

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF MATERIAL AND SUPPLIER

SUPPLIER:	PLANET PAINTS PTY LTD.
ABN:	64 109 223 298
ADDRESS:	7 Allen Court, Torrington, QLD 4350, Australia.
TELEPHONE:	(07) 4633 3544.
AH EMERGENCY TELEPHONE:	13 1126 (24 Hours) – Australian National Poisons Centre.
FAX:	(07) 4633 3466.
WEB PAGE:	www.planetpaints.com.au.
Product Name:	VERSACOAT Part B.
Proper Shipping Name:	Not applicable.
Product Use:	Hardener for mixing with VERSACOAT Part A and application onto metal surfaces.
Manufacturer's Product Code:	Not applicable.
Creation Date:	5 August 2021.
Revision Date:	Before 4 August 2026.

SECTION 2 – HAZARDS IDENTIFICATION

This product is **classified** as a HAZARDOUS CHEMICAL in accordance with the WHS, and is **classified** as HAZARDOUS in accordance with the GHS and is **classified** as DANGEROUS GOODS according to the Australian Dangerous Goods (ADG) Code.

Hazard Classes & Categories:	Hazard Class	Hazard Category
Physical:	Flammable Liquids.	Category 3.
Health:	Acute Toxicity - Inhalation.	Category 4.
	Skin Corrosion/Irritation.	Category 2.
	Serious Eye Damage/Irritation.	Category 2A.
	Sensitisation - Skin.	Category 1.
	Specific Target Organ Toxicity (Single Exposure).	Category 3.
	Specific Target Organ Toxicity (Repeated Exposure).	Category 2.
Environmental:	Not applicable.	Not applicable.
Signal Word:	DANGER.	
Hazard Statements:	Flammable liquid and vapour.	
	Harmful if inhaled.	
	Causes skin irritation.	
	Causes serious eye irritation.	
	May cause an allergic skin reaction.	
	May cause respiratory irritation.	
	May cause damage to organs through prolonged or repeated exposure.	

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SECTION 2 – HAZARDS IDENTIFICATION (CONTINUED)

Precautionary Statements:

Prevention:

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Keep away from heat/sparks/open flames/hot surfaces. – 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.
 Do not breathe mist/vapours/spray.
 Wash skin thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with plenty of soap and water, and shower.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.
 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 CENTRE or doctor/physician.
 If skin irritation or rash occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 Take off contaminated clothing and wash before reuse.
 In case of fire: Use alcohol resistant foam (preferred) or normal foam for extinction.

Storage:

Store locked up in a well-ventilated place. Keep container tightly closed and cool.

Disposal

Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

General:

If medical advice is needed, have product container or label at hand.
 Keep out of reach of children.
 Read label before use.

Pictogram:



Flame



Health hazard



Exclamation mark

Pictogram Description:

Other Hazards which do not result in Classification:

The product has ototoxic properties due to the presence of Ethyl Benzene, and Xylenes as components.

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SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Proportion:
Hexamethylene-1,6-Diisocyanate Homopolymer	28182-81-2	> 60% w/w
Propylene Glycol Monomethyl Ether Acetate (1-Methoxy-2-propanol Acetate)	108-65-6	10 - < 30% w/w
Xylene	1330-20-7	10 - < 30% w/w
Ethyl Benzene	100-41-4	< 5% w/w
Hexamethylene-1,6-Diisocyanate	822-06-0	< 0.5% w/w
Total		100 % w/w

SECTION 4 – FIRST AID MEASURES

General information:	In case of serious or persistent conditions, call a doctor or emergency medical care. Show this safety data sheet to the doctor in attendance.
Scheduled Poisons:	Poisons Information Centre in each Australian State capital city can provide additional assistance for scheduled poisons. (Phone Australia 13 1126) or a doctor (at once).
First Aid Facilities Required:	Eye wash fountains and a general washing facility should be easily accessible in the immediate work area.
Inhalation:	Remove victim from 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 necessary.
Skin Contact:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.
Eye Contact:	Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
Ingestion (Swallowed):	Immediately rinse out mouth and drink 1 or 2 glasses of water. Immediately seek medical attention and bring these instructions. If swallowed DO NOT induce vomiting. Never give anything by mouth to an unconscious patient. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration into the lungs.
Protection of First-aiders:	Wear overalls, safety glasses or goggles and impervious gloves. No special precautions are envisaged to be required. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin. Always wash hands before smoking, eating, drinking or using the toilet.
Advice to Doctor:	The manifestations of respiratory symptoms, including pulmonary oedema, resulting from acute exposure may be delayed. No specific antidote is known. Supportive care. Treatment based on judgement by the doctor in response to reactions of the patient. Poisons Information Centre in each Australian State capital city can provide additional assistance for scheduled poisons.

