SAFETY DATA SHEET EMJ110 N

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name EMJ110 N

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

Identified uses Printing ink.

Uses advised againstNo specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Electra Polymers Ltd

Roughway Mill, Roughway Lane Tonbridge Kent TN11 9SG

UK

Tel: +44 1732 811118 Fax: +44 1732 811119 sds@electrapolymers.com

1.4. Emergency telephone number

Emergency telephone +44 (0)1732 811 118 (08.30 - 17.00 GMT)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Human health May cause serious eye damage. May cause skin sensitisation or allergic reactions in sensitive

individuals. Considered to be a low inhalation hazard at normal workplace temperatures.

Environmental The product contains a substance which is very toxic to aquatic organisms and which may

cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Hazard pictograms







Danger

Signal word

Hazard statements H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements P273 Avoid release to the environment.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/ doctor.

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

Contains Cyclic trimethylol propane formal acrylate, 2-propenoic acid, 2-(2-Vinyloxyethoxy) ethyl ether

ester, Dipropylene glycol diacrylate, PHENYL BIS(2,4,6-TRIMETHYLBENZOYL)-PHOSPHINE OXIDE, 2,2-BIS(ACRYLOYLOXYMETHYL)BUTYL ACRYLATE, Triazine

derivative

Supplementary precautionary statements

ecautionary P261 Avoid breathing vapour/ spray.

P264 Wash contaminated skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P302+P352 IF ON SKIN: Wash with plenty of water.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.

P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. May cause skin sensitisation or allergic reactions in sensitive individuals.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Cyclic trimethylol propane formal acrylate

30-60%

CAS number: 66492-51-1 EC number: 266-380-7

Classification

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1B - H317 Aquatic Chronic 2 - H411

2-propenoic acid, 2-(2-Vinyloxyethoxy) ethyl ether ester

10-30%

CAS number: 86273-46-3

Classification

Acute Tox. 4 - H302 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412

Dipropylene glycol diacrylate

5-10%

CAS number: 57472-68-1

Classification

Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317

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PHENYL BIS(2,4,6-TRIMETHYLBENZOYL)-PHOSPHINE

1-5%

OXIDE

Classification

Skin Sens. 1 - H317 Aquatic Chronic 4 - H413

2,2-BIS(ACRYLOYLOXYMETHYL)BUTYL ACRYLATE

1-5%

CAS number: 15625-89-5 EC number: 239-701-3

REACH registration number: 01-

2119489896-11

Classification

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

BUTANOL-norm 0.1-1%

CAS number: 71-36-3 EC number: 200-751-6

Classification

Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335, H336

Triazine derivative 0.1-1%

CAS number: 187547-46-2 EC number: 420-390-1 REACH registration number: 01-

0000016703-72-XXXX

Classification

Skin Sens. 1 - H317 Aquatic Chronic 2 - H411

1-METHOXY-2-PROPANOL 0.1-1%

CAS number: 107-98-2 EC number: 203-539-1 REACH registration number: 01-

2119457435-35-0000

Classification

Flam. Liq. 3 - H226 STOT SE 3 - H336

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METHANOL <0.1%

CAS number: 67-56-1 EC number: 200-659-6

Classification

Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370

ETHYL ACETATE <0.1%

CAS number: 141-78-6 EC number: 205-500-4

Classification

Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336

HEPTANE <0.1%

Classification

Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Get medical attention if any discomfort continues. Treat symptomatically.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing. Get medical attention if any discomfort continues.

Ingestion Do not induce vomiting. Get medical attention if any discomfort continues.

Skin contact Wash skin thoroughly with soap and water. Get medical attention if irritation persists after

washing. Take off contaminated clothing and wash it before reuse.

Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15

minutes and get medical attention.

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

General information Treat symptomatically.

Inhalation No specific symptoms known. May cause respiratory irritation.

Ingestion No specific symptoms known. May cause irritation.

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Skin contact Causes skin irritation. May cause sensitisation by skin contact.

Eye contact Causes serious eye damage.

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

Notes for the doctor No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards None.

Hazardous combustion

products

Thermal decomposition or combustion products may include the following substances: Oxides

of carbon. Toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during

firefighting

No specific firefighting precautions known.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. No smoking,

sparks, flames or other sources of ignition near spillage.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Avoid the spillage or runoff

entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable

non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near

spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste

disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions For personal protection, see Section 8.

