

Page 1 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

> Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Nail Sealing fluid NDM 1 kg Art.: 9076413

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

Seam sealant Sector of use [SU]: SU 0 - Other SU 1 - Agriculture, forestry, fishery SU19 - Building and construction work SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Chemical product category [PC]: PC 1 - Adhesives, sealants Process category [PROC]: PROC19 - Hand-mixing with intimate contact and only PPE available **Uses advised against:** No information available at present.

1.3 Details of the supplier of the safety data sheet (B)

BTI Befestigungstechnik GmbH & Co. KG, Salzstr. 51, 74653 Ingelfingen, Germany Phone: +49 7940 141 256, Fax: +49 7940 141 9256 Stefan.Haug@bti.de, www.bti.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number Emergency information services / official advisory body:

Telephone number of the company in case of emergencies: +49(0)700/24112(BRC)

SECTION 2: Hazards identification

2.1 Classification of	the substance or mixture				
Classification according to Regulation (EC) 1272/2008 (CLP)					
Hazard class	Hazard category	Hazard statement			
Acute Tox.	4	H332-Harmful if inhaled.			
Eye Irrit.	2	H319-Causes serious eye irritation.			
STOT SE	3	H335-May cause respiratory irritation.			



Page 2 of 28
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003
Replacing version dated / version: 03.07.2015 / 0002
Valid from: 14.10.2015
PDF print date: 19.10.2015
Nail Sealing fluid NDM 1 kg
Art.: 9076413

Skin Irrit.	2	H315-Causes skin irritation.
Resp. Sens.	1	H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens.	1	H317-May cause an allergic skin reaction.
STOT RE	2	H373-May cause damage to organs through prolonged or repeated exposure.
Carc.	2	H351-Suspected of causing cancer.

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



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

P201-Obtain special instructions before use. P260-Do not breathe vapours or spray. P280-Wear protective gloves/protective clothing and eye protection/face protection. P284-Wear respiratory protection. P302+P352-IF ON SKIN: Wash with plenty of water and soap. P304+P340-IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313-IF exposed or concerned: Get medical advice/attention.

EUH204-Contains isocyanates. May produce an allergic reaction.

4,4'-methylenediphenyl diisocyanate2,2'-methylenediphenyl diisocyanateo-(p-isocyanatobenzyl)phenylisocyanateDiphenylmethanediisocyanate, isomeres and homologues

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

REGULATION (EC) No 648/2004

n.a.



Page 3 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

SECTION 3: Composition/information on ingredients

3.1 Substance	
n.a.	
3.2 Mixture	
4,4'-methylenediphenyl diisocyanate	
Registration number (REACH)	01-2119457014-47-XXXX
Index	615-005-00-9
EINECS, ELINCS, NLP	202-966-0
CAS	101-68-8
content %	25-<50
Classification according to Regulation (EC) 1272/2008	Carc. 2, H351
(CLP)	Acute Tox. 4, H332
	STOT RE 2, H373
	Eye Irrit. 2, H319
	STOT SE 3, H335
	Skin Irrit. 2, H315
	Resp. Sens. 1, H334
	Skin Sens. 1, H317

o-(p-isocyanatobenzyl)phenylisocyanate	
Registration number (REACH)	01-2119480143-45-XXXX
Index	615-005-00-9
EINECS, ELINCS, NLP	227-534-9
CAS	5873-54-1
content %	10-30
Classification according to Regulation (EC) 1272/2008	Carc. 2, H351
(CLP)	Acute Tox. 4, H332
	STOT RE 2, H373
	Eye Irrit. 2, H319
	STOT SE 3, H335
	Skin Irrit. 2, H315
	Resp. Sens. 1, H334
	Skin Sens. 1, H317

Poly propylene glycol	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	500-039-8 (NLP)
CAS	25322-69-4
content %	10-<25
Classification according to Regulation (EC) 1272/2008	Acute Tox. 4, H302
(CLP)	

Diphenylmethanediisocyanate, isomeres and homologues	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	-
CAS	9016-87-9
content %	10-20



Page 4 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

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

2,2'-methylenediphenyl diisocyanate	
Registration number (REACH)	01-2119927323-43-XXXX
Index	615-005-00-9
EINECS, ELINCS, NLP	219-799-4
CAS	2536-05-2
content %	1-5
Classification according to Regulation (EC) 1272/2008	Carc. 2, H351
(CLP)	Acute Tox. 4, H332
	STOT RE 2, H373
	Eye Irrit. 2, H319
	STOT SE 3, H335
	Skin Irrit. 2, H315
	Resp. Sens. 1, H334
	Skin Sens. 1, H317

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

If the person is unconscious, place in a stable side position and consult a doctor.

Respiratory arrest - Artificial respiration apparatus necessary.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Dab away with polyethylene glycol 400

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available. **Ingestion**

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

Never pour anything into the mouth of an unconscious person!

