

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: 100001025 Issue date: 28/04/2015 Revision date: 20/09/2021 Supersedes version of: 09/01/2018 Version: 4.0

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

1.1. Product identifier

Product form Trade name : Mixture : Soudatherm Roof 170

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

1.2.1. Relevant identified uses

Intended for general public Main use category Use of the substance/mixture : Consumer use,Professional use

: Adhesives, binding agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Soudal N.V. N.V. Everdongenlaan 18-20 2300 Turnhout Belgium T +32 14 42 42 31 - F +32 14 42 65 14 sds@soudal.com - www.Soudal.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120 Bruxelles/Brussels	+32 70 245 245	Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)

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 4	H332
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity – Single exposure, Category 3, Respiratory	H335
tract irritation	
Specific target organ toxicity – Repeated exposure, Category 2	H373
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

Hazard pictograms (CLP)	
	GHS07 GHS08
Signal word (CLP)	: Danger
Contains	: polymethylene polyphenyl isocyanate
Hazard statements (CLP)	: 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.
	H351 - Suspected of causing cancer.
	H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand.
	P102 - Keep out of reach of children.
	P261 - Avoid breathing vapours.
	P271 - Use only outdoors or in a well-ventilated area.
	P280 - Wear protective gloves, protective clothing/eye protection/face protection.
	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor. P405 - Store locked up.
	P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Extra phrases	Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
	Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
	This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

The product does not meet the PBT and vPvB classification criteria Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
polymethylene polyphenyl isocyanate (9016-87-9)	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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures			
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
polymethylene polyphenyl isocyanate	CAS-No.: 9016-87-9	≥ 25 – < 50	Carc. 2, H351 Resp. Sens. 1, H334 Skin Sens. 1, H317 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Comments

Full text of H- and EUH-statements: see section 16

: polymethylene polyphenyl isocyanate, contains > 0.1% MDI isomers

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	: Call a poison center or a doctor if you feel unwell.	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Respiratory problems: consult a doctor/medical service.	
First-aid measures after skin contact	 Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. 	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
First-aid measures after ingestion	: Rinse mouth out with water. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.	
4.2. Most important symptoms and eff	fects, both acute and delayed	
Symptoms/effects after inhalation	 Dry/sore throat. Cough. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. 	
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.	
Symptoms/effects after eye contact	: Eye irritation.	
Symptoms/effects after ingestion	: Irritation of the gastric/intestinal mucosa.	
4.3. Indication of any immediate medical attention and special treatment needed		

Treat symptomatically.

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media Unsuitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.Do not use a solid water stream as it may scatter and spread fire.		
5.2. Special hazards arising from the substance or mixture			
Reactivity in case of fire	: Reacts with water: release of toxic/harmful substances. Hydrogen cyanide. Reacts slowly with water, generate gases (CO2) and overpressure : rupture containers.		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.		
5.3. Advice for firefighters			
Firefighting instructions	: Cool closed containers exposed to fire with water spray. Do not allow water to enter the vessels, a violent reaction may occur. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.		

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Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipment and emergency procedures		
General measures	: No open flames. No smoking.	
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containment and cleaning up		
For containment	: Dam up the liquid spill.	
Methods for cleaning up	: Absorb spilled material with sand or earth. Scoop absorbed substance into closing containers.	
Other information	: Dispose of materials or solid residues at an authorized site.	

6.4. Reference to other sections For further information refer to section 13.

SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling Hygiene measures	 Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Keep away from naked flames/heat. Keep only in original container. Wash contaminated clothing before reuse. Contaminated work clothing should not be clowed out of the work place. Do not are did on area when weight the mediate the protection. 		
	allowed out of the workplace. 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 Incompatible products Incompatible materials	 Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Moisture. Reacts with water. Oxidizing agent. Strong acids. Strong bases. Heat sources. 		

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

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8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Measure concentrations regularly, and at the time of any change occuring in conditions likely to have consequences on workers exposure.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Chemical goggles or face shield. EN 166

8.2.2.2. Skin protection

Skin and body protection: Protective clothing (EN 14605 or EN 13034)

Hand protection:

Protective gloves against chemicals (EN 374)

8.2.2.3. Respiratory protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	· Liquid
Filysical state	: Liquid
Colour	: brown.
Appearance	: Liquid.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available

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Flash point	: > 195 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 1,083 kg/l (20°C)
Relative density	: 1,083 (20°C)
Relative vapour density at 20 °C	: >1
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content

: < 1 % (< 10.83 g/l)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Moisture sensitive.