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SECTION 5 – FIRE FIGHTING MEASURES

Hazards from Combustion Products:	In general fire, upon combustion, this product may emit Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Hydrogen Cyanide, Isocyanate, Isocyanic Acid, and other possibly toxic gases and vapours.
Suitable Extinguishing Media:	Use Alcohol resistant foam as the preferred firefighting medium but, if it is not available, normal foam can be used to extinguish fire. Also dry chemical or carbon dioxide may be used to extinguish small fires. Water may be ineffective but should be used to cool fire-exposed containers, structures and to protect personnel.
Unsuitable Extinguishing Media:	High pressure water jet. This product reacts with water to form Carbon Dioxide (CO ₂) gas.
Specific Hazards arising from the chemical:	Flammable liquid and vapour. Product may form flammable/explosive vapour-air mixture during use. All potential ignition sources (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc.) must be eliminated both in and near the work area. Do NOT smoke. Vapour may travel a considerable distance to source of ignition and flash back. The vapour is heavier than air, spreads along the ground and distant ignition is possible.
Precautions for Fire Fighting:	If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. Firefighters should wear safety boots, non-flammable overalls, gloves, hat, goggles, and self-contained breathing equipment. Heating can cause expansion or decomposition of the material which can lead to the container(s) exploding. If safe to do so, remove container(s) from the path of the fire if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Dyke for later disposal. Use extinguishing agents for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.
Hazchem Code:	●3Y.
AERGB:	127.
Flash Point:	Ca. 38°C.
Flammability:	Flammable liquid and vapour. In general fire, upon combustion, this product may emit Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Hydrogen Cyanide, Isocyanate, Isocyanic Acid, and other possibly toxic gases and vapours.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:	
General Information:	In case of spill, isolate hazard area and deny entry. Wear protective clothing as described in Section 8 of this safety data sheet. Eye contact MUST be prevented by means of suitable personal protection equipment. Product is a respiratory and skin sensitiser. See Section 8, Exposure Controls And Personal Protection for further information regarding personal protection. See Section 4, First Aid Measures, for further information.
Advice for non-emergency personnel:	Do not touch or walk through spilled material. For personal protection see section 8. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

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SECTION 6 – ACCIDENTAL RELEASE MEASURES (CONTINUED)

Advice for emergency responders:	<p><u>Eye and face protection:</u> The use of face shields, chemical goggles, or safety glasses with side shield protection (meeting the requirements of AS/NZS 1337) is recommended. If exposed to dust or fume, wear dust-tight goggles (meeting the requirements of AS/NZS 1337).</p> <p><u>Skin protection:</u></p> <p><u>Hand protection:</u> Chemical resistant gloves (e.g. PE/EVAL/PE gloves >1 mm thickness, complying with AS 2161) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water. Product is a skin sensitiser. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.</p> <p><u>Clothing:</u> Suitable protective clothing complying with AS 4501, suitable chemical resistant footwear complying with AS/NZS 2210 is recommended.</p> <p><u>Respiratory protective equipment:</u> When the product is spilled in case of inadequate ventilation use a full face air purifying respirator (with Class A filter for organic vapours boiling above 65°C) meeting the requirements of AS/NZS 1715 and AS/NZS 1716.</p>
Environmental Precautions:	Do not allow to enter drainage system, surface or ground water. In the event of product entering waters or drainage system, or polluting soil or plants contact the Environmental Protection Authority or your local Waste Management Authority.
Methods and Materials for Containment and Cleaning up/ Removing:	
Small Spills:	Shut off all possible sources of ignition. Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal. The wasted material can be disposed of by incineration (preferably high temperature) by an approved agent according to State, Territory and/or Local government regulations.
Large Spills:	Shut off all possible sources of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. May be slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material, but not sawdust). Collect and seal in properly labelled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services. The wasted material can be disposed of by incineration (preferably high temperature) by an approved agent according to State, Territory and/or Local government regulations.
Reference to Other Sections:	See Section 7 for information on safe handling; See Section 8 for information on personal protection equipment; See Section 13 for information on disposal.

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SECTION 6 – ACCIDENTAL RELEASE MEASURES (CONTINUED)

Other Information: Recommended measures are based on the most likely spillage scenarios for this material. However, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken.

SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling:

Advice on Safe Handling:

Avoid spills – product and its vapour are highly flammable. Avoid all personal contact, including skin and eye contact and inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Refer AS 1940.

Technical Measures:

Flammable liquid and vapour. Refer to State Regulations for storage and transport requirements.

Other Information:

Rotate all stock to prevent ageing. Use on FIFO (First In-First Out) basis. Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for Safe Storage, including any Incompatibilities:

Technical Measures/Storage Conditions:

Avoid all sources of ignition – (heat, sparks, static electricity, open flame). Use flameproof equipment and fittings to prevent flammability risk. Store in a well-ventilated area. Store in a cool, dry place and out of direct sunlight. Store away from incompatible substances including explosive substances, flammable gases, toxic gases, radioactive substances. Store in a cool (at temperatures below 25°C), dry, well-ventilated place and out of direct sunlight. Keep containers closed when not in use - check regularly for leaks.

Materials to Avoid:

Aluminium; Plastics; Natural, neoprene or nitrile rubbers.

Packaging Material:

For container paints, use epoxy paint, zinc silicate paint. For containers, or container linings use mild steel, stainless steel.

Further Information about Storage Conditions:

This material is **DANGEROUS GOODS** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.

Containers may be hazardous when empty. Since emptied containers retain product residue, follow all SDS and label warnings even after container is emptied.

