

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

1.1. Product identifier

Product form : Mixture
Product name : Nelfamar Cuprum-45
Product code : F.1637

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

Relevant identified uses

Main use category : Industrial use, Professional use
Use of the substance/mixture : High build, physically drying chlorinated rubber coating
Function or use category : Coatings and paints, thinners, paint removers

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]

Flammable liquids, Category 3 H226
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 1 H318
Skin sensitisation, Category 1 H317
Reproductive toxicity, Additional category, Effects on or via lactation H362
Specific target organ toxicity – Repeated exposure, Category 2 H373
Hazardous to the aquatic environment – Acute Hazard, Category 1 H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1 H410
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. May cause harm to breast-fed children. May cause damage to organs through prolonged or repeated exposure. Harmful if inhaled. Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Very toxic to aquatic life with long lasting effects.

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2.2. Label elements

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

Hazard pictograms (CLP)



CLP Signal word

Contains

Hazard statements (CLP)

Precautionary statements (CLP)

- : Danger
- : xylene; dicopper oxide; copper (I) oxide; Chlorinated Paraffins, C14-17 (52%); rosin; colophony
- : H226 - Flammable liquid and vapour.
H302+H332 - Harmful if swallowed or if inhaled.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H362 - May cause harm to breast-fed children.
H373 - May cause damage to organs through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.
- : P201 - Obtain special instructions before use.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P263 - Avoid contact during pregnancy and while nursing.
P280 - Wear eye protection, protective gloves.
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.
P391 - Collect spillage.

2.3. Other hazards

PBT: not yet assessed

vPvB: not yet assessed

Contains PBTvPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
Substance(s) meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Chlorinated Paraffins, C14-17 (52%) (85535-85-9)
Substance(s) meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Chlorinated Paraffins, C14-17 (52%) (85535-85-9)
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Tris(methylphenyl) phosphate (1330-78-5), rosin; colophony (8050-09-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Tris(methylphenyl) phosphate (1330-78-5), rosin; colophony (8050-09-7)

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 %

Component	
Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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	Chlorinated Paraffins, C14-17 (52%) (85535-85-9)

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
dicopper oxide; copper (I) oxide substance with a Community workplace exposure limit	CAS-No.: 1317-39-1 EC-No.: 215-270-7 EC Index-No.: 029-002-00-X REACH-no: 01-2119513794-36	25 – 50	Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=3.34 mg/l) Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=10)
xylene substance with national workplace exposure limit(s) (BE, CZ, DE, FR, GB, NL, RO, SI, SK, RS); substance with a Community workplace exposure limit	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9 REACH-no: 01-2119488216-32	10 – 25	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=11 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
rosin; colophony substance with national workplace exposure limit(s) (CZ, GB, RO)	CAS-No.: 8050-09-7 EC-No.: 232-475-7 EC Index-No.: 650-015-00-7 REACH-no: 01-2119480418-32	10 – 25	Skin Sens. 1, H317
zinc oxide substance with national workplace exposure limit(s) (CZ, FR, PL, RO, SK)	CAS-No.: 1314-13-2 EC-No.: 215-222-5 EC Index-No.: 030-013-00-7 REACH-no: 01-2119463881-32	5 – 10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
ethylbenzene substance with national workplace exposure limit(s) (BE, CZ, DE, FR, GB, NL, PL, RO, SI, SK, RS); substance with a Community workplace exposure limit	CAS-No.: 100-41-4 EC-No.: 202-849-4 EC Index-No.: 601-023-00-4 REACH-no: 01-2119489370-35	5 – 10	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 (ATE=17.4 mg/l/4h) STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
2-butoxyethanol; ethylene glycol monobutyl ether substance with national workplace exposure limit(s) (CZ, DE, FR, GB, NL, PL, RO, SK, RS); substance with a Community workplace exposure limit	CAS-No.: 111-76-2 EC-No.: 203-905-0 EC Index-No.: 603-014-00-0 REACH-no: 01-2119475108-36	5 – 10	Acute Tox. 3 (Inhalation:vapour), H331 (ATE=3 mg/l) Acute Tox. 4 (Oral), H302 (ATE=1200 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Irrit. 2, H319
Tris(methylphenyl) phosphate substance with national workplace exposure limit(s) (DE)	CAS-No.: 1330-78-5 EC-No.: 809-930-9 REACH-no: 01-2119531335-46	1 – 2.5	Repr. 2, H361fd Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Chlorinated Paraffins, C14-17 (52%) substance listed on REACH Candidate List (Medium-chain chlorinated paraffins (MCCP)) substance with national workplace exposure limit(s) (DE); PBT substance; vPvB substance	CAS-No.: 85535-85-9 EC-No.: 287-477-0 EC Index-No.: 602-095-00-X REACH-no: 01-2119519269-33	1 – 2.5	Lact., H362 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH066

