



Safety Data Sheet

TECHNOMELT PUR 3317BRJ

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SDS No. : 56121

V001.7

Date of issue: 27.12.2023

Section 1. Identification of the substance/preparation and of the company/undertaking

Product name: TECHNOMELT PUR 3317BRJ

Intended use: Adhesive for the graphic industry

Supplier:

Henkel Australia Pty Ltd
135-141 Canterbury Road
Kilsyth, Victoria, 3137
Australia

Phone: +61 (3) 9724 6444

E-mail address of person responsible for Safety Data Sheet: SDSinfo.Adhesive@henkel.com

Emergency Telephone for Chemical Accidents: 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

Section 2. Hazards identification

Classification of the substance or mixture

Hazardous according to the criteria of Safe Work Australia.

GHS Classification:

Hazard Class

Respiratory sensitizer
Skin sensitizer
Carcinogenicity

Hazard Category

Category 1
Category 1
Category 2

Hazard pictogram:



Signal word:

Danger

Hazard statement(s):	H317 May cause an allergic skin reaction. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H351 Suspected of causing cancer.
Precautionary Statement(s):	
Prevention:	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust or fumes. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. P284 [In case of inadequate ventilation] wear respiratory protection.
Response:	P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313 IF exposed or concerned: Get medical advice/attention. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.
Storage:	P405 Store locked up.
Disposal:	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

Dangerous Goods information:

Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

Section 3. Composition / information on ingredients

General chemical description:	Mixture Polyurethane prepolymer with isocyanate groups
Type of preparation:	1-Component PU adhesive

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
o-(p-Isocyanatobenzyl)phenyl isocyanate	5873-54-1	1- < 5 %
4,4'-methylenediphenyl diisocyanate	101-68-8	0.1- < 1 %
non hazardous ingredients~		60- <= 100 %

Section 4. First aid measures

Ingestion:	Rinse mouth, do not induce vomiting, consult a doctor.
Skin:	Molten product. After skin contact cool down immediately with cold water. Do not remove adherent product. Seek medical advice.
Eyes:	After contact with the hot melt: cool with water, seek medical attention.
Inhalation:	Fresh air, oxygen supply, warmth; seek specialist medical attention. Delayed effects possible after inhalation.
First Aid facilities:	Eye wash and safety shower Normal washroom facilities
Medical attention and special treatment:	Treat symptomatically as for contact dermatitis or thermal burns.

Section 5. Fire fighting measures

Suitable extinguishing media:	All common extinguishing agents are suitable.
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Water spray (fog), foam, dry chemical or carbon dioxide.

Improper extinguishing media: High pressure waterjet

Decomposition products in case of fire: Thermal decomposition can lead to release of irritating gases and vapors.
carbon monoxide
Carbon dioxide.
Oxides of nitrogen.
Isocyanates.
Hydrogen cyanide.

Special protective equipment for fire-fighters: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
Wear self-contained breathing apparatus.

Section 6. Accidental release measures

Personal precautions: Wear protective equipment.
Avoid contact with skin and eyes.
Keep unprotected persons away.

Environmental precautions: Do not empty into drains / surface water / ground water.

Clean-up methods: Allow to solidify.
Remove mechanically.
Dispose of contaminated material as waste according to Section 13.

Section 7. Handling and storage

Precautions for safe handling: Always be careful around molten material.
Do not inhale vapors and fumes.
Ensure adequate ventilation, especially in confined areas.
Avoid skin and eye contact.
Wear suitable protective clothing, safety glasses and gloves.
See advice in section 8

Conditions for safe storage: Store in sealed original container protected against moisture.
Ensure good ventilation/extraction.
Store in a cool place in closed original container.
Ensure adequate ventilation.
Store in a dry place.
Storage at -20 to 50°C is recommended.

Section 8. Exposure controls / personal protection

National exposure standards:

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Peak Limit. (ppm)	Peak Limit. (mg/m3)	STEL (ppm)	STEL (mg/m3)
Isocyanates, all (as-NCO) 5873-54-1							0.07
Isocyanates, all (as-NCO) 5873-54-1			0.02				
ISOCYANATES, ALL (AS-NCO) 101-68-8			0.02				

ISOCYANATES, ALL (AS-NCO) 101-68-8							0.07
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Engineering controls:	Ensure good ventilation/extraction.
Eye protection:	Goggles which can be tightly sealed.
Skin protection:	Protective clothing that covers arms and legs. Wear heat resistance gloves while working with the hot melt (EN 407). Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.
Respiratory protection:	If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

Section 9. Physical and chemical properties

Appearance:	white Solid, crystalline
Odor:	characteristic
pH:	Not applicable, Product reacts with water.
Melting point / freezing point:	60 - 150 °C (140 - 302 °F)
Flash point:	Not applicable
Flammability (solid, gas):	The product is not flammable.
Vapor pressure: (no method / method unknown; 20 °C (68 °F))	< 0.1 hPa
Vapor density:	Not applicable, Product is a solid.
Density:	1.1 g/cm ³
Solubility in water:	Insoluble (20 °C)
Auto ignition:	Not determined
Decomposition temperature:	
Viscosity (dynamic):	2,500 - 4,500 mPa.s(Brookfield; 130 °C (266 °F); speed of rotation: 20 min-1; Spindle No: 27; Method: ;; TIA-PD-PD/HM PA10-049; viscosity Brookfield (Purmelt))
VOC content (2010/75/EC)	0 % (VOCV 814.018 VOC regulation CH)

Section 10. Stability and reactivity

Stability:	Stable under recommended storage conditions.
Conditions to avoid:	Humidity Heat.

