Safety Data Sheet

TEROSON PU 9225 HARDENER

SDS No. : 76477
V001.2
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SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: TEROSON PU 9225 HARDENER

Intended use: 2-Component polyurethane adhesive

Supplier:

Henkel New Zealand Ltd
2 Allens Rd
East Tamaki
Auckland, 2013
New Zealand
Phone: +64 (9) 272-6710

Emergency information: 24 HOUR EMERGENCY CONTACT NUMBER 0800 243 622

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture
Classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO).
Not classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

GHS Classification:

Hazard Class	Hazard Category	Target organ
Skin irritation	Category 2	
Serious eye irritation	Category 2A	
Respiratory sensitizer	Category 1	
Skin sensitizer	Category 1	
Carcinogenicity	Category 2	
Target Organ Systemic Toxicant - Single exposure	Category 3	respiratory tract irritation
Target Organ Systemic Toxicant - Repeated exposure	Category 2	

Hazard pictogram:

Signal word: Danger

Hazard statement(s):
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust or fumes.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
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+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

Storage:
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

General chemical description: Mixture
Isocyanate

Type of preparation: Hardening component of a 2-component PU adhesive

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Limestone	1317-65-3	30- < 50 %
Diphenylmethane diisocyanate, isomers and homologs	9016-87-9	10- < 20 %
4,4'- methylenediphenyl diisocyanate	101-68-8	10- < 20 %
Calcium carbonate	471-34-1	1- < 10 %
o-(p-Isocyanatobenzyl)phenyl isocyanate	5873-54-1	1- < 5 %
2,2'-Methylenediphenyl diisocyanate	2536-05-2	0.1- < 1 %

SECTION 4 FIRST AID MEASURES

Ingestion: Rinse mouth, do not induce vomiting, consult a doctor.

Skin: Immediately remove soiled or soaked clothing.
Immediately wash skin thoroughly with soap and water.
Seek medical advice.

Eyes:	Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.
Inhalation:	Move to fresh air. Keep warm and in a quiet place. Seek medical advice.
First Aid facilities:	Eye wash and safety shower Normal washroom facilities
Medical attention and special treatment:	Treat symptomatically. Exposed persons should be kept under medical observation for at least 48 hours because delayed effects may occur.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
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.
Special protective equipment for fire-fighters:	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA). Wear protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Ensure adequate ventilation. Wear protective equipment. Avoid contact with skin and eyes. Danger of slipping on spilled product. Keep unprotected persons away. See advice in section 8
Environmental precautions:	Do not empty into drains / surface water / ground water.
Clean-up methods:	Neutralise any spillages with a mixture of alcohol, water and wetting agent, if necessary adding 1% ammonia relative to the isocyanate groups. Dispose of contaminated material as waste according to Section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:	Ensure good ventilation/suction at the workplace. Avoid contact with skin and clothing. Wear suitable protective clothing, safety glasses and gloves.
Conditions for safe storage:	Ensure good ventilation/extraction. Store in a cool, dry place. Temperatures between + 10 °C and + 25 °C Protect from direct sun-light and temperature above 50°C in any case.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace exposure standards:

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Ceiling	STEL (ppm)	STEL (mg/m3)
LIMESTONE 1317-65-3		10		-	-	-
ISOCYANATES, ALL (AS -NCO) 9016-87-9			0.02	-	-	-
ISOCYANATES, ALL (AS -NCO)		-	-	-		0.07
ISOCYANATES, ALL (AS -NCO) 101-68-8			0.02	-	-	-
ISOCYANATES, ALL (AS -NCO)		-	-	-		0.07
CALCIUM CARBONATE 471-34-1			10	-	-	-
ISOCYANATES, ALL (AS -NCO) 5873-54-1			0.02	-	-	-
ISOCYANATES, ALL (AS -NCO)		-	-	-		0.07
ISOCYANATES, ALL (AS -NCO) 2536-05-2			0.02	-	-	-
ISOCYANATES, ALL (AS -NCO)		-	-	-		0.07

