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57076 Siegen

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

1.1 Product identifier

Doming IC 300

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

1.2.1 Relevant uses

Production of adhesives

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company NEUMANN
VAKUUM- UND DOSIERTECHNIK
Weidenauer Str. 206
57076 Siegen / GERMANY
Phone + 49 271 24 01 19 58
Homepage www.doming-maschine.de
E-mail robneu2000@yahoo.de

Address enquiries to

Technical information robneu2000@yahoo.de
Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Company +4915233952212

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute Tox. 4: H332 Harmful if inhaled.
Skin Sens. 1: H317 May cause an allergic skin reaction.
STOT SE 3: H335 May cause respiratory irritation.

2.2 Label elements

The product is required to be labelled in accordance with GHS/CLP-Directives.

Hazard pictograms



Signal word

WARNING

Contains:

Hexamethylene diisocyanate, oligomers
Hexamethylene-diisocyanate

Hazard statements

H332 Harmful if inhaled.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

Precautionary statements

P261 Avoid breathing vapours / dust.
P312 Call a POISON CENTER / doctor if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.

Special labelling

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

Environmental hazards

Does not contain any PBT or vPvB substances.

Other hazards

Further hazards were not determined with the current level of knowledge.



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SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

Range [%]	Substance
75 - 100	Hexamethylene diisocyanate, oligomers CAS: 28182-81-2, EINECS/ELINCS: Polymer, Reg-No.: 01-2119485796-17-XXXX GHS/CLP: Acute Tox. 4: H332 - Skin Sens. 1: H317 - STOT SE 3: H335 - Aquatic Chronic 3: H412
< 0,25	Hexamethylene-diisocyanate CAS: 822-06-0, EINECS/ELINCS: 212-485-8, EU-INDEX: 615-011-00-1, Reg-No.: 01-2119457571-37-XXXX GHS/CLP: Acute Tox. 4: H302 - Acute Tox. 1: H330 - Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Skin Sens. 1: H317

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated soaked clothing immediately and dispose of safely.
Remove affected person from danger area, lay down.

Inhalation

Get medical advice.
Remove the victim into fresh air and keep him calm.

Skin contact

When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

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.

Ingestion

Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.
Seek medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms of poisoning may not occur for many hours, therefore keep under medical supervision for at least 48 hours.

4.3 Indication of any immediate medical attention and special treatment needed

Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

All extinguishing media are suitable but method must take into account the surrounding area to minimize dispersion.

Extinguishing media that must not be used

Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Carbon dioxide (CO₂)
Carbon monoxide (CO)
Nitrogen oxides (NO_x).
Metal oxides.



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5.3 Advice for firefighters

Use self-contained breathing apparatus.

Collect contaminated firefighting water separately, must not be discharged into the drains.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use breathing apparatus if exposed to vapours/aerosol.

Ensure adequate ventilation.

Use personal protective equipment.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).

Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.

The product is combustible.

Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in unopened original container.

Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Keep under lock and key. Should only be accessible to specialists or people authorized by them.

Keep in a cool place. Store in a dry place.

Keep container in a well-ventilated place.

Storage class (TRGS 510)

Storage class 10 (VCI)

7.3 Specific end use(s)

See product use, SECTION 1.2



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SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (DE)

Substance
Hexamethylene-diisocyanate
CAS: 822-06-0, EINECS/ELINCS: 212-485-8, EU-INDEX: 615-011-00-1, Reg-No.: 01-2119457571-37-XXXX
Exposure limit: 0,005 ppm, 0,035 mg/m ³ , DFG, 12,11, Sa
Factor: 1;=2=(I)
BAT: Parameter Hexamethylendiamin (nach Hydrolyse): 15 µg/g Kreatinin, Test material: Urin, Time of sampling: Expositionsende, bzw. Schichtende

DNEL

Substance
Hexamethylene-diisocyanate, CAS: 822-06-0
Industrial, inhalative, Long-term - local effects: 0,035 mg/m ³ .
Industrial, inhalative, Acute - local effects: 0,07 mg/m ³ .
Industrial, inhalative, Long-term - systemic effects: 0,035 mg/m ³ .

PNEC

Substance
Hexamethylene-diisocyanate, CAS: 822-06-0
soil, 0.0026 mg/kg dw.
sediment (seaater), 0.001334 mg/kg dw.
sediment (freshwater), 0.01334 mg/kg dw.
sewage treatment plants (STP), 8,42 mg/l.
seawater, 0.00774 mg/l.
freshwater, 0.0774 mg/l.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Tightly fitting goggles (EN 166:2001).
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. 0,7 mm; Butyl rubber, >480 min (EN 374-1/-2/-3).
Skin protection	Protective clothing.
Other	Avoid contact with eyes and skin. Do not wear used work clothes outside of the work area. Mark work areas. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.



