

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

1.1. Product identifier

Product form : Mixture
Product name : Nelfapox FW Coating (Hardener)
Product code : F.1616.B

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

Relevant identified uses

Main use category : Professional use, Industrial use
Use of the substance/mixture : Surface tolerant epoxy coating

1.3. Details of the supplier of the safety data sheet

Nelf Marine Paints B.V.
Nieuweweg 5
NL 9073 GN Marrum, Fryslân
Nederland
T +31 (0)518 - 418 000
info@nelfmarine.nl, www.nelfmarine.nl

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Netherlands	Nationaal Vergiftigingen Informatie Centrum (NVIC)	Huispostnummer Q03.2.315 Postbus 85500 3508 GA Utrecht	+31 88 755 80 00	Only for the purpose of informing medical personnel in cases of acute intoxications (24 hours a day, 7 days a week)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4 H302
Skin corrosion/irritation, Category 1, Sub-Category 1A H314
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
Full text of H- and EUH-statements: see section 16

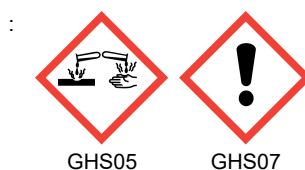
Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP)



CLP Signal word

: Danger

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Contains	: benzyl alcohol; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; 2,4,6-tris(dimethylaminomethyl)phenol; Cycloaliphatic Amine; trimethylhexane-1,6-diamine ; 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5 trimethylcyclohexylamine
Hazard statements (CLP)	: H302 - Harmful if swallowed. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P261 - Avoid breathing spray, vapours. P264 - Wash hands thoroughly after handling. P280 - Wear eye protection, protective gloves. P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor. P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a doctor. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)	CAS-No.: 9046-10-0 EC-No.: 618-561-0 REACH-no: 01-2119557899-12	50 – 75	Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412
benzyl alcohol substance with national workplace exposure limit(s) (CZ, DE, NL, PL)	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5 REACH-no: 01-2119492630-38	10 – 25	Acute Tox. 4 (Oral), H302 (ATE=1580 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Eye Irrit. 2, H319 Skin Sens. 1B, H317
3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS-No.: 2855-13-2 EC-No.: 220-666-8 EC Index-No.: 612-067-00-9 REACH-no: 01-2119514687-32	10 – 25	Acute Tox. 4 (Oral), H302 (ATE=1030 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 3, H412
Cycloaliphatic Amine	CAS-No.: - EC-No.: -	5 – 10	Skin Corr. 1, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS-No.: 38294-64-3 EC-No.: 500-101-4 REACH-no: 01-2119965165-33	5 – 10	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
trimethylhexane-1,6-diamine	CAS-No.: 25513-64-8 EC-No.: 247-063-2 REACH-no: 01-2119560598-25	5 – 10	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317
2,4,6-tris(dimethylaminomethyl)phenol	CAS-No.: 90-72-2 EC-No.: 202-013-9 EC Index-No.: 603-069-00-0 REACH-no: 01-2119560597-27	3 – 5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1C, H314 Eye Dam. 1, H318

Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS-No.: 2855-13-2 EC-No.: 220-666-8 EC Index-No.: 612-067-00-9 REACH-no: 01-2119514687-32	(0.001 ≤ C ≤ 100) Skin Sens. 1A; H317

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.
Self protection of the first-aider	: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
------------------------------	--

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Store locked up.
Packaging materials : Always store product in container of same material as original container.

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

benzyl alcohol (100-51-6)	
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	45 mg/m ³

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses			

Skin protection

Skin and body protection:

Wear suitable protective clothing

Skin and body protection	
Type	Standard
Tyvek® Gown/Coveralls	

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,1 mm	2 (< 1.5)	EN ISO 374

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Respiratory protection			
Device	Filter type	Condition	Standard
Reusable half mask	Type P2	Dust protection	EN 143
Reusable half mask	Filter A2/B2	Vapour protection	EN 143

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: liquid.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Non flammable.
Explosive properties	: Explosive vapour/air mixtures may be formed.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 100 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: > 20.5 mm²/s
Solubility	: Immiscible. Water: Partially soluble
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 0.97 g/cm³
Relative density	: 0.97
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

Other safety characteristics

VOC content	: 35 %
Other properties	:

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Nelfapox FW Coating (Hardener)

ATE CLP (oral)	1863.916 mg/kg bodyweight
----------------	---------------------------

benzyl alcohol (100-51-6)

LD50 oral rat	1620 mg/kg
LD50 oral	1580 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1410 - 1770
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity)
LD50 dermal	> 2000 mg/kg
LC50 Inhalation - Rat	> 4.178 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)

LD50 oral rat	1030 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	> 2000 mg/kg
LC50 Inhalation - Rat	> 5.01 mg/l

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)

LD50 oral rat	2169 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1916 - 2455
---------------	---

trimethylhexane-1,6-diamine (25513-64-8)

LD50 oral rat	910 mg/kg bodyweight Animal: rat, Animal sex: male
---------------	--

Skin corrosion/irritation : Causes severe skin burns.

