

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

1.1. Product identifier

Product form : Mixture

Product name : PU360

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

1.2.1. Relevant identified uses

Use of the substance/mixture : binder for quartz carpet

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Siddec
 Industrieweg 10
 2490 Balen - BELGIE
 T +32 14 81 50 01
safety@sidec.be - www.sidec.eu

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn 1 1120 Bruxelles/Brussel	+32 70 245 245

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute Tox. 4 (Inhalation:vapour) H332

Skin Irrit. 2 H315

Skin Sens. 1 H317

STOT SE 3 H335

Aquatic Chronic 3 H412

Full text of H statements : see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazardous ingredients :

Ethyl formate; Hexamethylene diisocyanate, oligomers; Reaction mass of 1-Hexanol, 2-ethyl-, reaction products with 1,6-diisocyanatohexane and Hexane, 1,6-diisocyanato-, homopolymer; Dibutyltin dilaurate; p-toluenesulphonyl isocyanate

Hazard statements (CLP) :

H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H332 - Harmful if inhaled.
 H335 - May cause respiratory irritation.
 H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 - Wash hands, forearms and face 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.
 P273 - Avoid release to the environment.
 P280 - Wear protective gloves, protective clothing, eye protection.

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2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Toxic if inhaled. Causes skin irritation. May cause an allergic skin reaction. May damage fertility. May damage the unborn child. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.

Other hazards not contributing to the classification : None, to our knowledge.

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]
Reaction mass of 1-Hexanol, 2-ethyl-, reaction products with 1,6-diisocyanatohexane and Hexane, 1,6-diisocyanato-, homopolymer	(EC-No.) 939-549-4 (REACH-no) 01-2119980939-13	70 – 90	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Skin Sens. 1B, H317 STOT SE 3, H335
Hexamethylene diisocyanate, oligomers	(CAS-No.) 28182-81-2 (EC-No.) 931-274-8 (REACH-no) 01-2119485796-17	5 – 25	Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317 STOT SE 3, H335
p-toluenesulphonyl isocyanate	(CAS-No.) 4083-64-1 (EC-No.) 223-810-8 (EC Index-No.) 615-012-00-7 (REACH-no) 01-2119980050-47	0,25 – 0,3	Resp. Sens. 1, H334 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Dibutyltin dilaurate	(CAS-No.) 77-58-7 (EC-No.) 201-039-8 (EC Index-No.) 050-030-00-3 (REACH-no) 01-2119496068-27	0,2871 – 0,29	Skin Corr. 1, H314 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 STOT SE 1, H370 STOT RE 1, H372 Aquatic Chronic 1, H410

Specific concentration limits:

Name	Product identifier	Specific concentration limits
p-toluenesulphonyl isocyanate	(CAS-No.) 4083-64-1 (EC-No.) 223-810-8 (EC Index-No.) 615-012-00-7 (REACH-no) 01-2119980050-47	(5 ≤C < 100) Skin Irrit. 2, H315 (5 ≤C < 100) STOT SE 3, H335 (5 ≤C < 100) Eye Irrit. 2, H319

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothes.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Gently wash with plenty of soap and water.

First-aid measures after eye contact : Consult an eye specialist. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart.

First-aid measures after ingestion : Rinse mouth. Drink plenty of water. Immediately call a POISON CENTER or doctor.

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

In all cases of doubt, or when symptoms persist, seek medical attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : extinguishing powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic vapours are released.

5.3. Advice for firefighters

Protection during firefighting : Positive pressure self-contained breathing apparatus (SCBA).

Other information : Provision to contain effluent from fire extinguishing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear suitable protective clothing.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

For containment : Large amounts: Pump up the product into a suitably labelled spare container.

Methods for cleaning up : Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel).

6.4. Reference to other sections

Concerning disposal elimination after cleaning, see section 13. Concerning personal protective equipment to use, see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing vapours. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. Do not expose pregnant or breastfeeding women. Do not expose particularly sensitive persons at risk.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, cool, well-ventilated area. Keep container tightly closed. Protect from moisture.

Incompatible products : Water. Amines. alcohols.

Storage area : Store in a dry, cool area.

Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

p-toluenesulphonyl isocyanate (4083-64-1)		
United Kingdom	WEL TWA (mg/m ³)	0,02 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	0,07 mg/m ³
Dibutyltin dilaurate (77-58-7)		
Belgium	Limit value (mg/m ³)	0,1 mg/m ³
Belgium	Short time value (mg/m ³)	0,2 mg/m ³
France	VME (mg/m ³)	0,1 mg/m ³
France	VLE (mg/m ³)	0,2 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	0,2 mg/m ³
USA - ACGIH	ACGIH TWA (mg/m ³)	0,1 mg/m ³
USA - ACGIH	ACGIH STEL (mg/m ³)	0,2 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Avoid contact with skin and eyes. Do not breathe dust. Provide adequate ventilation to minimize dust concentrations.