Advice on general occupational hygiene

Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Wash after use and before eating, smoking and using the toilet. Remove

contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions Keep away from heat, sparks and open flame. Store in tightly-closed, original container.

Protect from freezing and direct sunlight.

Storage class Miscellaneous hazardous material storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

BUTANOL-norm

Long-term exposure limit (8-hour TWA): WEL

Short-term exposure limit (15-minute): WEL 50 ppm 154 mg/m³

Sk

1-METHOXY-2-PROPANOL

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m³ Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m³ Sk

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³ Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³ Sk

ETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm Short-term exposure limit (15-minute): WEL 400 ppm

HEPTANE

Long-term exposure limit (8-hour TWA): WEL 500 ppm

Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit Sk = Can be absorbed through skin. Sk = Can be absorbed through the skin.

0-Cresol, polymer with 1-chloro-2,3 epoxypropane and formaldehyde (CAS: 29690-82-2)

Ingredient comments No exposure limits known for ingredient(s).

PHENYL BIS(2,4,6-TRIMETHYLBENZOYL)-PHOSPHINE OXIDE (CAS: 162881-26-7)

DNEL Workers - Inhalation; Long term, Short term systemic effects: 21 mg/m³

Workers - Dermal; Long term, Short term systemic effects: 3.3 mg/kg Consumer - Inhalation; Long term systemic effects: 5.2 mg/m³ Consumer - Dermal; Long term systemic effects: 1.5 mg/kg Consumer - Oral; Long term systemic effects: 1.5 mg/kg

2,2-BIS(ACRYLOYLOXYMETHYL)BUTYL ACRYLATE (CAS: 15625-89-5)

DNEL Industry - Dermal; Long term systemic effects: 0.8 mg/kg/day

Industry - Inhalation; Long term systemic effects: 16.2 mg/m³ Professional - Dermal; Long term systemic effects: 0.48 mg/kg/day Professional - Inhalation; Long term systemic effects: 4.9 mg/m³ Professional - Oral; Long term systemic effects: 1.39 mg/kg/day

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PNEC - Fresh water; 0.00147 mg/l

marine water; 0.000147 mg/lIntermittent release; 0.0147 mg/l

Sediment; 0.0062 mg/kgSoil; 0.0043 mg/kgSTP; 6.25 mg/l

Triazine derivative (CAS: 187547-46-2)

PNEC Fresh water; .1083 mg/l

marine water; .01083 mg/l Intermittent release; .01083 mg/l

STP; 100 mg/l

Sediment (Freshwater); 35.44 mg/l Sediment (Marinewater); 3.544 mg/l

Soil; 7 mg/l

1-METHOXY-2-PROPANOL (CAS: 107-98-2)

DNEL Industry - Inhalation; Short term : 553.5 mg/m³

Industry - Inhalation; Long term : 369 mg/m³ Industry - Dermal; Long term : 50.6 mg/m³

PNEC - Fresh water; 10 mg/l

- Sediment; 41.6 mg/kg

Soil; 2.47 mg/kgSTP; 100 mg/l

8.2. Exposure controls

Protective equipment





Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Wear eye protection. Wear face protection.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Butyl rubber. Nitrile rubber. Neoprene. Polyvinyl chloride (PVC). Laminate of polyethylene and ethylene vinyl alcohol (PE/EVOH).

Other skin and body protection

Wear apron or protective clothing in case of contact.

Hygiene measures

Do not eat, drink or smoke when using this product. Use engineering controls to reduce air contamination to permissible exposure level. Wash after use and before eating, smoking and using the toilet. Provide eyewash station. Wash contaminated clothing before reuse.

Respiratory protection

No specific requirements are anticipated under normal conditions of use.

Environmental exposure controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Avoid the spillage or runoff entering drains, sewers or watercourses.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid.

Colour Black.

Odour threshold Not determined.

pH Not determined.

Melting point Not determined.

Initial boiling point and range Not determined.

Flash point Not determined.

Evaporation rate Not determined.

Evaporation rate Not determined.

Evaporation factor Not determined.

Flammability (solid, gas) Not determined.

Upper/lower flammability or

explosive limits

Partition coefficient

Not determined.

Not determined.

Other flammability Not determined.

Vapour pressure Not determined.

Vapour density Not determined.

Relative density Not determined.

Bulk density Not determined.

Solubility(ies) Not determined.

Auto-ignition temperature Not determined.

Decomposition Temperature Not determined.

Viscosity > 20.5 mm²/s.