4.2 Most important symptoms and effects, both acute and delayed



Page 5 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. The following may occur: Dermatitis (skin inflammation) Drying of the skin. Allergic contact eczema Discoloration of the skin Irritant to mucosa of the nose and throat Coughing Headaches Effect on the central nervous system Asthmatic symptoms In case of sensitivity, concentrations below the limit value may already result in asthmatic symptoms. Respiratory distress Other dangerous properties cannot be ruled out. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. 4.3 Indication of any immediate medical attention and special treatment needed Symptomatic treatment. Delayed effects from exposure can be expected. In case of urge to cough - antitussive agents In case of irritation of the lungs, perform first-aid with controlled-dosage aerosol dexamethasone.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media CO₂ Extinction powder Water jet spray Large fire: Water jet spray / alcohol resistant foam Unsuitable extinguishing media High volume water jet 5.2 Special hazards arising from the substance or mixture In case of fire the following can develop: Oxides of carbon Oxides of nitrogen Isocyanates Hydrocyanic acid (hydrogen cyanide) Toxic pyrolysis products. Danger of bursting (explosion) when heated **5.3 Advice for firefighters** In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. According to size of fire Full protection, if necessary. Cool container at risk with water. Dispose of contaminated extinction water according to official regulations.



Page 6 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air. Avoid inhalation, and contact with eyes or skin. If applicable, caution - risk of slipping. **6.2 Environmental precautions** If leakage occurs, dam up. Resolve leaks if this possible without risk. Prevent surface and ground-water infiltration, as well as ground penetration. Prevent from entering drainage system. If accidental entry into drainage system occurs, inform responsible authorities. 6.3 Methods and material for containment and cleaning up Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13. Keep moist. Do not close packing drum. Allow to stand for a few days in an unclosed container until reaction no longer occurs. CO2 formation in closed tanks causes pressure to rise. 6.4 Reference to other sections For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1. 7.1 Precautions for safe handling 7.1.1 General recommendations Avoid inhalation of the vapours. Ensure good ventilation. If applicable, suction measures at the workstation or on the processing machine necessary. Avoid contact with eyes or skin. No contact with products of this type in case of allergies, asthma und chronic respiratory tract disorders. Eating, drinking, smoking, as well as food-storage, is prohibited in work-room. Observe directions on label and instructions for use. Use working methods according to operating instructions. 7.1.2 Notes on general hygiene measures at the workplace General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and at end of work. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothing and protective equipment before entering areas in which food is consumed. 7.2 Conditions for safe storage, including any incompatibilities Keep out of access to unauthorised individuals. Not to be stored in gangways or stair wells. Store product closed and only in original packing. Do not store with oxidizing agents. Store in a well ventilated place. Store in a dry place. Store at room temperature. Keep protected from direct sunlight and temperatures over 50°C. 7.3 Specific end use(s) Adhesive sealant



Page 7 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name 4,4'-methylenedip	phenyl diisocyanate			Content %:25-<50		
	VEL-STEL: 0,07 mg/n	n3 (Isocyanates,				
	ll (as -NCO))					
	16702 (Workplace air o					
	yanate groups in air usi		ylpipe	azine and		
	id chromatography) - 20					
	HS 25/3 (Organic isocy					
	pling either onto 2-(1- r e filters followed by solv					
	lysis using high perform					
	project BC/CEN/ENTR					
BMGV: 1 µmol urinary diamine/mol creatinin		Other information:				
(Isocyanate, post task)		all (as -NCO))	ben (isoe yunates,		
(B)				Contont		
Chemical Name o-(p-isocyanatobe	enzyl)phenylisocyanate			Content %:10-30		
WEL-TWA: 0,02 mg/m3 (Isocyanates, W	VEL-STEL: 0,07 mg/n	n3 (Isocvanates		70.10-30		
	ll (as -NCO))	15 (1500 yanates,				
Monitoring procedures:	ii (us 1(00))					
BMGV: 1 µmol urinary diamine/mol creatinin	ne in urine	Other information:	Sen (Isocyanates,		
(Isocyanate, post task)		all (as -NCO))		•		
Chemical Name Diphenylmethane	ediisocyanate, isomeres	and homologues		Content		
	•			%:10-20		
	VEL-STEL: 0,07 mg/n	n3 (Isocyanates,				
	ll (as -NCO))					
Monitoring procedures:	• •		<u> </u>	r ,		
BMGV: 1 μ mol urinary diamine/mol creatinin	ie in urine	Other information:	Sen (Isocyanates,		
(Isocyanate, post task)		all (as -NCO))				
Chemical Name 2,2'-methylenedip	phenyl diisocyanate			Content %:1- 5		
WEL-TWA: 0,02 mg/m3 (Isocyanates, W	VEL-STEL: 0,07 mg/n	n3 (Isocyanates,				
Monitoring procedures:						
BMGV: 1 µmol urinary diamine/mol creatinin	ne in urine	Other information:	Sen (Isocyanates,		
(Isocyanate, post task)		all (as -NCO))				

^(B) WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). |WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). |BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.



