PRC1810-ISO- SL000221

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Date of issue: 05/04/2018 Version: 1.00

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : PRC1810-ISO- SL000221

Product code : SL000221

Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : For professional use only

Industrial/Professional use spec : Industrial

Use of the substance/mixture : Polyurethane resin

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SYNTHENE
Ferme de l'Evêché CS20308
60723 Pont Sainte Maxence Cedex - FRANCE
T 33 344 31 72 00 - F 33 157 67 44 58
qual@synthene.com - www.synthene.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (inhalation:dust,mist) Category 2	H330
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06 GHS08

Signal word (CLP) : Danger

Hazardous ingredients : 4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate; Homopolymer of 1,6-hexamethylene diisocyanate

Hazard statements (CLP) : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.
H330 - Fatal if inhaled.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, face protection, protective clothing.
P284 - In case of inadequate ventilation wear respiratory protection.
P302+P352 - IF ON SKIN: Wash with plenty of water, soap.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P342+P311 - If experiencing respiratory symptoms: Call a doctor, a POISON CENTER.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements : EUH210 - Safety data sheet available on request.
EUH204 - Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate	(CAS-No.) 5124-30-1 (EC-No.) 225-863-2 (EC Index-No.) 615-009-00-0	50 - 80	Acute Tox. 2 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335
Homopolymer of 1,6-hexamethylene diisocyanate	(CAS-No.) 28182-81-2 (REACH-no) 01-2119485796-17	20 - 25	Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317 STOT SE 3, H335

Specific concentration limits:

Name	Product identifier	Specific concentration limits
4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate	(CAS-No.) 5124-30-1 (EC-No.) 225-863-2 (EC Index-No.) 615-009-00-0	(C >= 0,5) Skin Sens. 1, H317 (C >= 0,5) Resp. Sens. 1, H334

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move to fresh air in case of accidental inhalation of vapours or decomposition products.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

First-aid measures after ingestion : Take victim to fresh air, in a quiet place in an half laying position and urgently take medical advice. Do not give anything to drink. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Water spray.

5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire and/or explosion do not breathe fumes. Isocyanates. Nitrogen oxides. Risk of decomposition. Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. In case of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Provide local exhaust or general room ventilation.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Only qualified personnel equipped with suitable protective equipment may intervene. Equip cleanup crew with proper protection. Do not breathe gas, fumes, vapour or spray.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Shovel into suitable and closed container for disposal. Dispose of this material and its container to hazardous or special waste collection point.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Regular cleaning of equipment, work area and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep only in the original container in a cool, well-ventilated place.

Storage conditions : Store at temperatures between 15 - 25°C.

Packaging materials : Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment:

Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection. Protective clothing.

Hand protection:

PVC or other plastic material gloves

Eye protection:

Chemical goggles or face shield

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Regular cleaning of equipment, work area and clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Transparent.
Colour	:	Colourless.
Odour	:	Characteristics.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	1,08
Solubility	:	Reacts with water. Insoluble.
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	450 mPa.s
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions. No decomposition if stored normally.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong bases. Alcohol. Amines. Ammonia.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Inhalation:dust,mist: Fatal if inhaled.

ATE CLP (dust,mist)	0,429 mg/l/4h

4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate (5124-30-1)	
LD50 oral rat	18200 mg/kg
LD50 dermal rat	> 7000 mg/kg
LC50 inhalation rat (mg/l)	0,33 mg/l/4h

Homopolymer of 1,6-hexamethylene diisocyanate (28182-81-2)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	0,39 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified
Chronic aquatic toxicity : Not classified

4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate (5124-30-1)	
LC50 fish 1	>= 8,1 mg/l
EC50 Daphnia 1	>= 8,3 mg/l
ErC50 (algae)	>= 5 mg/l

Homopolymer of 1,6-hexamethylene diisocyanate (28182-81-2)	
LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l (48 h)
EC50 72h algae (1)	0 mg/l
ErC50 (algae)	> 199 mg/l
ErC50 (other aquatic plants)	> mg/l

12.2. Persistence and degradability

PRC1810-ISO- SL000221	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

Homopolymer of 1,6-hexamethylene diisocyanate (28182-81-2)	
Bioconcentration factor (BCF REACH)	706,2
Log Pow	≈ 8,38

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

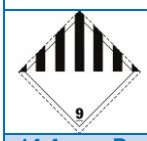
13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA
14.1. UN number		
3334	3334	3334
14.2. UN proper shipping name		
aviation regulated liquid, n.o.s. (4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate ; 4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate)	AVIATION REGULATED LIQUID, N.O.S. (4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate)	aviation regulated liquid, n.o.s. (4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate)
Transport document description		
UN 3334 aviation regulated liquid, n.o.s. (4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate ; 4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate), 9, III	UN 3334 AVIATION REGULATED LIQUID, N.O.S. (4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate), 9, III	UN 3334 aviation regulated liquid, n.o.s. (4,4'-methylenedi(cyclohexyl isocyanate), dicyclohexylmethane-4,4'-di-isocyanate), 9, III
14.3. Transport hazard class(es)		
9	9	9
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

- Overland transport

Transport regulations (ADR) : Not subject

Classification code (ADR) : M11

EAC code : 2Z

- Transport by sea

Transport regulations (IMDG) : Not subject

Special provisions (IMDG) : 960

Stowage category (IMDG) : None

Properties and observations (IMDG) : Not subject to the provisions of this Code but may be subject to provisions governing the transport of dangerous goods by other modes.

- Air transport

PCA Excepted quantities (IATA) : E1

PCA Limited quantities (IATA) : Y964

PCA limited quantity max net quantity (IATA) : 30kgG

PCA packing instructions (IATA) : 964

PCA max net quantity (IATA) : 100L

CAO packing instructions (IATA) : 964

CAO max net quantity (IATA) : 220L

Special provisions (IATA) : A27

ERG code (IATA) : 9A

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 %

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 1, low hazard to waters (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material

The requirements from the Danish Working Environment Authorities regarding work with epoxy resins and isocyanates must be observed during use and disposal

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
EUH204	Contains isocyanates. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute Tox. 2 (Inhalation:dust,mist)	H330	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Resp. Sens. 1	H334	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product