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Hand protection	: Wear suitable gloves tested to EN374. (>=30 min). Breakthrough time : refer to the recommendations of the supplier. Recommended materials. Butyl rubber gloves. (>= 7 mm)
Eye protection	: Protective goggles. EN 166
Skin and body protection	: Wear suitable protective clothing. like: Chemical resistant apron. Boots
Respiratory protection	: Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Cloudy.
Colour	: Colourless.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
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)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,107 g/cm ³
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 600 – 1000 mPa·s
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

water, amines and alcohol's.

10.4. Conditions to avoid

Water, humidity.

10.5. Incompatible materials

water, amines and alcohol's.

10.6. Hazardous decomposition products

None under normal use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if inhaled.

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LD50 oral rat	> 2000 mg/kg
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LC50 inhalation rat (mg/l)	0,1 – 0,5 mg/l/4h
ATE CLP (vapours)	11 mg/l/4h
Reaction mass of 1-Hexanol, 2-ethyl-, reaction products with 1,6-diisocyanatohexane and Hexane, 1,6-diisocyanato-, homopolymer	
LC50 inhalation rat (mg/l)	0,264 mg/l/4h
p-toluenesulphonyl isocyanate (4083-64-1)	
LD50 oral rat	2330 mg/kg bodyweight (Equivalent to or corresponding to OECD 401, Rat, Male / Female, Read-across, Oral)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24h, Rat, Male / Female, Read-across, Skin)
Dibutyltin dilaurate (77-58-7)	
LD50 oral rat	2071 mg/kg bodyweight (Equivalent to or corresponding to OECD 401, Rat, Male / Female, Experimental value, Oral, 14 day (s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24h, Rat, Male / Female, Experimental Value, Dermal, 14 day (s))
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: 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

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LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l
EC50 72h algae (1)	> 100 mg/l
p-toluenesulphonyl isocyanate (4083-64-1)	
LC50 fish 1	> 45 mg/l (OECD 203: Fish: acute toxicity study, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value)
EC50 Daphnia 1	> 100 mg/l (OECD 202: Acute Immobilization Study at Daphnia sp., 48 h, Daphnia magna, Static System, Fresh Water, Experimental Value)
ErC50 (algae)	30 mg/l (OECD 201: Algae: growth inhibition study, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)
Dibutyltin dilaurate (77-58-7)	
EC50 Daphnia 1	< 463 µg/l (OECD 202: Acute Immobilization Study at Daphnia sp., 48 h, Daphnia magna, Static System, Fresh Water, Experimental Value, Movement)
ErC50 (algae)	> 1 mg/l (OECD 201: Algae: growth inhibition study, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Tin)

12.2. Persistence and degradability

p-toluenesulphonyl isocyanate (4083-64-1)	
Persistence and degradability	Readily biodegradable in water.
Dibutyltin dilaurate (77-58-7)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

p-toluenesulphonyl isocyanate (4083-64-1)	
Partition coefficient n-octanol/water (Log Pow)	0,6 (Experimental value, OECD 117: Partition coefficient (n-octanol / water), HPLC method)
Bioaccumulative potential	Slightly bioaccumulative.
Dibutyltin dilaurate (77-58-7)	
BCF fish 1	31 – 813 (Calculated value)
Partition coefficient n-octanol/water (Log Pow)	4,44 (Practical experience / observation, OECD 107: Partition coefficient (n-octanol / water): Shake bottle method, 20.8 ° C)
Bioaccumulative potential	Bioaccumulative potential.

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12.4. Mobility in soil

p-toluenesulphonyl isocyanate (4083-64-1)

Ecology - soil : No supplementary information available.

Dibutyltin dilaurate (77-58-7)

Ecology - soil : No supplementary information available.

12.5. Results of PBT and vPvB assessment

Component

Dibutyltin dilaurate (77-58-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
p-toluenesulphonyl isocyanate (4083-64-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Ensure all national/local regulations are observed.
Waste treatment methods : This material and its container must be disposed of in a safe way.

SECTION 14: Transport information

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

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

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14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

Carriage prohibited (ADN) : No

Not subject to ADN : No

- Rail transport

Carriage prohibited (RID) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

15.1.2. National regulations

Germany

Regulatory reference : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (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

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use 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. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Muta. 2	Germ cell mutagenicity, Category 2

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Repr. 1B	Reproductive toxicity, Category 1B
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT SE 1	Specific target organ toxicity — single exposure, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H360	May damage fertility or the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.