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	CAS-No.: 25068-38-6 EC-No.: 500-033-5 EC Index-No.: 603-074-00-8 REACH-no: 01-2119456619-26	0.5 – 1	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411
toluene substance with national workplace exposure limit(s) (CZ, DE, FR, GB, NL, PL, RO, SI, SK, RS); substance with a Community workplace exposure limit	CAS-No.: 108-88-3 EC-No.: 203-625-9 EC Index-No.: 601-021-00-3 REACH-no: 01-2119471310-51	0.5 – 1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	CAS-No.: 25068-38-6 EC-No.: 500-033-5 EC Index-No.: 603-074-00-8 REACH-no: 01-2119456619-26	(5 $\leq$ C $\leq$ 100) Skin Irrit. 2; H315 (5 $\leq$ C $\leq$ 100) Eye Irrit. 2; H319

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	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
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. Call a poison center or a doctor if you feel unwell.
Self protection of the first-aiders	: 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	: Harmful if inhaled.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Harmful if swallowed.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.
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. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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 : Collect spillage. 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. Notify authorities if product enters sewers or public waters.
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.

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Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Avoid contact during pregnancy/while nursing. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.
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	: Ground/bond container and receiving equipment.
Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed.
Packaging materials	: Always store product in container of same material as original container.

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

xylene (1330-20-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Xylene, mixed isomers, pure
IOEL TWA	221 mg/m ³
	50 ppm
IOEL STEL	442 mg/m ³
	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Netherlands - Occupational Exposure Limits	
Local name	Xyleen, o-, m-, p-isomeren
TGG-8u (OEL TWA)	210 mg/m ³
	47.5 ppm
TGG-15min (OEL STEL)	442 mg/m ³
	100 ppm
Remark	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2024
zinc oxide (1314-13-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Zinc oxide
Remark	SCOEL Recommendations (Ongoing)

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dicopper oxide; copper (I) oxide (1317-39-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Copper(I) oxide
IOEL TWA	0.01 mg/m³ (respirable fraction)
Remark	(Year of adoption 2014)
Regulatory reference	SCOEL Recommendations
ethylbenzene (100-41-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylbenzene
IOEL TWA	442 mg/m³
	100 ppm
IOEL STEL	884 mg/m³
	200 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Netherlands - Occupational Exposure Limits	
Local name	Ethylbenzeen
TGG-8u (OEL TWA)	215 mg/m³
	48.6 ppm
TGG-15min (OEL STEL)	430 mg/m³
	97.3 ppm
Remark	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2024
toluene (108-88-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Toluene
IOEL TWA	192 mg/m³
	50 ppm
IOEL STEL	384 mg/m³
	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
Netherlands - Occupational Exposure Limits	
Local name	Tolueen
TGG-8u (OEL TWA)	150 mg/m³
	39 ppm
TGG-15min (OEL STEL)	384 mg/m³
	100 ppm

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toluene (108-88-3)	
Regulatory reference	Arbeidsomstandighedenregeling 2024
2-butoxyethanol; ethylene glycol monobutyl ether (111-76-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-Butoxyethanol
IOEL TWA	98 mg/m³
	20 ppm
IOEL STEL	246 mg/m³
	50 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Netherlands - Occupational Exposure Limits	
Local name	2-Butoxyethanol
TGG-8u (OEL TWA)	100 mg/m³
	20.4 ppm
TGG-15min (OEL STEL)	246 mg/m³
	50 ppm
Remark	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een Haanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2024

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

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Skin and body protection	
Type	Standard
Tyvek® Gown/Coveralls	

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves, Disposable gloves	Polyvinylalcohol (PVA)	5 (> 240 minutes)	0.3		

Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

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	: Blue. red brown. Black.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Flammable liquid and vapour.
Explosive properties	: Explosive vapour/air mixtures may be formed.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 28 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 1121.233 – 1261.388 mm²/s
Solubility	: Immiscible. Water: Insoluble
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.91 kg/l
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

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9.2. Other information

Other safety characteristics

VOC content : 33.7 %
Other properties :

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

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) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified.

