

Material Safety Data Sheet



Completed 06-12-2022
Revision: (date) -
SDS version 1.0

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

1.1. Product Identifier

Trade Name: DMS PU Hardener D20
Product- no.: 691-
UFI: UPJA-SVPT-D204-HMT1

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

Recommended uses:

Chemical.

Uses advised against:

This product must not be used for purposes other than those recommended without first seeking the advice of the supplier.

1.3. Details of the supplier of the safety data sheet

DMS A/S
Grundet Bakke 48 7100 Vejle
Denmark
dms@dms-as.com
+45 70234343

Contact person and e-mail:

Søren Markussen
Mobil nr. +45 42364636
email sm@dms-as.com

The Safety data sheet is completed and validated by:

Mediator A/S, Centervej 2, DK-6000 Kolding. Consultant: KN

1.4. Emergency telephone number

NHS: 111

Use your national or local emergency number - See section 4 "First aid measures".

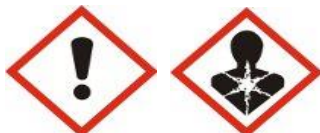
SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP (1272/2008):
Skin Irrit. 2;H315
Skin Sens. 1;H317
Eye Irrit. 2;H319
Acute Tox. 4;H332
Resp. Sens. 1;H334
STOT SE 3;H335
Carc. 2;H351
STOT RE 2;H373

See full text of H-phrases in section 16.

2.2. Label elements



Signal word:

Danger

Causes skin irritation. (H315)
May cause an allergic skin reaction. (H317)
Causes serious eye irritation. (H319)
Harmful if inhaled. (H332)
May cause allergy or asthma symptoms or breathing difficulties if inhaled (H334)
May cause respiratory irritation. (H335)
Suspected of causing cancer. (H351)
May cause damage to organs through prolonged or repeated exposure. (H373)
Contains isocyanates. May produce an allergic reaction. (EUH 204)

Obtain special instructions before use. (P201)

Avoid breathing vapours/spray. (P261)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. (P303 + P361 + P353)

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. (P304 + P340 + P342 + P311)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338)

Store locked up. (P405)

2.3. Other hazards

-

Additional labelling:

As from 24 August 2023 adequate training is required before industrial or professional use.

Additional warnings

-

SECTION 3: Composition/information on ingredients

3.1.3.2. Substances/Mixtures

Substance	EU-Index no. / REACH-Reg. no.	CAS-no.	EINECS-no.	CLP-classification	Wt/Wt %	Note
Diphenylmethane diisocyanate polymer	- / -	9016-87-9	618-498-9	Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Irrit. 2;H319, Acute Tox. 4;H332, Resp. Sens. 1;H334, STOT SE 3;H335, Carc. 2;H351, STOT RE 2;H373	>90	1

1) The substance is an isocyanate.

See full text of H-phrases in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Seek fresh air.

Keep victim under observation.

Seek medical advice in case of breathing difficulties.

Ingestion:

Wash out mouth thoroughly and drink 1-2 glasses of water in small sips.

Do not induce vomiting.

Seek medical advice immediately.

Skin contact:

Immediately remove contaminated clothing.

Wash skin with soap and water.

Seek medical advice immediately.

Eye contact:

Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice immediately. Continue flushing until medical attention is obtained.

Additional information:

When obtaining medical advice, show the safety data sheet or label.

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

Tissue damaging effects: This product contains substances which are corrosive. If vapour or aerosols are inhaled, it can result in damage to lungs, irritation and burns in the respiratory organs as well as coughing. Corrosive substances cause irreversible damage to eyes and acid burns to skin.

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

Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguish with powder, foam, carbon dioxide or water mist.

Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

Avoid inhalation of vapour and fumes – seek fresh air.
Udsættes man for nedbrydningsprodukter, kan det give helbredsskader.
Fire will produce dense black smoke.
Exposure to decomposition products may cause a health hazard.

5.3. Advice for firefighters

If there is a risk of exposure to vapour and flue gases, a self-contained breathing apparatus must be worn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8 for type of protective equipment.
Avoid breathing and contact with skin and eyes.

6.2. Environmental precautions

Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.
Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers.

6.4. Reference to other sections

See section 8 for type of protective equipment.
See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See section 8 for information about precautions for use and personal protective equipment.
Use the product under well-ventilated conditions.
Running water and eye wash equipment must be available.
Individuals suffering from asthma or eczema and individuals with known, chronic lung disease or excessively sweaty palms (hyperhidrosis manuum) should not work with the product.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc.
Keep in tightly closed original packaging.
Store in a dry, cool, well-ventilated area.

7.3. Specific end use(s)

See application section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits according to EH40/2005 Workplace exposure limits (Fourth Edition 2020):

Substance	Long-term exposure limit ppm / mg/m ³	Short-term exposure limit ppm / mg/m ³	Note
-----------	--	---	------

Diphenylmethan diisocyanat polymer

DNEL/PNEC-values:

No data.

8.2. Exposure controls

There are no exposure scenarios for this product.

Appropriate engineering controls:

Wear the personal protective equipment specified below.
Wash hands before breaks, before using restroom facilities, and at the end of work.
Do not eat, drink or smoke when using this product.

Personal protective equipment:



Respiratory protection:

In case of insufficient ventilation, wear respiratory protective equipment with filter A2/P2.

Hand protection:

Wear protective gloves made of nitrile rubber.
Change gloves immediately if contaminated, and wash hands with soap and water.

Eye/face protection:

Wear safety goggles/face protection.

Skin protection:

Special work clothing should be used.