Biological Exposure Indices:

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
4,4'-Methylenediphenyl diisocyanate 101-68-8 [4,4'-METHYLENEDIPHENYLENE DIISOCYANATE (MDI); 4,4'-METHYLENE BISPHENYL ISOCYANATE]	4,4'-Diaminodiphenyl following hydrolysis	Creatinine in urine	Sampling time: End of exposure or end of shift.	10 µg/g	NZ BEI		

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
4,4'-Methylenediphenyl diisocyanate 101-68-8	4,4-Diaminodiphenylmethane	Creatinine in urine	Sampling time: End of shift.	10 µg/g	DE BAT	BAT values reflect the total physical load of workplace substances absorbed through inhalation, dermally, etc. With occupational exposure to MDI, parameter 4,4'-Diaminodiphenylmethane (MDA) in the urine	

						covers all components of a complex MDI mixture, since both monomers and oligomers of the MDI are degraded independent of the exposure path of the monomerous MDI. In contrast, the MAK value for MDI takes into account only the monomer MDI portion.	

Engineering controls: Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

Eye protection: Goggles which can be tightly sealed.

Skin protection: Wear protective equipment.
Nitrile rubber gloves should be worn.
Protective clothing that covers arms and legs.

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: black
pasty
Odor: earthy
pH: Not applicable, Product is non-soluble (in water).
Melting point / freezing point: Not available.
Specific gravity: 1.7
Flash point: > 110 °C (> 230 °F)
(no method)
Ignition temperature Not applicable
Vapor pressure:
Not determined
Vapor density: Not applicable, Product is a solid.
Density: 1.7 g/cm3
Solubility in water: Insoluble
Viscosity (dynamic): 26 - 32 Pa*s
(Brookfield; 20 °C (68 °F);
Conc.: 100 % product; Method: ;
QP1555.0; TE1002-208;
Viscosity by Brookfield)
VOC content (2004/42/EC) 0 % (2010/75/EU)

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of temperature and pressure.

Conditions to avoid: Avoid moisture.
Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials: Reaction with water, alcohols, amines.
Reaction with water, formation of CO2
Strong oxidizing agents.

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

Carbon monoxide.
Carbon dioxide.
Oxides of nitrogen.
Isocyanates.

Hazardous polymerization: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Health Effects:
Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Skin: Irritating to skin.
Symptoms may include redness, edema, drying, defatting and cracking of the skin.
May cause skin sensitization.
Eyes: Causes eye irritation.
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Inhalation: This product is irritating to the respiratory system.
May cause sensitization by inhalation and skin contact.