3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)

pH	11.8
----	------

Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy) (9046-10-0)

pH	11.7
----	------

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5 trimethylcyclohexylamine (38294-64-3)

pH	7 – 11
----	--------

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Serious eye damage/irritation : Assumed to cause serious eye damage

3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)	
pH	11.8

Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy) (9046-10-0)	
pH	11.7

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5 trimethylcyclohexylamine (38294-64-3)	
pH	7 – 11

Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

benzyl alcohol (100-51-6)	
NOAEL (oral, rat, 90 days)	400 mg/kg bodyweight Animal: rat, Guideline: other:

3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)	
LOAEL (oral, rat, 90 days)	160 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
NOAEL (oral, rat, 90 days)	15 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)

trimethylhexane-1,6-diamine (25513-64-8)	
LOAEL (oral, rat, 90 days)	60 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	10 mg/kg bodyweight Animal: rat

Aspiration hazard : Not classified

Nelfapox FW Coating (Hardener)	
Viscosity, kinematic	> 20.5 mm²/s

benzyl alcohol (100-51-6)	
Viscosity, kinematic	< 20.5 mm²/s

3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)	
Viscosity, kinematic	< 20.5 mm²/s

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Viscosity, kinematic	204.082 mm²/s

Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy) (9046-10-0)	
Viscosity, kinematic	< 20.5 mm²/s

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5 trimethylcyclohexylamine (38294-64-3)	
Viscosity, kinematic	22280.788 mm²/s

11.2. Information on other hazards

No additional information available

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

benzyl alcohol (100-51-6)	
LC50 - Fish [1]	460 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	230 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	770 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	500 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	76.828 mg/l Test organisms (species): other:
NOEC chronic fish	48.897 mg/l Test organisms (species): other: Duration: '30 d'

3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)	
LC50 - Fish [1]	110 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	23 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	37 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 50 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	46.7 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	25.5 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

trimethylhexane-1,6-diamine (25513-64-8)	
EC50 72h - Algae [1]	43.5 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
LOEC (chronic)	1.02 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1.02 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 10.9 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '30 d'

12.2. Persistence and degradability

Nelfapox FW Coating (Hardener)	
Persistence and degradability	Rapidly degradable

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

benzyl alcohol (100-51-6)	
Persistence and degradability	Rapidly degradable
3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)	
Persistence and degradability	Rapidly degradable
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Persistence and degradability	Rapidly degradable
Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy) (9046-10-0)	
Persistence and degradability	Rapidly degradable
Cycloaliphatic Amine (-)	
Persistence and degradability	Rapidly degradable
trimethylhexane-1,6-diamine (25513-64-8)	
Persistence and degradability	Rapidly degradable
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5 trimethylcyclohexylamine (38294-64-3)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

benzyl alcohol (100-51-6)	
Partition coefficient n-octanol/water (Log Pow)	1.05
3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)	
Partition coefficient n-octanol/water (Log Kow)	1.9
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Partition coefficient n-octanol/water (Log Pow)	-0.66
Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy) (9046-10-0)	
Partition coefficient n-octanol/water (Log Pow)	1.34
trimethylhexane-1,6-diamine (25513-64-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.3
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5 trimethylcyclohexylamine (38294-64-3)	
Partition coefficient n-octanol/water (Log Pow)	2.6

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
European List of Waste (LoW, EC 2000/532)	: 08 01 11* - waste paint and varnish containing organic solvents or other dangerous substances 08 01 12 - waste paint and varnish other than those mentioned in 08 01 11

SECTION 14: Transport information

In accordance with ADR / RID

ADR	RID
14.1. UN number or ID number	
UN 2735	UN 2735
14.2. UN proper shipping name	
AMINES, LIQUID, CORROSIVE, N.O.S. (Reaction products of di-, tri, and tetra-propoxylated propane-1,2, diol with ammonia, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine)	AMINES, LIQUID, CORROSIVE, N.O.S. (Reaction products of di-, tri, and tetra-propoxylated propane-1,2, diol with ammonia, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine)
Transport document description	
UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Reaction products of di-, tri, and tetra-propoxylated propane-1,2, diol with ammonia, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine), 8, III, (E)	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Reaction products of di-, tri, and tetra-propoxylated propane-1,2, diol with ammonia, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine), 8, III
14.3. Transport hazard class(es)	
8	8
	
14.4. Packing group	
III	III
14.5. Environmental hazards	
Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available	

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: C7
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1, TP28
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Hazard identification number (Kemler No.) : 80
Orange plates :