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SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

<p>Exposure Control Measures:</p>	<p>Ensure the use of individual protection measures including Personal Protective Equipment (PPE) and that the appropriate biological monitoring is carried out.</p>
<p>Exposure Standards:</p>	<p>National Occupational Exposure Limits, as published by Safework Australia: Time-weighted Average (TWA): None established for product. TWA for Ethyl Benzene is 100 ppm, 434 mg/m³. TWA for Hexamethylene-1,6-Diisocyanate (as Isocyanate) is 0.02 mg/m³ (Sensitiser). TWA for Hexamethylene-1,6-Diisocyanate Homopolymer (as Isocyanate) is 0.02 mg/m³ (Sensitiser). TWA for 1-Methoxy-2-propanol Acetate is 50 ppm, 274 mg/m³ (via inhalation only, for skin absorption see below). TWA for Xylene is 80 ppm, 350 mg/m³.</p>
<p>Exposure Standards:</p>	<p>Short Term Exposure Limit (STEL): None established for product. STEL for Ethyl Benzene is 125 ppm, 543 mg/m³. STEL for Hexamethylene-1,6-Diisocyanate (as Isocyanate) is 0.07 mg/m³ (Sensitiser). STEL for Hexamethylene-1,6-Diisocyanate Homopolymer (as Isocyanate) is 0.07 mg/m³ (Sensitiser). STEL for 1-Methoxy-2-propanol Acetate is 100 ppm, 548 mg/m³ (via inhalation only, for skin absorption see below). STEL for Xylene is 150 ppm, 655 mg/m³.</p> <p>These 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 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.</p> <p>The adopted Occupational Exposure Standards listed only consider absorption via inhalation, and are valid only on the condition that significant skin absorption cannot occur.</p>
<p>Biological Monitoring:</p>	<p>Safe Work Australia have not published any Biological Limits for ingredients of this product. However, according to ACGIH: BEI for Ethyl Benzene as sum of Mandelic Acid and Phenylglyoxylic Acid in urine is 0.7 g/g Creatinine, to be sampled at end of shift at end of workweek (Non-specific determinant, Semi-quantitative determinant). BEI for Ethyl Benzene as Ethyl Benzene in end-exhaled air is to be sampled at any time (Semi-quantitative determinant). BEI for Xylenes as Methylhippuric Acids in urine is 1.5 g/g Creatinine, to be sampled at end of shift.</p>

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SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION (CONTINUED)

Engineering Controls:	<p>When using this product use only outdoors or in a well-ventilated area and ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use with local exhaust ventilation (draw off vapours directly at the point of generation and exhaust from the work area) or while wearing appropriate respirator. Vapour is heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use. Provide eyewash station and safety shower.</p>
Individual Protection Measures Including Personal Protective Equipment (PPE):	<p><u>General protective & hygiene measures:</u> The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing, and wash contaminated clothing and other protective equipment before storing or re-using. DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. Avoid contact with the eyes and skin. Ensure that eyewash stations and safety showers are close to the workstation location.</p>
Individual Protection Measures Including Personal Protective Equipment (PPE):	<p><u>Eye and face protection:</u> The use of face shields, chemical goggles, or safety glasses with side shield protection (meeting the requirements of AS/NZS 1337) is recommended. If exposed to dust or fume, wear dust-tight goggles (meeting the requirements of AS/NZS 1337).</p> <p><u>Skin protection:</u></p> <p><u>Hand protection:</u> Chemical resistant gloves (e.g. PE/EVAL/PE gloves >1 mm thickness, complying with AS 2161) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water. Product is a skin sensitiser. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.</p> <p><u>Clothing:</u> Suitable protective clothing complying with AS 4501, suitable chemical resistant footwear complying with AS/NZS 2210 is recommended.</p> <p><u>Respiratory protective equipment:</u> When the product is spilled in case of inadequate ventilation use a full face air purifying respirator (with Class A filter for organic vapours boiling above 65°C) meeting the requirements of AS/NZS 1715 and AS/NZS 1716.</p>

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Description/ Properties:	
Colour:	Clear, colourless to yellowish low viscosity liquid.
Odour:	Solvent-like odour.
Melting Point/ Freezing Point:	Ca -48°C.
Initial Boiling Point/ Boiling Range:	Ca 145°C at 101.3 kPa.
Flammability (solid, gas):	Not applicable.
Upper/Lower Flammability or Explosive Limits:	Not available.
Flashpoint:	Ca. 38°C.
Auto-ignition Temperature:	Ca. 460°C.

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

Decomposition Temperature:	> 200°C.
pH:	Not applicable.
Kinematic Viscosity:	Ca 230 mm ² /s @ 23°C.
Solubility in water:	Immiscible, reacts slowly to liberate Carbon Dioxide (CO ₂) gas.
Solubility in solvents:	Miscible with organic solvents including esters, ketones, glycol ethers and aromatic hydrocarbons.
Partition coefficient: n-octanol/water:	Not available.
Vapour Pressure:	Ca 1 kPa @ 20°C
Relative Density:	Ca 1.07 @ 20°C.
Relative Vapour Density:	>1 (air=1).
Particle Characteristics:	Not applicable.

