

Safety Data Sheet

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

Trade name VELOSIT IR 605 (B-Comp.)
Version 3 (EN)
Revision date 01.09.2020
Print date 13.10.2020

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

1.1 Product identifier

VELOSIT IR 605 (B-Comp.)
UFI: 9C4C-CSNC-FFC1-30SC

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

Relevant identified uses

The product is intended for professional users. Building products.

Uses advised against

No identified use.

1.3 Details of the supplier of the safety data sheet

Supplier / Importer

VELOSIT GmbH & Co. KG
Industriepark 7

D-32805 Horn-Bad Meinberg
Tel.: +49-5233-95 17 300
Fax: +49-5233-95 17 301
E-Mail: info@velosit.de

Emergency telephone number

1.4 +49-5233-95 17 300 (during business hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Acute toxicity	Category 4	H332
Skin corrosion/irritation	Category 2	H315
Serious eye damage/eye irritation	Category 2	H319
Respiratory sensitization	Category 1	H334
Skin sensitization	Category 1	H317
Carcinogenicity	Category 2	H351
Specific target organ toxicity - single exposure	Category 3	H335
Specific target organ toxicity - repeated exposure	Category 2	H373
Full text of H- and EUH-phrases: see sec. 16.		

2.2 Labelling elements

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

Hazard components for labelling

Diphenylmethane 4,4'-diisocyanate

Signal word: Danger

Hazard pictograms

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Hazard statements

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.

Full text of H- and EUH-phrases: see sec. 16.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P284	Wear respiratory 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/doctor.

Supplemental hazard information

Persons who suffer from hypersensitivity of the respiratory tract (i.e. asthmatic and chronic bronchitis sufferers) should avoid handling this product. Symptoms affecting the respiratory tract can also occur several hours after overexposure. Dust, vapours and aerosols are the primary risk to the respiratory act. The product is not classified as hazardous if it has been mixed with component B (mixing ratio 1A:1B) and completely reacted/cured.

Special labelling of certain mixtures

EUH204	Contains isocyanates. May produce an allergic reaction.
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2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

CAS No.	EC No.	Substance name	Concentration
101-68-8	202-966-0	Diphenylmethane 4,4'-diisocyanate Acute Tox. 4, H332; Eye Irrit. 2, H319; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; Carc. 2, H351; STOT SE 3, H335; STOT RE 2, H373	25 - 50%

Full text of H- and EUH-phrases: see sec. 16.

SECTION 4: First aid measures

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4.1 Description of first aid measures

General information

Soiled, soaked clothing and shoes must be immediately removed, decontaminated and disposed of.

Following inhalation

Provide fresh air. In case of breathing difficulties or respiratory arrest initiate artificial respiration. Medical treatment necessary.

Following skin contact

Wash immediately with plenty of soap and water. Medical treatment necessary.

Following eye contact

Rinse opened eyelids with water for a sufficiently long time and consult an ophthalmologist immediately.

Following ingestion

Rinse mouth immediately and drink plenty of water. Induce vomiting if the person concerned is conscious. Medical treatment necessary.

Self-protection of the first aider

Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

The product irritates the respiratory tract and may trigger sensitisation of the skin and respiratory tract. Treatment of acute irritation or bronchial constriction is primarily symptomatic. Extended medical treatment may be required depending on the degree of exposure and the severity of symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatical treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), foam or powder extinguisher. In case of large fires use continuous water spray.

Unsuitable extinguishing media

High volume water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen, isocyanate vapours and traces of hydrogen cyanide. In the event of fire and / or explosion, do not breathe fumes. Fire in vicinity poses risk of pressure build-up and rupture. Containers at risk from fire should be cooled with water and, if possible, removed from the danger area.

5.3 Advice for fire-fighters

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In case of fire fighting respiratory protection with independent air supply and tightly fitting chemical protection suit required.

Additional information

Do not allow contaminated extinguishing water to enter the soil, ground water or surface waters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For emergency responders

Ensure adequate ventilation. Do not inhale gas/smoke/vapour/spray. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

6.2 Environmental precautions

Do not allow to escape into waterways, wastewater or soil.

6.3 Methods and material for containment and cleaning up

Where possible react with component A (mixing ratio 1A:1B) and allow to fully cure. The product can then be disposed as a household waste. If not possible to react with component A, take up with absorbent for chemicals or, if necessary with dry sand and store in closed containers.

6.4 Reference to other sections

For advice on safe handling: see sec. 7.

For advice on protective measures: see sec. 8.

For advice on disposal: see sec. 13.

SECTION 7: Handling and storage

7.1 Protective measures for safe handling

Advice on safe handling

In open handling, devices with local exhaust ventilation must be used. Do not inhale gas/smoke/vapour/aerosol.

Fire preventions

Usual measures for fire prevention.

7.2 Conditions for safe storage, including any incompatibilities

Hints on storage assembly

Keep away from foodstuffs, drinks and tobacco.

Storage temperature for personal safety

max. 50 °C

Further information on storage conditions

Keep container tightly closed. Keep under lock and key. Store in a place accessible only to authorised persons. Ensure adequate ventilation and spot extraction at critical points.

7.3 Specific end uses

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No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Occupational health examinations must be offered.

CAS No.	Substance	Value	Peak limit	Type
101-68-8	Diphenylmethane 4,4'-diisocyanate	0,05 mg/m ³ E	1; =2=(I)	AGW (DE)
A: alveolar fraction, E: respirable fraction				

8.2 Exposure controls

Appropriate engineering controls

In open handling, devices with local exhaust ventilation must be used. Do not inhale gas/smoke/vapour/aerosol.