Environmental exposure controls:

Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Brown
Odour:	Almost odor free
Melting point/ Freezing Point (°C):	-24
Boiling point or initial boiling point and boiling range (°C):	> 300
Flammability:	-
Lower and upper explosion limit (vol-%):	-
Flash point (°C):	-
Auto-ignition temperature (°C):	-
Decomposition temperature (°C):	-
pH:	-
Kinematic viscosity (mm ² /s):	-
Solubility:	Soluble in water
Partition coefficient n-octanol/water (log value)	-
Vapour pressure:	-
Density and/or relative density:	1,24 g/cm ³ ved 20 °C.
Relative vapour density:	-
Particle characteristics:	-

9.2. Other information

None.	
Viscosity:	100-200 mPa.s ved 25 °C (Dynamisk)

SECTION 10: Stability and reactivity

10.1. Reactivity

No data.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid contact with moisture and water.

10.5. Incompatible materials

Undgå kontakt med stærke baser.

10.6. Hazardous decomposition products

Product decomposes in fire conditions or when heated to high temperatures, and toxic gases such as CO_x, NO_x and isocyanate may be released.

SECTION 11: Toxicological information

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

Harmful by inhalation.

Substance	exposure	Species	Test	Result
No data.	-	-	-	-

Skin corrosion/irritation:

Irritating to skin – may cause reddening.

Serious eye damage/irritation:

Irritating to eyes. Causes a burning sensation and tearing.

Respiratory or skin sensitisation:

May cause sensitization by inhalation. Symptoms include cold, sneezing, breathing difficulties and hives.

May cause sensitization by skin contact. Symptoms include reddening, swelling, blistering and ulceration – often slowly developing.

Germ cell mutagenicity:

Based on the existing data, the classification is not met.

Carcinogenicity:

Suspected of causing cancer.

Reproductive toxicity:

Based on the existing data, the classification is not met.

STOT-single exposure:

Inhalation may cause irritation to the upper airways.

STOT-repeated exposure:

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard:

Based on the existing data, the classification is not met.

11.2. Information on other hazards

Test data are not available.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Test duration	Species	Test	Result
No data.	-	-	-	-

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
No data.	-	-	-

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow
No data.	-	-

12.4. Mobility in soil

Test data are not available.

12.5. Results of PBT and vPvB assessment

The product does not meet the criteria for PBT or vPvB.

12.6. Endocrine disrupting properties

Test data are not available.

12.7. Other adverse effects

None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

EWC-Code	Description
08 05 01	Waste isocyanates

Specific labelling:

Isocyanate waste. Be careful! Risk of eczema!

Contaminated packaging:

Empty packaging and residues must be disposed of through the municipal waste collection service for hazardous waste.

SECTION 14: Transport information

The product is not covered by the rules for transport of dangerous goods by road and sea according to ADR, IMDG and IATA.

14.1 -14.4.**ADR**

-

IMDG

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Maritime transport in bulk according to IMO instruments

Not relevant.

SECTION 15: Regulatory information

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

EH40/2005 Workplace exposure limits (Fourth Edition 2020).

Additional labelling:

-

Restrictions for application:

Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product. Young people above 15 years are exempted this rule, if the product is a part of an education/training.

Special care should be applied for pregnant and lactating women.

Demands for specific education:

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.

Persons suffering from asthma or eczema, and persons with chronic lung diseases or diagnosed skin- or respiratory allergy against isocyanates must not work with the product. Persons with severely sweaty hands (hyperhidrosis manuum) must not work with the product.

15.2. Chemical safety assessment

None.

SECTION 16: Other information

According to EU regulation 1907/2006 (REACH)

Other information:**Sources:**

EC regulation 1907/2006 (REACH), with amendments.

EC Regulation 1272/2008 (CLP), with amendments.

EU regulation no. 276/2010

Directive 2000/532/EC

ECHA - The European Chemicals Agency

Full text of H-phrases as mentioned in section 2+3:

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.
EUH 204	Contains isocyanates. May produce an allergic reaction.

Classification according to Regulation (EC) Nr. 1272/2008:

Skin Irrit. 2;H315	Calculation method
Skin Sens. 1;H317	Calculation method
Eye Irrit. 2;H319	Calculation method
Acute Tox. 4;H332	Calculation method
Resp. Sens. 1;H334	Calculation method
STOT SE 3;H335	Calculation method
Carc. 2;H351	Calculation method
STOT RE 2;H373	Calculation method

Abbreviations and acronyms used in the safety data sheet:

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals. Regulation (EC) No 1907/2006.

CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.

CAS-Number.: Chemical Abstracts Service number.

EC-Number.: EINECS and ELINCS Number (see also EINECS and ELINCS).

DNEL: Derived No Effect Level.

PNEC(s): Predicted No Effect Concentration(s).

STOT: Specific Target Organ Toxicity.

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).

LC50: Lethal Concentration to 50 % of a test population.

EC50: The effective concentration of substance that causes 50% of the maximum response.

PBT: Persistent, Bioaccumulative and Toxic.

vPvB: Very Persistent and Very Bioaccumulative.

NOEC: The highest tested concentration at which, in a study, no statistically significant effect is observed in the exposed population compared with an appropriate control group.

NOAEL: The highest tested dose or exposure level at which there are no statistically significant increases in the frequency or severity of adverse effects between the exposed population and an appropriate control group; some effects may be produced at this level, but they are not considered adverse or precursors of adverse effects.

Other:

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

Minor changes have been made in following sections:

-

This material safety data sheet replaces version:

-