SECTION 10 – STABILITY AND REACTIVITY

Reactivity:	Exothermic reaction with amines and alcohols. Product reacts slowly with water forming Carbon dioxide (CO ₂). In closed containers risk of bursting owing to increase of pressure.
Chemical Stability:	Stable at normal temperatures and pressure, but product reacts Product reacts slowly with water forming Carbon dioxide (CO ₂). Exothermic reaction with amines and alcohols.
Possibility of Hazardous Reactions:	Contact with moisture, other materials that react with isocyanates, or temperatures above 177°C, may cause polymerisation.
Conditions to Avoid:	Avoid contact with incompatible materials. Avoid contact with heat, flames, sparks and other ignition sources including buildup of static electricity. Prevent vapour accumulation.
Incompatible Materials:	Water, Amines, Strong bases, Alcohols, Copper alloys.
Hazardous Decomposition Products:	Flammable liquid and vapour. In general fire, upon combustion, this product may emit Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Hydrogen Cyanide, Isocyanate, Isocyanic Acid, and other possibly toxic gases and vapours.

SECTION 11 – TOXICOLOGICAL INFORMATION

Health Effects:	No data for product, following data is compiled on basis of ingredients.
Acute Toxicity Data (Oral):	Product is not classified as Acute Toxicity Data (Oral). On basis of ingredients: Acute Toxicity for Ethylbenzene, (Oral) LD ₅₀ (rat) 3,500 mg/kg. Acute Toxicity for Hexamethylene diisocyanate, (Oral) LD ₅₀ (rat) 746 mg/kg. Acute Toxicity for Hexamethylene-1,6-Diisocyanate Homopolymer, (Oral) LD ₅₀ (rat) > 5,000 mg/kg. Acute Toxicity for 1-Methoxy-2-propanol Acetate, (Oral) LD ₅₀ (rat) > 5,000 mg/kg. Acute Toxicity for Xylene, (Oral) LD ₅₀ (rat) 4,300 mg/kg.

SAFETY DATA SHEET

SECTION 11 – TOXICOLOGICAL INFORMATION (CONTINUED)

Acute Toxicity Data (Dermal):	<p>Product is not classified as Acute Toxicity Data (Dermal). No data for product. On basis of ingredients:</p> <p>Acute Toxicity for Ethylbenzene, (Dermal) LD₅₀ (rabbit) 17.8 mL/kg.</p> <p>Acute Toxicity for Hexamethylene diisocyanate, (Dermal) LD₅₀ (rat) > 7,000 mg/kg.</p> <p>Acute Toxicity for Hexamethylene-1,6-Diisocyanate Homopolymer, (Dermal) LD₅₀ (rabbit) > 2,000 mg/kg (based on studies of a comparable product).</p> <p>Acute Toxicity for 1-Methoxy-2-propanol Acetate, (Dermal) LD₅₀ (rabbit) > 5,000 mg/kg.</p> <p>Acute Toxicity for Xylene, (Dermal) LD₅₀ (rabbit) > 2,000 mg/kg.</p>
Acute Toxicity Data (Inhalation):	<p>Product is classified as Acute Toxicity Data (Inhalation); Hazard Category 4 Harmful if inhaled. On basis of ingredients:</p> <p>Acute Toxicity for Ethylbenzene, (Inhalation) LCL₀ (rabbit) 4000 ppm/4 hours; TCL₀ (human) 100 ppm/8 hours.</p> <p>Acute Toxicity for Hexamethylene diisocyanate, (Inhalation) LC₅₀ (rat) 0.124 mg/L/4h.</p> <p>Acute Toxicity for Hexamethylene-1,6-Diisocyanate Homopolymer, (Inhalation) LC₅₀ (rat) 0.554 mg/L/4h; test atmosphere: dust/mist. The test atmosphere generated in the animal study is not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Based on expert judgement and the weight of the evidence, a modified classification for acute inhalation toxicity is justified. Converted acute toxicity point estimate 1.5 mg/L; test atmosphere: dust/mist; Method: expert judgement.</p> <p>Acute Toxicity for 1-Methoxy-2-propanol Acetate, (Inhalation) LC₅₀ (rat) 24 mg/L/6 hours, no deaths occurred.</p> <p>Acute Toxicity for Xylene, (Inhalation) LC₅₀ (rat) 5,000 ppm/4 hours.</p>
Chronic Toxicity Data:	<p>No data for product. On basis of ingredients:</p> <p>Repeated Dose Toxicity with Ethyl Benzene, (rabbit, inhalation, 28 days) NOAEL: 3.4 mg/l; (rat, male/female, inhalation, daily, 90 days) NOAEL: 0.47 mg/L.</p> <p>Subacute, subchronic and prolonged toxicity for Hexamethylene-1,6-Diisocyanate Homopolymer, application route: subacute inhalation toxicity, rat. Method: OECD test guideline 412, test concentration: 3.7, 17.5 and 76.6 mg aerosol/m³, exposure time: 3 weeks (6 hours/ day, 5 days/week). 3.7 mg/m³ was tolerated without damage (NOEL), 17.5 mg/m³ and 76.6 mg/m³ caused increase of lung weight, pronounced concentration-dependent inflammatory changes in the respiratory tract. All the changes were unspecific and are therefore attributed to the primary irritation potential of the product. Evidence of damage to organs other than the organs of respiration was not found. Toxicological studies of a comparable product.</p> <p>Repeated dose toxicity for 1-Methoxy-2-propanol Acetate in animals, effects have been reported on the following organs: Kidney; Liver; Nasal tissue. (rat, inhalation, 14 days) NOAEL: 300 ppm, LOAEL: 1000 ppm.</p> <p>Repeated Dose Toxicity with Xylene, (rat, inhalation, 90 days) NOAEL: 810 ppm, there were no adverse effects seen at the highest dose tested; (rat, oral, 90 days) LOAEL: 150 mg/kg</p>