Nelfamar Cuprum-45	
ATE CLP (oral)	1000 mg/kg bodyweight
ATE CLP (dust,mist)	3.318 mg/l/4h
xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg
LD50 oral	> 4000 mg/kg
LD50 dermal rabbit	> 4200 mg/kg
LC50 Inhalation - Rat (Vapours)	11 mg/l/4h
zinc oxide (1314-13-2)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 5.7 mg/l
dicopper oxide; copper (I) oxide (1317-39-1)	
LD50 oral rat	1340 mg/kg

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ethylbenzene (100-41-4)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	17800 mg/kg
LC50 Inhalation - Rat	17.4 mg/l
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
toluene (108-88-3)	
LD50 oral rat	5580 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 5300 - 5910
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 9,63 - 20,77
2-butoxyethanol; ethylene glycol monobutyl ether (111-76-2)	
LD50 oral	1414 mg/kg bodyweight Animal: guinea pig, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1020 - 1961
Skin corrosion/irritation	: Causes skin irritation.
zinc oxide (1314-13-2)	
pH	7.5 – 8.5
Serious eye damage/irritation	: Causes serious eye damage.
zinc oxide (1314-13-2)	
pH	7.5 – 8.5
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May cause harm to breast-fed children.
STOT-single exposure	: Not classified
xylene (1330-20-7)	
STOT-single exposure	May cause respiratory irritation.
toluene (108-88-3)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
xylene (1330-20-7)	
STOT-repeated exposure	May cause damage to organs (central nervous system, liver, kidneys) through prolonged or repeated exposure.
zinc oxide (1314-13-2)	
LOAEL (dermal, rat/rabbit, 90 days)	75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
NOAEL (oral, rat, 90 days)	31.52 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
ethylbenzene (100-41-4)	
NOAEL (oral, rat, 90 days)	75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs (hearing organs) through prolonged or repeated exposure.

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toluene (108-88-3)	
LOAEL (oral, rat, 90 days)	1250 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	2.355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

2-butoxyethanol; ethylene glycol monobutyl ether (111-76-2)	
NOAEL (dermal, rat/rabbit, 90 days)	> 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard : Not classified

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Viscosity, kinematic	1121.233 – 1261.388 mm ² /s

xylene (1330-20-7)	
Viscosity, kinematic	< 0.9 mm ² /s

ethylbenzene (100-41-4)	
Viscosity, kinematic	< 20.5 mm ² /s

Tris(methylphenyl) phosphate (1330-78-5)	
Viscosity, kinematic	> 20.5 mm ² /s

toluene (108-88-3)	
Viscosity, kinematic	0.647 mm ² /s

11.2. Information on other hazards

Other information

Potential adverse human health effects and symptoms : The product contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Ecology - water : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.

xylene (1330-20-7)	
LC50 - Fish [1]	2.6 mg/l
EC50 - Crustacea [1]	1 mg/l
EC50 - Other aquatic organisms [1]	2.2 mg/l
LOEC (chronic)	3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

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zinc oxide (1314-13-2)	
LC50 - Fish [1]	1120 (1.1 – 2250) mg/l
EC50 - Crustacea [1]	12.3 (0.098 – 24.6) mg/l
ethylbenzene (100-41-4)	
LC50 - Fish [1]	5.1 mg/l Test organisms (species): Menidia menidia
EC50 72h - Algae [1]	5.4 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	4.9 mg/l Test organisms (species): Skeletonema costatum
EC50 96h - Algae [1]	3.6 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	7.7 mg/l Test organisms (species): Skeletonema costatum
LOEC (chronic)	1.7 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC (chronic)	0.96 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
reaction product: bisphenol-A(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	
EC50 - Crustacea [1]	≈ 2 mg/l Test organisms (species): Daphnia magna
toluene (108-88-3)	
LC50 - Fish [1]	5.5 mg/l Test organisms (species): Oncorhynchus kisutch
LOEC (chronic)	2.76 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC (chronic)	0.74 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC chronic fish	1.39 mg/l Test organisms (species): Oncorhynchus kisutch Duration: '40 d'
2-butoxyethanol; ethylene glycol monobutyl ether (111-76-2)	
LC50 - Fish [1]	1370 (1250 – 1490) mg/l
LC50 - Other aquatic organisms [1]	800 mg/l
EC50 - Crustacea [1]	≈ 1800 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 100 mg/l Test organisms (species): Oryzias latipes Duration: '14 d'
12.2. Persistence and degradability	
Nelfamar Cuprum-45	
Persistence and degradability	Rapidly degradable
xylene (1330-20-7)	
Persistence and degradability	Rapidly degradable
zinc oxide (1314-13-2)	
Persistence and degradability	Rapidly degradable
dicopper oxide; copper (I) oxide (1317-39-1)	
Persistence and degradability	Rapidly degradable
ethylbenzene (100-41-4)	
Persistence and degradability	Rapidly degradable