Tunnel restriction code (ADR) : E

Rail transport

Classification code (RID) : C7
Special provisions (RID) : 274
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T7
Portable tank and bulk container special provisions (RID) : TP1, TP28
Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(b)	Nelfapox FW Coating (Hardener) ; benzyl alcohol ; 3-aminomethyl-3,5,5-trimethylcyclohexylamine ; 2,4,6-tris(dimethylaminomethyl)phenol ; Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy) ; Cycloaliphatic Amine ; trimethylhexane-1,6-diamine ; 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
3(c)	Nelfapox FW Coating (Hardener) ; 3-aminomethyl-3,5,5-trimethylcyclohexylamine ; Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy) ; Cycloaliphatic Amine ; 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 35 %
Decopaint Directive (2004/42/EC) - Annex II : A/j (Paints and Varnishes - Two-pack reactive performance coatings for specific end use such as floors)
Maximum allowed concentration : 500 g/l VOC
Maximum content of VOC : 0.00 g/l VOC

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Netherlands

ABM category : A(3) - hazardous for aquatic organisms, may have longterm hazardous effects in aquatic environment
SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier
No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

The information supplied has been based upon the current level of information available, for the purpose of specifying the requirements regarding environment, health and safety in conjunction with the product. They are not to be interpreted as a warranty. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Indication of changes		
Section	Changed item	Comments
	Supersedes version of	Added
	Issue date	Added
	Revision date	Modified
	Flammability (solid, gas)	Added
	Special provisions (IATA)	Modified
1.1	Name	Modified
1.1	Product code	Modified
1.2	Use of the substance/mixture	Added
2.1	Adverse physicochemical, human health and environmental effects	Added

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Indication of changes		
Section	Changed item	Comments
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified
2.2	Precautionary statements (CLP)	Modified
2.2	Hazard statements (CLP)	Modified
3	Composition/information on ingredients	Modified
4.1	First-aid measures general	Modified
4.1	First-aid measures after skin contact	Modified
4.1	First-aid measures after inhalation	Modified
4.1	First-aid measures after ingestion	Modified
4.1	First-aid measures after eye contact	Modified
4.2	Symptoms/effects after inhalation	Modified
4.2	Symptoms/effects after skin contact	Modified
4.2	Symptoms/effects after ingestion	Modified
4.2	Symptoms/effects after eye contact	Modified
4.2	Symptoms/effects	Removed
4.3	Other medical advice or treatment	Added
5.1	Unsuitable extinguishing media	Modified
5.1	Suitable extinguishing media	Modified
5.2	Explosion hazard	Modified
5.2	Fire hazard	Modified
5.2	Hazardous decomposition products in case of fire	Added
5.3	Firefighting instructions	Modified
5.3	Protection during firefighting	Added
6.1	Emergency procedures	Added
6.1	Protective equipment	Modified
6.1	General measures	Modified
6.1	Protective equipment	Modified
6.1	Emergency procedures	Modified
6.2	Environmental precautions	Modified
6.3	For containment	Added
6.3	Methods for cleaning up	Modified
6.3	Other information	Added
6.4	Reference to other sections (8, 13)	Modified
7.1	Additional hazards when processed	Modified
7.1	Precautions for safe handling	Modified
7.1	Hygiene measures	Modified
7.2	Technical measures	Modified
7.2	Packaging materials	Added

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Indication of changes		
Section	Changed item	Comments
7.2	Storage conditions	Modified
7.2	Incompatible products	Removed
7.2	Storage temperature	Removed
7.2	Storage area	Removed
7.2	Special rules on packaging	Removed
7.3	Specific end uses	Removed
8.2	Personal protective equipment	Added
8.2	Environmental exposure controls	Modified
8.2	Hand protection	Modified
8.2	Eye protection	Modified
8.2	Appropriate engineering controls	Modified
8.2	Materials for protective clothing	Removed
9.1	Melting point	Added
9.1	Viscosity, kinematic	Modified
9.1	Density	Modified
9.2	VOC content	Modified
10.1	Reactivity	Added
10.2	Chemical stability	Modified
10.3	Possibility of hazardous reactions	Added
10.4	Conditions to avoid	Modified
10.5	Incompatible materials	Removed
10.6	Hazardous decomposition products	Modified
11.1	ATE CLP (oral)	Modified
12.1	Ecology - general	Added
12.1	Ecology - water	Removed
13.1	Product/Packaging disposal recommendations	Added
13.1	Sewage disposal recommendations	Added
13.1	Additional information	Added
13.1	Regional legislation (waste)	Modified
13.1	Waste treatment methods	Added
13.1	Ecology - waste materials	Removed
14.2	Proper Shipping Name (ADR)	Modified
15.1	VOC content	Modified
15.2	Chemical safety assessment	Modified
16	Abbreviations and acronyms	Modified

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
	CLP
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstracts Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Nelfapox FW Coating (Hardener)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging.
Other information	: None.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
Skin Sens. 1B	Skin sensitisation, category 1B
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H412	Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Acute Tox. 4 (Oral)	H302	Calculation method
Skin Corr. 1A	H314	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Chronic 3	H412	Calculation method

Safety Data Sheet applicable for regions : NL - Netherlands

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.