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SECTION 11 – TOXICOLOGICAL INFORMATION (CONTINUED)

Skin Corrosion/Irritation:	<p>Product is classified as Skin Corrosion/Irritation, Hazard Category 2; Causes skin irritation. On basis of ingredients:</p> <p>Hexamethylene-1,6-Diisocyanate Homopolymer, primary skin irritation tests carried out on rabbit shows slight irritant. Classification: no skin irritation.</p> <p>1-Methoxy-2-propanol Acetate is essentially non-irritating to skin on prolonged contact; repeated contact may cause skin irritation with local redness.</p> <p>Xylene causes skin irritation</p>
Serious Eye Damage/Irritation:	<p>Product is classified as Serious Eye Damage/Irritation. Hazard Category 2A; Causes serious eye irritation. On basis of ingredients:</p> <p>Hexamethylene-1,6-Diisocyanate Homopolymer, primary mucosae irritation tests carried out on rabbit eye shows slight irritant. Classification: no eye irritation.</p> <p>1-Methoxy-2-propanol Acetate may cause pain disproportionate to the level of irritation to eye tissues, it may cause slight eye irritation and slight corneal injury.</p> <p>Xylene is moderately irritating to the eye, but insufficient to classify.</p>
Respiratory or Skin Sensitisation:	<p>Product is not classified as a Respiratory Sensitiser but is classified as a Skin Sensitiser, Hazard Category 1; May cause an allergic skin reaction. On basis of ingredients:</p> <p>Hexamethylene-1,6-Diisocyanate Homopolymer, respiratory sensitisation test show no pulmonary sensitisation observed in animal tests. No pulmonary sensitisation potential was observed in guinea pigs after either intradermal or inhalative induction with polyisocyanate based on hexamethylene diisocyanate. Classification: no classification according to EC Directives 2006/121/EC or 1999/45/EC as respiratory sensitiser.</p> <p>Hexamethylene-1,6-Diisocyanate Homopolymer, skin sensitisation according to Magnusson/Kligmann (maximising test according to OECD test guideline 406) test carried out on guinea pig shows positive result. Classification: may cause sensitisation by skin contact.</p> <p>1-Methoxy-2-propanol Acetate did not cause allergic skin reactions when tested in guinea pigs.</p> <p>Xylene is not expected to be a skin sensitiser.</p>
Germ Cell Mutagenicity:	<p>Product is not classified as a Germ Cell Mutagen. No data for product. On basis of ingredients:</p> <p>Hexamethylene-1,6-Diisocyanate Homopolymer, test type: Salmonella/microsome test (Ames test). Result: No indication of mutagenic effects.</p> <p>Hexamethylene-1,6-Diisocyanate Homopolymer, test type: Micronucleus test on mouse (Genotoxicity in vivo) Result: Negative.</p> <p>Xylene is not mutagenic</p>

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SECTION 11 – TOXICOLOGICAL INFORMATION (CONTINUED)

<p>Carcinogenicity:</p>	<p>Product is not classified as a Carcinogen. No data for product. On basis of ingredients: Carcinogenicity for Ethyl Benzene was tested by inhalation exposure in mice and rats. In mice, there was an increased incidence of lung adenomas in males and liver adenomas in females. In male rats, there was an increased incidence of renal tubule adenomas and carcinomas. Two studies of workers potentially exposed to Ethyl Benzene in a production plant and a Styrene polymerization plant showed no excess cancer incidence and no excess cancer mortality during a 15 year follow up. IARC overall evaluation of Ethyl Benzene as a 2B, Possible carcinogen. For Xylene, an increased tumour incidence has been observed in experimental animals; the significance of this finding, due to Ethylbenzene is unknown.</p>
<p>Reproductive Toxicity:</p>	<p>Product is not classified as Toxic to Reproduction. On basis of ingredients: 1-Methoxy-2-propanol Acetate did not cause birth defects or other effects in the foetus even at doses which caused toxic effects in the mother.</p>
<p>Specific Target Organ Toxicity (STOT) – Single Exposure:</p>	<p>Product is classified as Specific Target Organ Toxicity (Single Exposure), Hazard Category 3; May cause respiratory irritation. Hexamethylene-1,6-Diisocyanate Homopolymer, STOT evaluation - one time exposure. Classification: may cause respiratory irritation. High concentrations of Xylene may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death. Inhalation of vapours or mists may cause irritation to the respiratory system</p>
<p>Specific Target Organ Toxicity (STOT) – Repeated Exposure:</p>	<p>Product is classified as Specific Target Organ Toxicity (Repeated Exposure), Hazard Category 2; May cause damage to organs through repeated exposure. No data for product. On basis of ingredients: For Xylene: harmful: danger of serious damage to health by prolonged exposure through inhalation. Auditory system: prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. Solvent abuse and noise interaction in the work environment may cause hearing loss.</p>
<p>Aspiration Hazard:</p>	<p>Product is not classified as Aspiration Hazard. No data for product. On basis of ingredients: Aspiration of Xylene into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal</p>
<p>Information on Possible Routes of Exposure: Ingestion (Swallowing):</p>	<p>Inhalation is the primary route of exposure although absorption may occur through skin contact or following accidental ingestion. Scheduled poison, not to be ingested. On basis of ingredients: Aspiration of Xylene into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.</p>
<p>Eye Contact:</p>	<p>Product contact with eye may be irritating with symptoms of reddening, itching and swelling. May cause temporary corneal injury. Vapour may cause irritation with symptoms of burning and tearing. Prolonged contact with vapour of product may cause conjunctivitis. On basis of ingredients: Contact with Xylene causes serious eye irritation.</p>