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Tris(methylphenyl) phosphate (1330-78-5)	
Persistence and degradability	Rapidly degradable
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	
Persistence and degradability	Rapidly degradable
toluene (108-88-3)	
Persistence and degradability	Rapidly degradable
2-butoxyethanol; ethylene glycol monobutyl ether (111-76-2)	
Persistence and degradability	Rapidly degradable
Chlorinated Paraffins, C14-17 (52%) (85535-85-9)	
Persistence and degradability	Rapidly degradable
rosin; colophony (8050-09-7)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

xylene (1330-20-7)	
Partition coefficient n-octanol/water (Log Pow)	3.1
ethylbenzene (100-41-4)	
Partition coefficient n-octanol/water (Log Pow)	3.15
Partition coefficient n-octanol/water (Log Kow)	3
Tris(methylphenyl) phosphate (1330-78-5)	
Partition coefficient n-octanol/water (Log Pow)	5.93
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	
Partition coefficient n-octanol/water (Log Pow)	3.242
toluene (108-88-3)	
Partition coefficient n-octanol/water (Log Pow)	2.73
2-butoxyethanol; ethylene glycol monobutyl ether (111-76-2)	
Partition coefficient n-octanol/water (Log Pow)	≈ 0.8
Chlorinated Paraffins, C14-17 (52%) (85535-85-9)	
Partition coefficient n-octanol/water (Log Pow)	7

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Nelfamar Cuprum-45	
PBT: not yet assessed	
vPvB: not yet assessed	
Component	
Substance(s) meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Chlorinated Paraffins, C14-17 (52%) (85535-85-9)

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Component

Substance(s) meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Chlorinated Paraffins, C14-17 (52%) (85535-85-9)
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Tris(methylphenyl) phosphate (1330-78-5), rosin; colophony (8050-09-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Tris(methylphenyl) phosphate (1330-78-5), rosin; colophony (8050-09-7)

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Nelfamar Cuprum-45

Other information	Avoid release to the environment.
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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	: Flammable vapours may accumulate in the container. 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 1263	UN 1263
14.2. UN proper shipping name	
PAINT	PAINT
Transport document description	
UN 1263 PAINT, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1263 PAINT, 3, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)	
3	3
14.4. Packing group	
III	III
14.5. Environmental hazards	
Dangerous for the environment: Yes	Dangerous for the environment: Yes

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ADR	RID
No supplementary information available	

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 163, 367, 650
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T2
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	:



Tunnel restriction code (ADR)	: D/E
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Rail transport

Classification code (RID)	: F1
Special provisions (RID)	: 163, 367, 650
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Transport category (RID)	: 3
Colis express (express parcels) (RID)	: CE4
Hazard identification number (RID)	: 33

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)	Nelfamar Cuprum-45 ; xylene ; ethylbenzene ; Tris(methylphenyl) phosphate ; reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) ; toluene ; 2-butoxyethanol; ethylene glycol monobutyl ether ; Chlorinated Paraffins, C14-17 (52%)
3(a)	Nelfamar Cuprum-45 ; xylene ; ethylbenzene ; toluene
3(c)	Nelfamar Cuprum-45 ; xylene ; ethylbenzene ; Tris(methylphenyl) phosphate ; reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) ; toluene ; Chlorinated Paraffins, C14-17 (52%)

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EU restriction list (REACH Annex XVII)

Reference code	Applicable on
48.	toluene

REACH Annex XIV (Authorisation List)

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

REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations $\geq 0.1\%$ or SCL: Medium-chain chlorinated paraffins (MCCP) (EC 287-477-0, CAS 85535-85-9)

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)

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	: 33.7 %
Decopaint Directive (2004/42/EC) - Annex II	: A/i (Paints and Varnishes - One-pack performance coatings)
Maximum allowed concentration	: 500 g/l VOC
Maximum content of VOC	: 409.00 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 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)

Name	CN designation	CAS-No.	CN code	Category, Subcategory	Threshold	Annex
Toluene		108-88-3	2902 30 00	Category 3		Annex I

National regulations

Netherlands

ABM category	: Z(2) - biodegradable substances with hazardous properties for humans and the environment (carcinogenicity/ mutagenicity/reprotoxicity/bioacumulative potential or toxicity)
SZW-lijst van kankerverwekkende stoffen	: Chlorinated Paraffins, C14-17 (52%),rosin; colophony are listed
SZW-lijst van mutagene stoffen	: Chlorinated Paraffins, C14-17 (52%),rosin; colophony are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: Chlorinated Paraffins, C14-17 (52%) is listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	: Tris(methylphenyl) phosphate is listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: xylene,toluene are listed

15.2. Chemical safety assessment

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.

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Indication of changes		
Section	Changed item	Comments
2.2	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified
16	Composition/information on ingredients	Modified

Abbreviations and acronyms:	
IARC	International Agency for Research on Cancer
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
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
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
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative
SDS	Safety Data Sheet

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. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3

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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 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Lact.	Reproductive toxicity, Additional category, Effects on or via lactation
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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Full text of H- and EUH-statements:

H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Flam. Liq. 3	H226	On basis of test data
Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Lact.	H362	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	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.