Incompatible materials: Reaction with water, alcohols, amines.
Reacts with water: Pressure built up in closed vessel (CO₂).

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors.

carbon monoxide
carbon dioxide
Oxides of nitrogen.
Isocyanates.
Hydrogen cyanide.

Section 11. Toxicological information

Health Effects:

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Skin: May cause mild skin irritation.

May cause allergic skin reaction.

When it is heated, this material may cause thermal burns.

Eyes: May cause mild irritation

Molten adhesive may cause severe burns.

Inhalation: May cause respiratory tract irritation.

May cause allergic respiratory reaction.

Persons suffering from allergic reactions to isocyanates should avoid contact with the product.

Carcinogenicity: Category 2 (Carcinogen), Suspected of causing cancer by inhalation.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	LD50 LD50	> 2,000 mg/kg > 9,400 mg/kg	oral dermal		rat rabbit	other guideline: OECD Guideline 402 (Acute Dermal Toxicity)
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50 LD50	> 2,000 mg/kg > 9,400 mg/kg	oral dermal		rat rabbit	other guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
4,4'- methylenediphenyl diisocyanate 101-68-8	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
4,4'- methylenediphenyl diisocyanate 101-68-8	irritating		human	Weight of evidence

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	sensitising	Respiratory sensitisation	guinea pig	not specified
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	sensitising	Mouse local lymph node assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
4,4'-methylenediphenyl diisocyanate 101-68-8	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4,4'-methylenediphenyl diisocyanate 101-68-8	sensitising	Respiratory sensitisation	guinea pig	not specified

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
4,4'-methylenediphenyl diisocyanate 101-68-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
4,4'-methylenediphenyl diisocyanate 101-68-8	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	NOAEL=0,2 mg/m ³	inhalation: aerosol	2 y 6 h/d, 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
4,4'-methylenediphenyl diisocyanate 101-68-8	NOAEL=0.0002 mg/l	inhalation: aerosol	main: 2 y; satellite: 1 y 6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Section 12. Ecological information**General ecological information:**

Do not empty into drains / surface water / ground water.

Ecotoxicity:**Toxicity:**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	LC50	Toxicity > Water Solubility	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	EC50	Toxicity > Water Solubility	Daphnia	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	EC50	Toxicity > Water Solubility	Algae	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	NOELR	Toxicity > Water Solubility	Algae	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	LL50	> 100 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)
4,4'- methylenediphenyl diisocyanate 101-68-8	EL50	> 100 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	NOELR	100 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	> 1,000 mg/l	Bacteria	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	not inherently biodegradable	aerobic	0 %	OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))
4,4'- methylenediphenyl diisocyanate 101-68-8	not readily biodegradable.	aerobic	0 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1		200	28 day	Cyprinus carpio		OECD Guideline 305 E (Bioaccumulation: Flow- through Fish Test)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	5.22					QSAR (Quantitative Structure Activity Relationship)
4,4'- methylenediphenyl diisocyanate 101-68-8		92 - 200	28 d	Cyprinus carpio		OECD Guideline 305 E (Bioaccumulation: Flow- through Fish Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	4.51				22 °C	OECD Guideline 117 (Partition Coefficient (n- octanol / water), HPLC Method)

Section 13. Disposal considerations

- Waste disposal of product:** Dispose of waste and residues in accordance with local authority requirements.
- Disposal for uncleaned package:** Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Section 14. Transport information

Road and Rail Transport:

Dangerous Goods information: Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

Marine transport IMDG:

Not dangerous goods

Air transport IATA:

Not dangerous goods

Section 15. Regulatory information

- SUSMP Poisons Schedule** None
- AIC:** All components are listed or are exempt from listing on the Australian Inventory of Industrial Chemicals or Introduced under AICIS.

Section 16. Other information

- Abbreviations/acronyms:**
- ADGC - Australian Dangerous Goods Code
 - GHS: Globally Harmonized System
 - CAS: Chemical Abstracts Service
 - OECD: Organization for Economic Cooperation and Development
 - LD 50: Lethal Dose 50%
 - LC 50: Lethal Concentration 50%
 - IMDG: International Maritime Dangerous Goods code
 - IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
 - STEL - Short term exposure limit
 - TWA - Time weighted average
 - AIIC - Australian Inventory of Industrial Chemicals (AIIC)
 - AICIS - Australian Industrial Chemicals Introduction Scheme
- Reason for issue:** Reviewed MSDS. Reissued with new date. involved chapters: 1-16
:
- Updated composition in Section 3.

Date of previous issue: 01.11.2022

Disclaimer:

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