SAFETY DATA SHEET

SECTION 11 – TOXICOLOGICAL INFORMATION (CONTINUED)

Skin Contact:

Product contact with skin may cause irritation, reddening, swelling, rash, and in some cases, skin sensitisation with an allergic skin reaction. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling and rash. Cured material is difficult to remove.

Inhalation:

Intentional exposure to vapours may cause drowsiness or dizziness and/or respiratory irritation. On basis of ingredients:

Hexamethylene-1,6-Diisocyanate Homopolymer, primary mucosae irritation tests carried out on rabbit shows irritation to respiratory tract.

Classification: Irritating to respiratory system.

Diisocyanate or polyisocyanate vapors or mist at concentrations above the exposure limits or guidelines can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) with symptoms of runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing difficulty). Persons with a pre-existing, nonspecific bronchial hyper-reactivity can respond to concentrations below the exposure limits or guidelines with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the exposure limits or guidelines may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g. fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible. Inhalation of the solvents may cause central nervous system depression with symptoms of nausea, lightheadedness, drowsiness, dizziness and loss of co-ordination. Inhalation of high concentrations of Xylene may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death. Inhalation of vapours or mists may cause irritation to the respiratory system.

Other Health Effects:

Additional information:

Hexamethylene-1,6-Diisocyanate Homopolymer:

Special properties/effects: over-exposure entails the risk of concentration-dependent irritating effects on eyes, nose, throat, and respiratory tract.

Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

Hypersensitive persons may suffer from these effects even at low isocyanate concentrations, including concentrations below the UK Workplace Exposure Limit (WEL). Prolonged contact with the skin may cause tanning and irritant effects. Animal tests and other research indicates that skin contact with diisocyanates can play a role in causing isocyanate sensitisation and respiratory reaction.

SAFETY DATA SHEET

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity:	This product is not classified as Hazardous To The Aquatic Environment and is not classified as Environmentally hazardous substance (according to the ADG Code).
Fish Toxicity:	<p>No data for product. On basis of ingredients:</p> <p>Acute Toxicity for Ethyl Benzene, LC₅₀ 5.1 mg/L (Atlantic silverside (Menidia menidid, 96 hours).</p> <p>Acute Toxicity for Hexamethylene diisocyanate, LC₀ ≥ 82.8 mg/L (Zebra fish, Danio rerio, static test, 96 hours).</p> <p>Acute Toxicity for Hexamethylene-1,6-Diisocyanate Homopolymer, LC₅₀ > 100 mg/L (Zebra fish, Danio rerio, 96 hours).</p> <p>Acute Toxicity for 1-Methoxy-2-propanol Acetate, LC₅₀ 100 - 180 mg/L (Rainbow trout, Oncorhynchus mykiss).</p> <p>Acute Toxicity for Xylene, LC₅₀ 3.3 mg/L (Rainbow trout, Oncorhynchus mykiss, 96 hours).</p>
Invertebrates Toxicity:	<p>No data for product. On basis of ingredients:</p> <p>Acute Toxicity for Ethyl Benzene, LC₅₀ 2.4-2.8 mg/L, (Water flea, Daphnia magna, 24 hours); EC₅₀ 1.8-2.4 mg/L, (Water flea, Daphnia magna, 48 hours).</p> <p>Acute Toxicity for Hexamethylene diisocyanate, EC₀ ≥ 89.1 mg/L (Water flea, Daphnia magna, static test, 48 hours).</p> <p>Acute Toxicity for Hexamethylene-1,6-Diisocyanate Homopolymer, EC₅₀ > 100 mg/L (Water flea, Daphnia magna, 48 hours); ecological report carried out on a comparable product.</p> <p>Acute Toxicity for 1-Methoxy-2-propanol Acetate, LC₅₀ 408 - 500 mg/L (Water flea, Daphnia magna).</p> <p>Acute Toxicity for Xylene, 1<LC/EC/IC₅₀ ≤ 10 mg/L.</p>
Algae Toxicity:	<p>No data for product. On basis of ingredients:</p> <p>Acute Toxicity for Ethyl Benzene, EC₅₀ 3.6 mg/L, (Freshwater Algae, Pseudokirchnerella subcapitata, 96 hours).</p> <p>Acute Toxicity for Hexamethylene diisocyanate, ErC₅₀ > 77.4 mg/L (Freshwater Algae, Desmodesmus Subspicatus, 0-72 hours).</p> <p>Acute Toxicity for Hexamethylene diisocyanate, NOEC 11.7 mg/L (Freshwater Algae, Desmodesmus Subspicatus, 72 hours).</p> <p>Acute Toxicity for Hexamethylene-1,6-Diisocyanate Homopolymer, ErC₅₀ > 100 mg/L (Freshwater Algae, Desmodesmus Subspicatus, 72 hours).</p> <p>Acute Toxicity for Xylene, 1<LC/EC/IC₅₀ ≤ 10 mg/L</p>
Toxicity to Microorganisms:	<p>No data for product. On basis of ingredients:</p> <p>Acute Toxicity for Hexamethylene-1,6-Diisocyanate Homopolymer, EC₅₀ activated sludge, respiration inhibition > 100 mg/L/3h. Tests carried out on a comparable product.</p> <p>Acute Toxicity for Xylene, LC/EC/IC₅₀ > 100 mg/L</p>
Effects on other organisms:	No data for product.
Persistence and Degradability:	<p>Hexamethylene diisocyanate, is readily biodegradable (DT₅₀ 48.44 hours by photolysis @ 25°C and 0.23 hours @ 23°C by hydrolysis).</p> <p>Hexamethylene-1,6-Diisocyanate Homopolymer is not readily biodegradable (biodegradation of 1% after 28 d).</p> <p>Xylene is readily biodegradable and oxidises by photo-chemical reactions in air.</p>