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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Color	colourless
Odor	almost odourless
Odour threshold	not determined
pH-value	not determined
pH-value [1%]	not determined
Boiling point [°C]	> 200
Flash point [°C]	> 150
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	1 hPa
Density [g/ml]	1,16
Bulk density [kg/m ³]	not applicable
Solubility in water	virtually insoluble
Partition coefficient [n-octanol/water]	not determined
Viscosity	1200 mPas (DIN EN ISO 3219)
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	> 400
Decomposition temperature [°C]	not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with water, with formation of carbon dioxide.

10.4 Conditions to avoid

Contact with moisture.

10.5 Incompatible materials

Polymerized by contact with water, alcohols, amines or alkalis.

10.6 Hazardous decomposition products

No hazardous decomposition products known.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
ATE-mix, inhalative, 11 mg/L (4h).
ATE-mix, dermal, > 2000 mg/kg.
ATE-mix, oral, > 2000 mg/kg.
Substance
Hexamethylene-diisocyanate, CAS: 822-06-0
LD50, dermal, Rat: > 7000 mg/kg bw.
LD50, oral, Rat: 959 mg/kg bw.
LC50, inhalative, Rat: 0,124 mg/l 4h.
NOAEL, inhalative, Rat: < 0,055 mg/l.

Serious eye damage/irritation	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
Skin corrosion/irritation	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
Respiratory or skin sensitisation	May cause an allergic skin reaction. Based on the available information, the classification criteria are fulfilled. Toxicological data of complete product are not available.
Specific target organ toxicity — single exposure	May cause respiratory irritation. Based on the available information, the classification criteria are fulfilled. Toxicological data of complete product are not available.
Specific target organ toxicity — repeated exposure	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
Mutagenicity	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
Reproduction toxicity	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
Carcinogenicity	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
General remarks	

SECTION 12: Ecological information

12.1 Toxicity

Substance
Hexamethylene-diisocyanate, CAS: 822-06-0
EC50, (72h), <i>Desmodesmus subspicatus</i> : > 77,4 mg/l (IUCLID).
LC0, (96h), <i>Brachidanio rerio</i> : > 82,8 mg/l (IUCLID).

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	No information available.

12.3 Bioaccumulative potential

No information available.



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12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.

Waste no. (recommended)

080501*

Contaminated packaging

Contaminated packing should be disposed of as product waste.

Waste no. (recommended)

150110*

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"



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14.3 Transport hazard class(es)

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not applicable



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SECTION 15: Regulatory information

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

EEC-REGULATIONS	1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC; (EU) 2015/830
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2015); IMDG-Code (2015, 37. Amdt.); IATA-DGR (2016).
NATIONAL REGULATIONS (DE):	Gefahrstoffverordnung - GefStoffV 2011; Wasch- und Reinigungsmittelgesetz - WRMG; Wasserhaushaltsgesetz - WHG; TRG 300; TRGS: 200, 615, 900, 905, Bekanntmachung 220 (TRGS220).
- Water hazard class	1 (self-classification)
- Decree for case of interference, observe limits	no
- Class. according to TA-Luft	5.2.5.
- Storage class (TRGS 510)	Storage class 10 (VCI)
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (1999/13/CE)	0 %
- Other regulations	TRGS 510: Storage of hazardous substances in non-stationary containers TRGS 430: Isocyanate - Exposure and supervision.

15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H319 Causes serious eye irritation.
 H315 Causes skin irritation.
 H330 Fatal if inhaled.
 H302 Harmful if swallowed.
 H412 Harmful to aquatic life with long lasting effects.
 H335 May cause respiratory irritation.
 H317 May cause an allergic skin reaction.
 H332 Harmful if inhaled.



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16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging
 DMEL = Derived Minimum Effect Level
 DNEL = Derived No Effect Level
 EC50 = Median effective concentration
 ECB = European Chemicals Bureau
 EEC = European Economic Community
 EINECS = European Inventory of Existing Commercial Chemical Substances
 ELINCS = European List of Notified Chemical Substances
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IC50 = Inhibition concentration, 50%
 IMDG = International Maritime Code for Dangerous Goods
 IUCLID = International Uniform Chemical Information Database
 LC50 = Lethal concentration, 50%
 LD50 = Median lethal dose
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships
 PBT = Persistent, Bioaccumulative and Toxic substance
 PNEC = Predicted No-Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 TLV®/TWA = Threshold limit value – time-weighted average
 TLV®/STEL = Threshold limit value – short-time exposure limit
 VOC = Volatile Organic Compounds
 vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Acute Tox. 4: H332 Harmful if inhaled. (Calculation method)
 Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
 STOT SE 3: H335 May cause respiratory irritation. (Calculation method)

Modified position

none

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