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

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Limestone 1317-65-3	LD50 LD50	> 5,000 mg/kg > 5,000 mg/kg	oral dermal		rat rat	not specified not specified
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	LD50 LD50	> 2,000 mg/kg > 9,400 mg/kg	oral dermal		rat rat	OECD Guideline 401 (Acute Oral Toxicity) 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)
Calcium carbonate 471-34-1	LD50 LC50 LD50	> 2,000 mg/kg > 3 mg/l > 2,000 mg/kg	oral inhalation dermal	 4 h	rat rat rat	OECD Guideline 420 (Acute Oral Toxicity) OECD Guideline 403 (Acute Inhalation Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)
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)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	LD50 LD50	> 2,000 mg/kg > 9,400 mg/kg	oral dermal		rat rabbit	EU Method B.1 (Acute Toxicity (Oral)) OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Limestone 1317-65-3	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	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)
Calcium carbonate 471-34-1	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Limestone 1317-65-3	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Calcium carbonate 471-34-1	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Limestone 1317-65-3	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	sensitising	Skin sensitisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Calcium carbonate 471-34-1	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
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 lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	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
Limestone 1317-65-3	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test mammalian cell gene mutation assay	with and without with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	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	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)
Calcium carbonate 471-34-1	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test mammalian cell gene mutation assay	with and without with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
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)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	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
Limestone 1317-65-3	NOAEL=1,000 mg/kg	oral: gavage	48 ddaily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	NOAEL=0.0002 mg/l	inhalation: aerosol	2 y6 h per d, 5 d per week	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 y6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Calcium carbonate 471-34-1	NOAEL=1,000 mg/kg	oral: gavage	48 ddaily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	NOAEL=0,2 mg/m³	inhalation: aerosol	2 y6 h/d, 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	NOAEL=0,2 mg/m³	inhalation: aerosol	2 y6 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, soil or bodies of water.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Limestone 1317-65-3	LC50	> 10,000 mg/l	Fish	96 h	Oncorhynchus mykiss	not specified
Limestone 1317-65-3	EC50	> 1,000 mg/l	Daphnia	48 h	Daphnia magna	not specified
Limestone 1317-65-3	EC50	> 200 mg/l	Algae	72 h	Desmodesmus subspicatus	not specified
Limestone 1317-65-3	EC50	> 1,000 mg/l	Bacteria	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	LC50	> 1,000 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	EC50	> 1,000 mg/l	Daphnia	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	EC50	> 1,640 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	EC50	> 100 mg/l	Bacteria	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration 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)
Calcium carbonate 471-34-1	LC50	Toxicity > Water solubility	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Calcium carbonate 471-34-1	EC50	Toxicity > Water solubility	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Calcium carbonate 471-34-1	EC50	Toxicity > Water solubility	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Calcium carbonate 471-34-1	NOEC	14 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Calcium carbonate 471-34-1	EC50	Toxicity > Water solubility	Bacteria	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
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)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	LC50	Tox>Water Solubility	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	EC50	Tox>Water Solubility	Daphnia	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	EC50	Tox>Water Solubility	Algae	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	NOELR	Tox>Water Solubility	Algae	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)

Persistence and degradability:

Hazardous components CAS-No.	**Result**	**Route of application**	**Degradability**	**Method**
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	not inherently biodegradable	aerobic	0 %	OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9	not readily biodegradable.	not specified	0 %	OECD 301 A - F
4,4'- methylenediphenyl diisocyanate 101-68-8	not readily biodegradable.	aerobic	0 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	not readily biodegradable.	aerobic	0 %	OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))
2,2'-Methylenediphenyl diisocyanate 2536-05-2	not readily biodegradable.	aerobic	0 %	OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method

Diphenylmethane diisocyanate, isomers and homologs 9016-87-9		200		Cyprinus carpio		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
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)
Calcium carbonate 471-34-1	-2.12					QSAR (Quantitative Structure Activity Relationship)
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)
2,2'-Methylenediphenyl diisocyanate 2536-05-2		200	28 day	Cyprinus carpio		OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	5.22					QSAR (Quantitative Structure Activity Relationship)

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal of product: Dispose of in accordance with local and national regulations.
In consultation with the responsible local authority, must be subjected to special treatment.

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

Dangerous Goods information:

Land Transport:
Not classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

Marine transport IMDG:
Not dangerous goods

Air transport IATA:
Not dangerous goods

SECTION 15. REGULATORY INFORMATION

New Zealand regulatory information:
Classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO).

HSNO Approval Number: HSR002679

Site and Storage: Refer to the site and storage requirements for this Group Standard.
Refer to the HSNO controls for approved hazardous substances.

NZIoC: Compliant for NZIOC

SECTION 16. OTHER INFORMATION

Abbreviations/acronyms:

STEL - Short term exposure limit
TWA - Time weighted average
HSNO - Hazardous Substances and New Organisms
GHS: Globally Harmonized System
CAS: Chemical Abstracts Service
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

Reason for issue: Reviewed SDS. Reissued with new date. involved chapters: 1 - 16

Date of previous issue: 26.07.2017

Disclaimer:

The percentage weight (% w/w) of ingredients is not to be taken as a specification guaranteed by Henkel New Zealand Limited, but only as an approximate guide to the content of hazardous ingredients in the material. The information contained herein does not constitute a guarantee by Henkel New Zealand Limited concerning the properties of the material.
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