SAFETY DATA SHEET

SECTION 12 – ECOLOGICAL INFORMATION (CONTINUED)

Biological Oxygen Demand (BOD):	No data for product. On basis of ingredients: Hexamethylene diisocyanate, has BOD of 42 % after 28 days (bacteria). 1-Methoxy-2-propanol Acetate has BOD of 19% after 5 days, BOD of 57% after 10 days, BOD of 61.5% after 20 days.
Theoretical Oxygen Demand (ThOD):	No data for product. On basis of ingredients: 1-Methoxy-2-propanol Acetate has ThOD of 1.82 mg/mg.
Chemical Oxygen Demand (COD):	No data for product.
BOD/COD Ratio:	None available for product.
Bio-accumulative potential:	There is no evidence to suggest bioaccumulation will occur. On basis of ingredients: Bioconcentration potential of Hexamethylene diisocyanate, is low (BCF 58, fish). Bioconcentration potential of 1-Methoxy-2-propanol Acetate is low, Partition coefficient, n-octanol/water (log P _{ow} is 0.56). Xylene does not bioaccumulate significantly
Mobility in Soil:	No data for product. Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects. Product is heavier than and is insoluble in water. On basis of ingredients: Hexamethylene-1,6-Diisocyanate Homopolymer react at the interface forming Carbon dioxide (CO ₂) and a solid insoluble product with high melting point (polyurethane). This reaction is accelerated by surfactants (e.g. detergents) or by water-soluble solvents. Previous experience shows that polyurethane is inert and non-degradable.
General:	DO NOT DISCHARGE INTO DRAINS, WATERWAYS, SEWER OR ENVIRONMENT. Product may be hazardous for water. Product is heavier than and is insoluble in water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Inform local authorities if this occurs.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal methods:	
Product:	Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority, according to State, Territory and/or Local government regulations, pertinent authorities and adhering to the necessary technical regulations. Do not allow runoff to sewer, waterway or ground. Incinerate with adequate scrubbing and ash disposal.
Individual Protection Measures:	Refer to Individual Protection Measures Including Personal Protective Equipment (PPE) in Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION.
Uncleaned Packaging:	Recommended to be disposed of according to official regulations.
Behaviour in Sewage Processing Plants:	No further relevant information available.

SAFETY DATA SHEET

SECTION 14 – TRANSPORT INFORMATION

Road & Rail Transport: This material is **classified** as DANGEROUS GOODS, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

UN Number: 1866.

UN Proper Shipping Name or Technical Name: 3.

ADG Class: RESIN SOLUTION.

Packing Group: III.

HAZCHEM Code: ●3Y.

AERGB: 127.

Marine Transport: This material is **classified** as DANGEROUS GOODS and **classified** as a MARINE POLLUTANT by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN Number: 1866.

UN Proper Shipping Name or Technical Name: 3.

IMDG Class: RESIN SOLUTION.

Packing Group: III.

Air Transport: This material is **classified** as DANGEROUS GOODS, by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN Number: 1866.

UN Proper Shipping Name or Technical Name: 3.

IATA Class: RESIN SOLUTION.

Packing Group: III.