Page 8 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

4,4'-methylenediphen	yl diisocyanate					
Area of application	Exposure route / Environmental compartment	Effect on health	Descript or	Value	Unit	Note
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	50	mg/kg bw/d	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	0,1	mg/m3	
Workers / employees	Human - dermal	Short term, local effects	DNEL	28,7	mg/cm2	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	0,1	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,05	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	0,05	mg/m3	
Consumer	Human - dermal	Short term, systemic effects	DNEL	25	mg/kg bw/d	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	0,05	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	20	mg/kg bw/d	
Consumer	Human - dermal	Short term, local effects	DNEL	17,2	mg/cm2	
Consumer	Human - inhalation	Short term, local effects	DNEL	0,05	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,025	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	0,025	mg/m3	
	Environment - freshwater		PNEC	1	mg/l	
	Environment - marine		PNEC	0,1	mg/l	
	Environment - soil		PNEC	1	mg/kg dw	
	Environment - sewage treatment plant		PNEC	1	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	10	mg/l	

o-(p-isocyanatobenzyl)phenylisocyanate						
Area of application	Exposure route /	Effect on health	Descript	Value	Unit	Note
	Environmental		or			
	compartment					
Workers / employees	Human - dermal	Short term,	DNEL	50	mg/kg	
		systemic effects			bw/day	
Workers / employees	Human - inhalation	Short term,	DNEL	0,1	mg/m3	
		systemic effects				



Page 9 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Workers / employees	Human - dermal	Short term, local effects	DNEL	28,7	mg/cm2
Workers / employees	Human - inhalation	Short term, local effects	DNEL	0,1	mg/m3
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0	mg/kg
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,05	mg/m3
Workers / employees	Human - dermal	Long term, local effects	DNEL	0	mg/kg
Workers / employees	Human - inhalation	Long term, local effects	DNEL	0,05	mg/m3
	Environment - freshwater		PNEC	1	mg/l
	Environment - marine		PNEC	0,1	mg/l
	Environment - soil		PNEC	1	mg/kg dry weight
	Environment - sewage treatment plant		PNEC	1	mg/l
Consumer	Human - dermal	Short term, systemic effects	DNEL	25	mg/kg body weight/d ay
Consumer	Human - inhalation	Short term, systemic effects	DNEL	0,05	mg/m3
Consumer	Human - oral	Short term, systemic effects	DNEL	20	mg/kg body weight/d ay
Consumer	Human - dermal	Short term, local effects	DNEL	17,2	mg/cm2
Consumer	Human - dermal	Short term, local effects	DNEL	0,05	mg/m3
Consumer	Human - dermal	Long term, systemic effects	DNEL	0	mg/kg
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,025	mg/m3
Consumer	Human - oral	Long term, systemic effects	DNEL	0	mg/kg
	Human - dermal	Long term, local effects	DNEL	0	mg/kg
Consumer	Human - inhalation	Long term, local effects	DNEL	0,025	mg/m3

2,2'-methylenediphenyl diisocyanate							
Area of application	Exposure route /	Effect on health	Descript	Value	Unit	Note	
	Environmental		or				
	compartment						



Page 10 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Workers / employees	Human - dermal	Short term,	DNEL	50	mg/kg
XX7 1 / 1	Human - inhalation	systemic effects Short term,	DNEL	0,1	bw/day
Workers / employees		systemic effects		,	mg/m3
Workers / employees	Human - dermal	Short term, local effects	DNEL	28,7	mg/cm2
Workers / employees	Human - inhalation	Short term, local effects	DNEL	0,1	mg/m3
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0	mg/kg
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,05	mg/m3
Workers / employees	Human - dermal	Long term, local effects	DNEL	0	mg/kg
Workers / employees	Human - inhalation	Long term, local effects	DNEL	0,05	mg/m3
	Environment - freshwater		PNEC	1	mg/l
	Environment - marine		PNEC	0,1	mg/l
	Environment - soil		PNEC	1	mg/kg
	Environment - sewage treatment plant		PNEC	1	mg/l
Consumer	Human - dermal	Short term, systemic effects	DNEL	25	mg/kg body weight/d ay
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,05	mg/kg
Consumer	Human - oral	Short term, systemic effects	DNEL	20	mg/kg body weight/d ay
Consumer	Human - dermal	Short term, local effects	DNEL	17,2	mg/cm2
Consumer	Human - inhalation	Short term, local effects	DNEL	0,05	mg/m3
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,025	mg/m3
Consumer	Human - inhalation	Long term, local effects	DNEL	0,025	mg/m3

8.2 Exposure controls 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment



Page 11 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and at end of work. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection: Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection: Chemical resistant protective gloves (EN 374). Recommended Protective nitrile gloves (EN 374) Minimum layer thickness in mm: >= 0,35 Permeation time (penetration time) in minutes: >= 480 The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended.

Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection: Normally not necessary. If OES or MEL is exceeded. Filter A2 P2 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.



Page 12 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

9.1 Information on basic physical and chemical properties

Physical state: Colour: Odour: Odour threshold: pH-value: Melting point/freezing point: Initial boiling point and boiling range: Flash point: Evaporation rate: Flammability (solid, gas): Lower explosive limit: Upper explosive limit: Vapour pressure: Vapour density (air = 1): Density: Bulk density: Solubility(ies): Water solubility: Partition coefficient (n-octanol/water): Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties: Oxidising properties: 9.2 Other information Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content:

Liquid According to specification Characteristic Not determined n.a. Not determined Not determined Not determined Not determined Not determined n.a. n.a. Not determined Not determined 1,13 - 1,15 g/cm3 (20°C) Not determined Not determined reacts with water, Insoluble Not determined No Not determined 1600 - 1900 mPas (20°C) Product is not explosive. No Not determined Not determined

Not determined Not determined Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested. **10.2 Chemical stability** Stable with proper storage and handling. **10.3 Possibility of hazardous reactions** No decomposition if used as intended. **10.4 Conditions to avoid** Protect from humidity. Polymerisation due to high heat is possible. T ~ 260°C **10.5 Incompatible materials** Acids Bases Oxidizing agents Amines Alcohols



Page 13 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Polyhydric alcohols Water Developement of: CO2 CO2 formation in closed tanks causes pressure to rise. Pressure increase will result in danger of bursting. **10.6 Hazardous decomposition products** No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

Nail Sealing fluid NDM 1 kg Art.: 9076413						
Toxicity / effect	Endp oint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral	ATE	>2000	mg/kg			calculated value
route:						-
Acute toxicity, by						n.d.a.
dermal route:						
Acute toxicity, by	ATE	12,43-	mg/l/4			calculated value,
inhalation:		21,5	h			Vapours
Acute toxicity, by	ATE	2,06-	mg/l/4			calculated value,
inhalation:		3,67	h			Aerosol
Skin corrosion/irritation:		-				
Serious eye						n.d.a.
damage/irritation:						
Respiratory or skin						n.d.a.
sensitisation:						
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ						n.d.a.
toxicity - single						
exposure (STOT-SE):						
Specific target organ						n.d.a.
toxicity - repeated						
exposure (STOT-RE):						
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification
						according to
						calculation
						procedure.

4,4'-methylenediphenyl diisocyanate							
Toxicity / effect	Endp	Value	Unit	Organism	Test method	Notes	
	oint						

B



Page 14 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC0	2,24	h mg/l/1	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
Skin corrosion/irritation:						Irritant
Serious eye damage/irritation:				Rabbit		Irritant
Respiratory or skin sensitisation:						Sensitising (inhalation and skin contact)
Carcinogenicity:						Limited evidence of a carcinogenic effect.
Symptoms:						respiratory distress, coughing, mucous membrane irritation
Specific target organ toxicity - single exposure (STOT-SE), inhalative:						Irritation of the respiratory tract

o-(p-isocyanatobenzyl)p	o-(p-isocyanatobenzyl)phenylisocyanate						
Toxicity / effect	Endp oint	Value	Unit	Organism	Test method	Notes	
Acute toxicity, by oral	LD50	>5000	mg/kg	Rat	Regulation (EC)	Analogous	
route:					440/2008 B.1	conclusion	
					(ACUTE ORAL		
					TOXICITY)		
Acute toxicity, by	LD50	>2000	mg/kg	Rabbit	OECD 402	Analogous	
dermal route:					(Acute Dermal	conclusion	
					Toxicity)		
Symptoms:						asthmatic	
						symptoms, mucous	
						membrane irritation	

Poly propylene glycol						
Toxicity / effect	Endp oint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>500 - <1000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>3000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	Analogous conclusion
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosi on)	Not irritant



Page 15 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Serious eye				Rabbit	OECD 405	Mild irritant
damage/irritation:					(Acute Eye	
-					Irritation/Corrosi	
					on)	
Respiratory or skin				Mouse	OECD 429 (Skin	Not sensitizising
sensitisation:					Sensitisation -	_
					Local Lymph	
					Node Assay)	
Respiratory or skin				Mouse	OECD 429 (Skin	Negative
sensitisation:					Sensitisation -	
					Local Lymph	
					Node Assay)	
Germ cell mutagenicity:				Salmonella	OECD 471	Negative
				typhimuri	(Bacterial	
				um	Reverse	
					Mutation Test)	
Germ cell mutagenicity:				Salmonella	OECD 471	Negative
				typhimuri	(Bacterial	
				um	Reverse	
					Mutation Test)	
Reproductive toxicity	NOA	1000	mg/kg	Rat	OECD 421	
(Effects on fertility):	EL				(Reproduction/De	
					velopmental	
					Toxicity	
					Screening Test)	
Symptoms:						annoyance, cramps,
						trembling