Personal protective equipment

General protection and hygiene measures

Immediately remove all soiled, soaked clothing. Draw up and observe skin protection plan! Wash hands and face thoroughly before breaks and at the end of work. Do not eat, drink, smoke or snort at the workplace.

Eye / Face protection

Basket glasses according to EN 166.

Skin protection

Use protective clothing resistant to chemicals.

Hand protection

Conditionally suitable materials for protective gloves (EN 374-3): Nitrile rubber (NBR) ≥ 0.35 mm - breakthrough time ≥ 480 minutes, Polychloroprene (CR) ≥ 0.5 mm - breakthrough time ≥ 480 minutes, Butyl rubber (IIR) ≥ 0.5 mm - breakthrough time ≥ 480 minutes, Fluorinated rubber (FKM) ≥ 0.4 mm - breakthrough time ≥ 480 minutes. Dispose of immediately after contamination.

Respiratory protection

Required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of charcoal filter and particulate filter is recommended.

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	brown
Odour:	characteristic
Melting point/freezing point:	-24 °C

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Initial boiling point/boiling range:	> 300 °C
Flash point:	> 250 °C
Vapour pressure:	0,00001 hPa at 20 °C
Relative density:	1.24 g/cm ³ at 20 °C
Solubility(ies):	immiscible at 15 °C
Auto-ignition temperature:	> 500 °C
Viscosity, dynamic:	456 mPa.s at 25 °C

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions occur when handled and stored as intended.

10.2 Chemical stability

From approx. 200 °C polymerisation, CO₂ separation.

10.3 Possibility of hazardous reactions

Exothermic reaction with amines and alcohols; reacts with water forming CO₂; in closed containers, risk of bursting owing to increase of pressure.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No hazardous decomposition products when stored and handled correctly.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Details on Diphenylmethane 4,4'-diisocyanate

Acute toxicity, oral

Dose:	LD50 > 9.200 mg/kg
Species:	Rat
Method:	GESTIS

Acute toxicity, inhalative

Dose:	ATE 11 mg/l (Dampf), 1,5 mg/l (Aerosol)
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Skin corrosion/irritation

Result:	Causes skin irritation.
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Eye damage/irritation

Result: Causes serious eye irritation.

Sensitisation to the respiratory tract/skin

Sensitisation to the respiratory tract

Result: Contains isocyanates. May cause allergy, asthma-like symptoms or breathing difficulties if inhaled.

Skin sensitisation

Result: Contains isocyanates. May cause allergic skin reactions.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity

Result: Based on the available data, the classification criteria are not met.

Carcinogenicity

Result: Probably causes cancer.

Reproductive toxicity

Result: Based on the available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Result: May irritate the respiratory tract.

Specific target organ toxicity (repeated exposure)

Result: May damage the organs with prolonged or repeated exposure.

Aspiration hazard

Result: Based on the available data, the classification criteria are not met.

Special hazards arising from the substance or mixture

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

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Details on Diphenylmethane 4,4'-diisocyanate

The product is not ecotoxic.

12.2 Persistence and degradability

Details on Diphenylmethane 4,4'-diisocyanate

No data available.

12.3 Bioaccumulative potential

Details on Diphenylmethane 4,4'-diisocyanate

No data available.

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12.4 Mobility in soil

Details on Diphenylmethane 4,4'-diisocyanate

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

Additional ecotoxicological information

Do not allow to escape into waterways, wastewater or soil, unless fully reacted with Component A. The product reacts with water at the interface forming CO₂ and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants or by water-soluble solvents. Previous experience shows that polyurea is inert and non-degradable.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose in accordance with applicable international, national and local laws, ordinances and statutes. When mixed with Component A and fully reacted/cured can be disposed of in landfill. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used. After final product withdrawal, all residues must be removed from containers (drip-free, powder-free or paste-free). Once the product residues adhering to the walls of the containers have been rendered harmless, the product and labels must be invalidated. These containers can be returned for recycling to the appropriate centres set up within the framework of the existing takeback scheme of the chemical industry. Containers must be recycled in compliance with national legislation and environmental regulations. None disposal into wastewater.

SECTION 14: Transport information

14.1 Landtransport (ADR/RID)

No dangerous good in sense of these transport regulations.

14.2 Inland waterway transport (ADN)

No dangerous good in sense of these transport regulations.

14.3 Sea transport (IMDG)

No dangerous good in sense of these transport regulations.

14.4 Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

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

EU regulations

Authorisations and/or restrictions on use

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Entry 56: 4,4'-methylenediphenyl diisocyanate; diphenylmethane 4,4'-diisocyanate

Other EU regulations

Directive 2012/18/EU on the control of major accident hazards involving dangerous substances [Seveso III Directive]

Not subject to the SEVESO III Directive.

National regulations

Notes on employment restrictions

Observe employment restrictions for young people (§ 22 JArbSchG). Observe employment restrictions for expectant and nursing mothers.

Skin absorption/sensitization

Triggers hypersensitivity reactions of an allergic nature.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

16.5 Text of the hazard statements and/or safety instructions referred to in sec.s 2 to 15

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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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.
EUH204	Contains isocyanates. May produce an allergic reaction.

16.7 Further information

To the best of our knowledge, the information in this safety data sheet is correct at the time of printing. The information is intended to provide guidelines for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal. The information is not transferable to other products. Insofar as the product is mixed, blended or processed with other materials, the information in this safety data sheet cannot be transferred to the new material manufactured in this way, unless expressly stated otherwise. The information is based on our current state of knowledge, but does not constitute a guarantee of product properties and does not establish a contractual legal relationship. Existing laws and regulations must be observed by the recipient of our products on his own responsibility.