Class Label:



SECTION 15 – REGULATORY INFORMATION

Australian Standards:

AS/NZS 1337.1:2010: Personal eye protection - Eye and face protectors for occupational applications.

AS/NZS 1715:2009: Selection, use and maintenance of respiratory protective equipment.

AS/NZS 1716:2012: Respiratory protective devices.

AS 1940:2017: The storage and handling of flammable and combustible liquids.

AS/NZS 2161.1:2000: Occupational protective gloves: Selection, use and maintenance.

AS/NZS 2161.2:2005: Occupational protective gloves: General requirements.

AS/NZS 2161.10.1:2005: Occupational protective gloves: Protective gloves against chemicals and micro-organisms — Terminology and performance requirements.

SAFETY DATA SHEET

SECTION 15 – REGULATORY INFORMATION (CONTINUED)

AS/NZS 2161.10.2:2005: Occupational protective gloves: Protective gloves against chemicals and micro-organisms—Determination of resistance to penetration.

AS/NZS 2161.10.3:2005: Occupational protective gloves: Protective gloves against chemicals and micro-organisms—Determination of resistance to permeation by chemicals.

AS/NZS 2210.1:2010: Safety, protective and occupational footwear - Guide to selection, care and use.

AS/NZS 2210.2:2009: Occupational protective footwear - Test methods (ISO 20344:2004, MOD).

AS/NZS 2210.4:2009: Occupational protective footwear - Specification for protective footwear (ISO 20346:2004, MOD).

AS/NZS 4501.1:2008: Occupational protective clothing - Guidelines on the selection, use, care and maintenance of protective clothing.

AS/NZS 4501.2:2006: Occupational protective clothing - General requirements.

AICIS: All ingredients present on AICIS Inventory.

SUSMP: Schedule Number S6 allocated.

SECTION 16 – OTHER INFORMATION

Acronyms and Comments:

ACGIH:	American Conference of Industrial Hygienists.
ADG Code:	Australian Code for the Transport of Dangerous Goods by Road and Rail.
AERGB:	Australian Emergency Response Guide Book (2018).
AICIS:	Australian Industrial Chemicals Introduction Scheme which replaced National Industrial Chemicals Notification and Assessment Scheme (NICNAS).
APVMA:	Australian Pesticides and Veterinary Medicines Authority.
AS:	Standards issued by Standards Australia, GPO Box 476, Sydney NSW 2001, Australia.
AS/NZ:	Standards issued by Standards Australia, GPO Box 476, Sydney NSW 2001, Australia and Standards New Zealand, Private Bag 2439 Wellington 6140, New Zealand.
ATE:	Acute Toxicity Estimate according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
BEI:	Biological Exposure Indices published by the American Conference of Governmental Industrial Hygienists (ACGIH), 1330 Kemper Meadow Drive, Cincinnati, OH 45240-4148, USA.
CAS Number:	Chemical Abstracts Service Registry Number.
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals, a globally harmonised system for classification and labelling of chemicals proposed by the United Nations.
HAZCHEM:	An emergency action code of numbers and letters which gives information to emergency services.
IARC:	International Agency for Research on Cancer.
IMDG:	International Maritime Dangerous Goods Code for transport by sea.

SAFETY DATA SHEET

SECTION 16 – OTHER INFORMATION (CONTINUED)

LC/LD:	The median lethal dose, LD ₅₀ (abbreviation for "lethal dose, 50%"), LC ₅₀ (lethal concentration, 50%) is the dose required to kill half the members of a tested population after a specified test duration. LD ₅₀ figures are frequently used as a general indicator of a substance's acute toxicity.
NTP:	National Toxicology Program (USA Department of Health and Human Services).
OSHA:	Occupational Safety and Health Administration (USA).
PPE:	Personal Protective Equipment.
Safe Work Australia:	Safe Work Australia was formerly the Australian Safety and Compensation Council, which included the National Occupational Health and Safety Commission (NOHSC).
SDS:	Safety Data Sheet.
STEL:	Exposure standard - short term exposure limit, a 15-minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.
SUSMP:	Standard for the Uniform Scheduling of Medicines and Poisons.
TDL₀:	Total Dose Low means the smallest deadly dose, which caused a toxic or other harmful effect after application on humans or animal.
TWA:	Exposure standard - time-weighted average, the average airborne concentration of a particular substance when calculated over a normal eight hour working day, for a five-day working week.
UK HSE:	United Kingdom Health and Safety Executive.
UN Number:	United Nations Number.
WHS:	Model work health and safety legislation introduced by the Australian government which consists of an integrated package of a model Work Health and Safety (WHS) Act, supported by model Work Health and Safety (WHS) Regulations, model Codes of Practice and a National Compliance and Enforcement Policy. The WHS Regulations implement a new system of chemical hazard classification, labelling and safety data sheet requirements based on the GHS.
Issue Date:	5 August 2021.
Supersedes Issue Date:	3 August 2016.
Revision Information:	Revised issue.
Contact Point:	Regulatory Affairs Manager.
Telephone:	(07) 4633 3544.
Note:	Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

SAFETY DATA SHEET

SECTION 16 – OTHER INFORMATION (CONTINUED)

Disclaimer:

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since Planet Paints Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace. This SDS does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.