Diphenylmethanediisocy	anate, is	omeres and	d homolog	gues		
Toxicity / effect	Endp	Value	Unit	Organism	Test method	Notes
	oint					
Acute toxicity, by oral	LD50	>10000	mg/kg	Rat		
route:						
Acute toxicity, by oral	LD50	>2000	mg/kg	Rat	OECD 401	
route:					(Acute Oral	
					Toxicity)	
Acute toxicity, by oral	LD50	>5000	mg/kg	Rat		
route:						
Acute toxicity, by	LD50	>10000	mg/kg	Rabbit		
dermal route:						
Acute toxicity, by	LD50	>2000	mg/kg	Rabbit		
dermal route:						
Acute toxicity, by	LD50	>9400	mg/kg	Rabbit		
dermal route:						
Acute toxicity, by	LD50	>9400	mg/kg	Rabbit	OECD 402	
dermal route:					(Acute Dermal	
					Toxicity)	
Acute toxicity, by	LC50	0,31	mg/l/4	Rat	OECD 403	Aerosol
inhalation:			h		(Acute Inhalation	
					Toxicity)	
Skin corrosion/irritation:						Irritant



Page 16 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Skin corrosion/irritation:			Rabbit	OECD 404 (Acute Dermal Irritation/Corrosi on)	Mild irritant
Skin corrosion/irritation:			Rabbit	OECD 404 (Acute Dermal Irritation/Corrosi on)	Irritant
Serious eye damage/irritation:					Irritant
Serious eye damage/irritation:			Rabbit	OECD 405 (Acute Eye Irritation/Corrosi on)	Not irritant
Serious eye damage/irritation:			Rabbit	OECD 405 (Acute Eye Irritation/Corrosi on)	Slightly irritant, Analogous conclusion
Respiratory or skin sensitisation:					Sensitising (inhalation and skin contact)
Germ cell mutagenicity:				OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Carcinogenicity:			Rat	OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies)	Negative
Reproductive toxicity:					Negative
Reproductive toxicity (Developmental toxicity):	NOA EL	12	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	
Reproductive toxicity (Effects on fertility):				OECD 414 (Prenatal Developmental Toxicity Study)	No indications of such an effect.
Specific target organ toxicity - single exposure (STOT-SE):					Irritation of the respiratory tract
Aspiration hazard:					No



Page 17 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Symptoms:		fever, coughing, headaches, nausea and vomiting., dizziness, breathing
		difficulties, laryngeal oedema, oedema of the
		lungs, chemical pneumonitis (condition similar
		to pneumonia), abdominal pain, diarrhoea

2,2'-methylenediphenyl			T T •/	0		N T (
Toxicity / effect	Endp oint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	Regulation (EC) 440/2008 B.1 (ACUTE ORAL TOXICITY)	Analogous conclusion
Acute toxicity, by dermal route:	LD50	>9400	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>2,24	h mg/l/1	Rat	OECD 403 (Acute Inhalation Toxicity)	Mist
Skin corrosion/irritation:						Irritant
Serious eye damage/irritation:				Rabbit		Irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Yes (skin contact)
Respiratory or skin sensitisation:				Guinea pig		Yes (inhalation), Analogous conclusion
Germ cell mutagenicity:				Salmonella typhimuri um	OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Carcinogenicity:				Rat	OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies)	Limited evidence of a carcinogenic effect., Analogous conclusion
Reproductive toxicity:	NOA EL	4	mg/m 3	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	No indications of such an effect.



Page 18 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Specific target organ	May cause
toxicity - single	respiratory
exposure (STOT-SE):	irritation.
Aspiration hazard:	Not to be expected
Symptoms:	respiratory distress,
	coughing, mucous
	membrane irritation

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

Nail Sealing fluid N				,	(•••					
Art.: 9076413 Toxicity / effect Endpoi Time Valu Unit Organism Test method Notes										
Toxicity / effect	Endpoi	Time	Valu	Unit	Organism	l est method	Notes			
T	nt		e				1			
Toxicity to fish:							n.d.a.			
Toxicity to							n.d.a.			
daphnia:										
Toxicity to algae:							n.d.a.			
Persistence and							With water at the			
degradability:							interface,			
							transforms slowly			
							with formation of			
							CO2 into a firm,			
							insoluble reaction			
							product with a high			
							melting point			
							(polycarbamide).			
							According to			
							experience			
							available to date,			
							polycarbamide is			
							inert and non-			
							degradable.			
Bioaccumulative							n.d.a.			
potential:										
Mobility in soil:							n.d.a.			
Results of PBT							n.d.a.			
and vPvB										
assessment										
Other adverse							n.d.a.			
effects:										
Other information:	AOX						According to the			
							recipe, contains no			
							AOX.			