10.3. Possibility of hazardous reactions

Reacts with water, generates gases or heat and overpressure : rupture containers. Reacts with (some) acids/bases. Reacts with (some) acids. alcohol. Amines.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

water. Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

On burning: release of (highly) toxic gases/vapours.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (dermal)	Not classified Not classified Harmful if inhaled.	
Soudatherm Roof 170		
ATE CLP (dust,mist)	3,296 mg/l/4h	
polymethylene polyphenyl isocyanate (9016-87-9)		
LD50 oral rat > 10000 mg/kg (Rat, Literature study, Oral)		
LD50 dermal rabbit > 5000 mg/kg (Rabbit, Literature study, Dermal)		

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polymethylene polyphenyl isocyanate (9016-87-9)		
LC50 Inhalation - Rat	10 – 20 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	: Suspected of causing cancer.	
Reproductive toxicity	: Not classified	
STOT-single exposure	: May cause respiratory irritation.	
polymethylene polyphenyl isocyanate (9016-87-9)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.	
polymethylene polyphenyl isocyanate (9016	-87-9)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure (if inhaled).	
Aspiration hazard	Not classified	
11.2. Information on other hazards		

No additional information available

SECTION 12: Ecological information		
12.1. Toxicity		
Hazardous to the aquatic environment, short-term : (acute)	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Not classified Not classified	
polymethylene polyphenyl isocyanate (9016-8	37-9)	
LC50 - Other aquatic organisms [1]	> 1000 mg/l (96 h, Literature study)	
12.2. Persistence and degradability		
polymethylene polyphenyl isocyanate (9016-6	37-9)	
Persistence and degradability not readily degradable in water.		
12.3. Bioaccumulative potential		
polymethylene polyphenyl isocyanate (9016-8	37-9)	
BCF - Fish [1]	1 (Pisces, Literature study)	
Partition coefficient n-octanol/water (Log Pow)	10,46 (Calculated, KOWWIN)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
12.4. Mobility in soil		
polymethylene polyphenyl isocyanate (9016-6	37-9)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	9,078 – 10,597 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	

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polymethylene polyphenyl isocyanate (9016-87-9)		
Ecology - soil Adsorbs into the soil.		
12.5. Results of PBT and vPvB assessment		
Soudatherm Roof 170		
The product does not meet the PBT and vPvB classification criteria		
12.6. Endocrine disrupting properties		
No additional information available		

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considera	tions
13.1. Waste treatment methods	
Regional legislation (waste)	 Collect all waste in suitable and labelled containers and dispose according to local legislation.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Do not discharge into drains or the environment.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances
	15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

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

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID n	umber	· · · · · ·		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping	g name	·,	·	
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard c	lass(es)	·,		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group		·,	·	
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental haz	ards	· /		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information	n available	11		

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea Not regulated

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Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Reference code Applicable on Entry title or description	
3(b)	Soudatherm Roof 170 ; polymethylene polyphenyl isocyanate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
56.	polymethylene polyphenyl isocyanate	Methylenediphenyl diisocyanate (MDI)
56(a)	polymethylene polyphenyl isocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 4,4'-Methylenediphenyl diisocyanate
56(b)	polymethylene polyphenyl isocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 2,4'-Methylenediphenyl diisocyanate
56(c)	polymethylene polyphenyl isocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 2,2'-Methylenediphenyl diisocyanate
74.	polymethylene polyphenyl isocyanate	Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

VOC Directive (2004/42)

VOC content

: < 1 % (< 10.83 g/l)

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Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878		

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	

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Abbreviations and acronyms:		
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4	
Carc. 2	Carcinogenicity, Category 2	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
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.	
H351	Suspected of causing cancer.	
H373	May cause damage to organs through prolonged or repeated exposure.	
Resp. Sens. 1	Respiratory sensitisation, Category 1	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	

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

Acute Tox. 4 (Inhalation:dust,mist)	H332	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

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Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Carc. 2 H351 Calculation method		
STOT SE 3	H335	Calculation method
STOT RE 2	H373	Calculation method

Safety Data Sheet (SDS), EU-20221

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.