.	

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. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Use personal protection equipment. Wash thoroughly after handling. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at temperatures below 40°C / 104°F. 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	Oxidizing agent. Acids. Alkalis. Acid chlorides. Acid anhydrides. Isocyanates.	

Section 8: Exposure controls and personal protection

Control parameters

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

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, SAFETY GLASSES, GLOVES.

Eye/face protection	Glasses.
Skin and body protection	Protective shoes or 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.
Thermal hazards	No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Transparent
Color	Colourless to Light yellow Green

Odor Odor threshold	Slight Characteristic No information available	
<u>Property</u> pH Melting point / freezing point	<u>Values</u> No data available No data available	Remarks • Method
Boiling point / boiling range Flash point	Decomposes >93°C	
Evaporation rate Flammability (solid, gas) Flammability Limit in Air	No data available No data available	None known None known
Upper flammability or explosive limits	No data available	None known
Lower flammability or explosive limits Vapor pressure	No data available No data available	None known
Vapor density Relative density	No data available 1.06 ± 0.02 g/cm ³ at 25°C	None known
Water solubility Solubility(ies)	No data available No data available	None known
Partition coefficient Autoignition temperature Decomposition temperature	No data available No data available No data available	None known None known None known
Kinematic viscosity Dynamic viscosity	No data available 800~2000 mPa.s at 25°C	None known

Other information

Section 10: Stability and re	eactivity
Reactivity	
Reactivity	Hygroscopic: absorbs moisture or water from surrounding air.
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	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	
Conditions to avoid	Heat, flames and sparks. UV-radiation/sunlight. Static discharge (electrostatic discharge). Moisture.
Incompatible materials	
Incompatible materials	Oxidizing agent. Acids. Alkalis. Acid chlorides. Acid anhydrides. Isocyanates.
Hazardous decomposition products	5

Hazardous decomposition products Carbon oxides. Nitrogen oxides. Amines.

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	May cause irritation.
Skin contact	May cause irritation. May cause sensitization by skin contact.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Symptoms	Irritation. May cause allergic skin reaction. Redness. Rashes. Hives.

Acute toxicity .

Numerical measures of toxicity - Product Information

On basis of test data			
Oral LD50	>	2000	mg/kg (rat)
Dermal LD50	>	2000	mg/kg (rat)
Inhalation LC50	>	4224	mg/m ³

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	Not classified.
Serious eye damage/eye irritation	Not classified.
Respiratory or skin sensitization	A skin sensitizer. (guinea pig).
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	No information available.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT - single exposure	Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.

Aspiration hazard

No information available.

Section 12: Ecological in	formation
Ecotoxicity	
Aquatic ecotoxicity	Keep out of waterways. Harmful to aquatic life with long lasting effects.
Terrestrial ecotoxicity	There is no data for this product.
Persistence and degradability	
Persistence and degradability	Not readily biodegradable.
-	
Bioaccumulative potential	These is no data for this work of
Bioaccumulation	There is no data for this product.
<u>Mobility</u>	
Mobility	No information available.
Other adverse effects	
Other adverse effects	No information available.
Section 13: Disposal con	siderations

Waste from residues/unused products	Refer to Waste Management Authority. Dispose of material through a licensed waste contractor.
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 information			
ADG	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.		
IATA	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.		
IMDG	Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.		

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>

Not 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 substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). 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
Aspartic acid, N,N"-(methylenebis(2-methyl-4,1-cyclo hexanediyl))bis-, tetraethyl ester - 136210-32-7		Specific information requirement: Obligations to provide information apply. You must tell us within 28 days if the circumstances of your importation or manufacture (introduction) are different to those in our assessment.

Illicit Drug Precursors/Reagents

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

International Inventories AIIC	All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.
NZIOC TSCA DSL/NDSL EINECS/ELINCS ENCS IECSC KECL	All the constituents of this material are listed on the New Zealand Inventory of Chemicals. Contact supplier for inventory compliance status. 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 12/2022

Reason(s) For Issue:	5 Yearly Revised Primary SDS
Prepared By	This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).
Revision date:	13-Feb-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 Ceiling C	TWA (time-weighted average) Maximum limit value Carcinogen	STEL *	STEL (Short Term Exposure Limit) Skin designation	
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) 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) 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) 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