Page 19 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Other information:	DOC			DOC-elimination degree(complexing organic substance)>= 80%/28d: n.a.
--------------------	-----	--	--	--

4,4'-methylenedip	henyl diisoc	yanate					
Toxicity / effect	Endpoi	Time	Valu	Unit	Organism	Test method	Notes
	nt		e				
Toxicity to fish:	LC50	96h	>100	mg/l	Brachydanio	OECD 203	
			0		rerio	(Fish, Acute	
						Toxicity	
						Test)	
Toxicity to	EC50	24h	>100	mg/l	Daphnia		Analogous
daphnia:			0		magna		conclusion
Toxicity to algae:	EC50	72h	1,5	mg/l		OECD 201	
						(Alga,	
						Growth	
						Inhibition	
						Test)	
Toxicity to algae:	NOEC/	72h	1640	mg/l	Desmodesmus	OECD 201	Analogous
	NOEL				subspicatus	(Alga,	conclusion
						Growth	
						Inhibition	
Densistern 1		20.1	0	0/		Test)	W7:4h 4 / 1
Persistence and		28d	0	%		OECD 302	With water at the
degradability:						C (Inherent	interface,
						Biodegradabi	transforms slowly with formation of
						lity - Modified	CO2 into a firm,
						MITI Test	insoluble reaction
						(II))	product with a high melting point
							(polycarbamide).,
							According to
							experience
							available to date,
							polycarbamide is
							inert and non-
							degradable.
Bioaccumulative	Log		5,22				A notable
potential:	Pow		2,				biological
r · · · · · · · · · · · · · · · · · · ·							accumulation
							potential has to be
							expected (LogPow
							> 3).
Results of PBT							No PBT substance,
and vPvB							No vPvB substance
assessment							
Toxicity to	EC50	3h	>100	mg/l	activated		
bacteria:					sludge		



Page 20 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Toxicity to	EC50	14d	>100	mg/kg	Eisenia	
annelids:			0		foetida	

o-(p-isocyanatober Toxicity / effect	Endpoi	Time	Valu	Unit	Organism	Test method	Notes
Tomenty / effect	nt		e		Organishi	I est method	TOUCS
Toxicity to fish:	LC0	96h	>	mg/l	Brachydanio	OECD 203	Analogous
			1000	8	rerio	(Fish, Acute	conclusion
						Toxicity	
						Test)	
Toxicity to	EC50	24h	>100	mg/l	Daphnia	OECD 202	Analogous
daphnia:			0	_	magna	(Daphnia sp.	conclusion
						Acute	
						Immobilisati	
						on Test)	
Toxicity to	NOEC/	21d	>10	mg/l	Daphnia	OECD 202	Analogous
daphnia:	NOEL				magna	(Daphnia sp.	conclusion
						Acute	
						Immobilisati	
						on Test)	
Toxicity to algae:	ErC50	72h	>164	mg/l	Scenedesmus	OECD 201	Analogous
			0		subspicatus	(Alga,	conclusion
						Growth	
						Inhibition	
D 1			0			Test)	****
Persistence and			0	%		OECD 302	With water at the
degradability:						C (Inherent	interface,
						Biodegradabi	transforms slowly
						lity - Modified	with formation of
							CO2 into a firm,
						MITI Test	insoluble reaction
						(II))	product with a high melting point
							(polycarbamide).
Toxicity to	EC50	3h	>100	mg/l	activated	OECD 209	Analogous
bacteria:			/100	mg/1	sludge	(Activated	conclusion
ouciella.					Since	Sludge,	conclusion
						Respiration	
						Inhibition	
						Test	
						(Carbon and	
						Ammonium	
						Oxidation))	

Poly propylene glycol									
Toxicity / effect	Endpoi	Time	Valu	Unit	Organism	Test method	Notes		
	nt		e						
Toxicity to fish:	LC50	96h	>100	mg/l	Poecilia	OECD 203			
					reticulata	(Fish, Acute			
						Toxicity			
						Test)			



Page 21 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Toxicity to	EC50	48h	>100	mg/l	Daphnia	OECD 202	
daphnia:				8/	magna	(Daphnia sp.	
-					_	Acute	
						Immobilisati	
						on Test)	
Toxicity to	NOEC/	21d	>=10	mg/l	Daphnia	OECD 211	Analogous
daphnia:	NOEL				magna	(Daphnia	conclusion
						magna	
						Reproductio	
m • • • • •	ECO	701		/1		n Test)	
Toxicity to algae:	EC0	72h	>= 100	mg/l	Desmodesmus	OECD 201	
			100		subspicatus	(Alga, Growth	
						Inhibition	
						Test)	
Toxicity to algae:	EC0	72h	>=10	mg/l	Desmodesmus	OECD 201	Analogous
1 oniony to urgue.		, 211	0		subspicatus	(Alga,	conclusion
			-			Growth	
						Inhibition	
						Test)	
Persistence and		28d	>60	%		OECD 301	Readily
degradability:						F (Ready	biodegradable
						Biodegradabi	
						lity -	
						Manometric	
						Respirometry	
			1.0.0			Test)	
Toxicity to	EC50	3h	>100	mg/l	activated	OECD 209	Analogous
bacteria:			0		sludge	(Activated	conclusion
						Sludge,	
						Respiration Inhibition	
						Test	
						(Carbon and	
						Ammonium	
						Oxidation))	
Toxicity to	EC50	3h	>100	g/l	activated	OECD 209	
bacteria:			0	6	sludge	(Activated	
						Sludge,	
						Respiration	
						Inhibition	
						Test	
						(Carbon and	
						Ammonium	
						Oxidation))	
Water solubility:							Insoluble15°C

Diphenylmethanediisocyanate, isomeres and homologues									
Toxicity / effect	Endpoi	Endpoi Time Valu Unit Organism Test method Notes							
	nt	nt e e							



Page 22 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Toxicity to fish:	LC0	96h	>100 0	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EC50	24h	>100 0	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisati on Test)	
Toxicity to algae:	EC50	72h	>164 0	mg/l		IUCLID Chem. Data Sheet (ESIS)	
Toxicity to algae:	NOEC/ NOEL	72h	1640	mg/l		OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:		28d	0	%		OECD 302 C (Inherent Biodegradabi lity - Modified MITI Test (II))	Not biodegradable
Results of PBT and vPvB assessment							No PBT substance
Toxicity to bacteria:	EC50	3h	>100	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other information:							Does not contain any organically bound halogens which can contribute to the AOX value in waste water.
Other information:	BOD	28d	<10	%		OECD 302 C (Inherent Biodegradabi lity - Modified MITI Test (II))	



Page 23 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

2,2'-methylenedipl							
Toxicity / effect	Endpoi	Time	Valu	Unit	Organism	Test method	Notes
	nt		e				
Toxicity to fish:	LC50	96h	>100	mg/l	Brachydanio	OECD 203	
			0		rerio	(Fish, Acute	
						Toxicity	
						Test)	
Toxicity to	EC50	24h	>100	mg/l	Daphnia	,	Analogous
daphnia:			0		magna		conclusion
Toxicity to algae:	EC50	72h	1,5	mg/l		OECD 201	
			y -	0		(Alga,	
						Growth	
						Inhibition	
						Test)	
Toxicity to algae:	NOEC/	72h	1640	mg/l	Desmodesmus	OECD 201	Analogous
TOATCHEY to algae.	NOEC/	/ 211	1040	Ing/1			conclusion
	NUEL				subspicatus	(Alga, Growth	conclusion
						Inhibition	
		0.1	0			Test)	XX7'.1
Persistence and		28d	0	%		OECD 302	With water at the
degradability:						C (Inherent	interface,
						Biodegradabi	transforms slowly
						lity -	with formation of
						Modified	CO2 into a firm,
						MITI Test	insoluble reaction
						(II))	product with a high
							melting point
							(polycarbamide).,
							According to
							experience
							available to date,
							polycarbamide is
							inert and non-
							degradable.
Bioaccumulative	Log		5,22				A notable
potential:	Pow		5,22				biological
potentiai.	ruw						accumulation
							potential has to be
							expected (LogPow
							> 3).
Results of PBT							No PBT substance.
and vPvB							No vPvB substance
assessment			4.0.0				
Toxicity to	EC50	3h	>100	mg/l	activated		
bacteria:					sludge		
Toxicity to	EC50	14d	>100	mg/kg	Eisenia		
annelids:			0		foetida		



Page 24 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no .: The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU) 08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances 08 05 01 waste isocyanates Recommendation: Sewage disposal shall be discouraged. Pay attention to local and national official regulations. E.g. suitable incineration plant. Hardened product: E.g. dispose at suitable refuse site. For contaminated packing material Pay attention to local and national official regulations. Empty container completely. Uncontaminated packaging can be recycled. Dispose of packaging that cannot be cleaned in the same manner as the substance. 15 01 02 plastic packaging 15 01 10 packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

General statements							
UN number:	n.a.						
Transport by road/by rail (ADR/RID)							
UN proper shipping name:							
Transport hazard class(es):	n.a.						
Packing group:	n.a.						
Classification code:	n.a.						
LQ (ADR 2015):	n.a.						
Environmental hazards:	Not applicable						
Tunnel restriction code:							
Transport by sea (IMDG-code)							
UN proper shipping name:							
Transport hazard class(es):	n.a.						
Packing group:	n.a.						
Marine Pollutant:	n.a						
Environmental hazards:	Not applicable						
Transport by air (IATA)							
UN proper shipping name:							
Transport hazard class(es):	n.a.						
Packing group:	n.a.						
Environmental hazards:	Not applicable						
Special precautions for user							
Unless specified otherwise, general measures for safe transport must be followed.							
Transport in bulk according to Annex II of MARPOL and the IBC Code							
Non-dangerous material according to Transport Regulations.							



Page 25 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture For classification and labelling see Section 2.
Observe restrictions:
Regulation (EC) No 1907/2006, Annex XVII
4,4'-methylenediphenyl diisocyanate
o-(p-isocyanatobenzyl)phenylisocyanate
Diphenylmethanediisocyanate, isomeres and homologues
2,2'-methylenediphenyl diisocyanate
Comply with trade association/occupational health regulations.
Observe youth employment law (German regulation).
Observe law on protection of expectant mothers (German regulation).
Directive 2010/75/EU (VOC):
0 g/l
15.2 Chemical safety assessment
A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

2, 3, 11

These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Acute Tox. 4, H332	Classification according to calculation procedure.
Eye Irrit. 2, H319	Classification according to calculation procedure.
STOT SE 3, H335	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Resp. Sens. 1, H334	Classification according to calculation procedure.
Skin Sens. 1, H317	Classification according to calculation procedure.
STOT RE 2, H373	Classification according to calculation procedure.
Carc. 2, H351	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H302 Harmful if swallowed.

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.



B Page 26 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

Eye Irrit. — Eye irritation STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation Skin Irrit. — Skin irritation Resp. Sens. — Respiratory sensitization Skin Sens. — Skin sensitization STOT RE — Specific target organ toxicity - repeated exposure Carc. — Carcinogenicity Acute Tox. — Acute toxicity - oral

Any abbreviations and acronyms used in this document:

AC Article Categories acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)

BMGVBiological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

- bw body weight
- CAS Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPACCollaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling

and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding

and Allied Processes)

dw dry weight



Page 27 of 28
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003
Replacing version dated / version: 03.07.2015 / 0002
Valid from: 14.10.2015
PDF print date: 19.10.2015
Nail Sealing fluid NDM 1 kg
Art.: 9076413

for example (abbreviation of Latin 'exempli gratia'), for instance e.g. EC European Community ECHA European Chemicals Agency European Economic Area EEA EEC European Economic Community **EINECS** European Inventory of Existing Commercial Chemical Substances **ELINCS** European List of Notified Chemical Substances EN European Norms EPA United States Environmental Protection Agency (United States of America) ERC **Environmental Release Categories** ES Exposure scenario etc. et cetera EU European Union EWC European Waste Catalogue Fax. Fax number general gen. GHS Globally Harmonized System of Classification and Labelling of Chemicals GWP Global warming potential HET-CAM Hen's Egg Test - Chorionallantoic Membrane HGWPHalocarbon Global Warming Potential IARC International Agency for Research on Cancer IATA International Air Transport Association IBC Intermediate Bulk Container IBC (Code) International Bulk Chemical (Code) IC Inhibitory concentration IMDG-code International Maritime Code for Dangerous Goods incl. including, inclusive International Uniform ChemicaL Information Database IUCLID LC lethal concentration LC50 lethal concentration 50 percent kill LCLo lowest published lethal concentration Lethal Dose of a chemical LD LD50 Lethal Dose, 50% kill LDLo Lethal Dose Low LOAEL Lowest Observed Adverse Effect Level LOEC Lowest Observed Effect Concentration LOEL Lowest Observed Effect Level LO Limited Quantities MARPOL International Convention for the Prevention of Marine Pollution from Ships not applicable n.a. n.av. not available not checked n.c. n.d.a. no data available NIOSH National Institute of Occupational Safety and Health (United States of America) No Observed Adverse Effective Concentration NOAEC No Observed Adverse Effect Level NOAEL NOEC No Observed Effect Concentration NOEL No Observed Effect Level ODP Ozone Depletion Potential OECD Organisation for Economic Co-operation and Development org. organic



Page 28 of 28 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 14.10.2015 / 0003 Replacing version dated / version: 03.07.2015 / 0002 Valid from: 14.10.2015 PDF print date: 19.10.2015 Nail Sealing fluid NDM 1 kg Art.: 9076413

PAH polycyclic aromatic hydrocarbon

PBT persistent, bioaccumulative and toxic

PC Chemical product category

PE Polyethylene

PNEC Predicted No Effect Concentration

POCP Photochemical ozone creation potential

ppm parts per million

PROC Process category

PTFE Polytetrafluorethylene

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

ThOD Theoretical oxygen demand

TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.