Explosive properties Not considered to be explosive.

Explosive under the influence

of a flame

No

Oxidising properties The mixture itself has not been tested but none of the ingredient substances meet the criteria

for classification as oxidising.

Comments Information given is applicable to the product as supplied.

9.2. Other information

Other information None.

Refractive index Not determined.

Particle size Not applicable.

Molecular weight Not applicable.

Volatility Not determined.

Saturation concentration Not determined.

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Critical temperature Not determined.

Volatile organic compound Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid Keep away from heat, sparks and open flame. Avoid exposure to high temperatures or direct

sunlight.

10.5. Incompatible materials

Materials to avoid Strong alkalis. Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition Thermal decomposition or combustion products may include the following substances: Acrid

products smoke or fumes. Oxides of nitrogen. Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

ATE oral (mg/kg) 7,633.26

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC50) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data No information available.

Human skin model testNo information available.

Extreme pH Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro

Based on available data the classification criteria are not met.

Genotoxicity - in vivo

Based on available data the classification criteria are not met.

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Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met. Does not contain any

substances known to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met. Does not contain any

substances known to be toxic to reproduction.

Reproductive toxicity -

Based on available data the classification criteria are not met. Does not contain any

development

substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

Based on available data the classification criteria are not met. STOT - single exposure

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met. Aspiration hazard

Inhalation No specific health hazards known. May cause respiratory system irritation.

Ingestion No specific health hazards known. May cause discomfort if swallowed.

Skin contact May cause sensitisation by skin contact.

Eye contact Causes serious eye irritation.

Acute and chronic health

hazards

May cause skin sensitisation or allergic reactions in sensitive individuals. May cause chemical

eye burns.

Route of exposure Inhalation Skin absorption Skin and/or eye contact Ingestion

Target organs No specific target organs known.

Medical symptoms Symptoms following overexposure may include the following: Allergic rash. May cause

discomfort if swallowed.

Medical considerations May cause allergic contact eczema.

SECTION 12: Ecological information

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause

long-term adverse effects in the aquatic environment.

12.1. Toxicity

Acute aquatic toxicity

Not determined. Acute toxicity - fish

Acute toxicity - aquatic

invertebrates

Not determined.

Acute toxicity - aquatic plants Not determined.

Acute toxicity -

Not determined.

microorganisms

Not determined. Acute toxicity - terrestrial

Chronic aquatic toxicity

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Chronic toxicity - fish early life Not determined.

stage

Short term toxicity - embryo

Not determined.

and sac fry stages

Chronic toxicity - aquatic

invertebrates

Not determined.

12.2. Persistence and degradability

Persistence and degradability This product is not expected to be readily biodegradable.

Phototransformation Not determined.

Stability (hydrolysis) Not determined.

Biological oxygen demand Not determined.

12.3. Bioaccumulative potential

Chemical oxygen demand

Bioaccumulative potential Not determined.

Partition coefficient Not determined.

12.4. Mobility in soil

Adsorption/desorption

coefficient

Not determined.

Not determined.

Henry's law constant Not determined.

Surface tension Not determined.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste.

Disposal methodsDispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority. Residues and empty containers should be taken care of as

hazardous waste according to local and national provisions.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3082
UN No. (IMDG) 3082
UN No. (ICAO) 3082
UN No. (ADN) 3082

EMJ110 N

14.2. UN proper shipping name

Proper shipping name (ADR/RID)

 ${\tt ENVIRONMENTALLY\ HAZARDOUS\ SUBSTANCE,\ LIQUID,\ N.O.S.\ (CONTAINS\ Cyclic}$

trimethylol propane formal acrylate, Triazine derivative)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Cyclic

trimethylol propane formal acrylate, Triazine derivative)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Cyclic

trimethylol propane formal acrylate, Triazine derivative)

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Cyclic

trimethylol propane formal acrylate, Triazine derivative)

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID classification code M6

ADR/RID label 9

IMDG class 9

ICAO class/division 9

ADN class 9

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group

ICAO packing group

ADN packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-A, S-F

ADR transport category 3

Emergency Action Code •3Z

Hazard Identification Number 90

(ADR/RID)

Tunnel restriction code (-)

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

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Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment

Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

Health and Safety at Work etc. Act 1974 (as amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives

91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

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 (as

amended).

Health and environmental

listings

None of the ingredients are listed.

Authorisations (Annex XIV

Regulation 1907/2006)

Restrictions (Annex XVII

Regulation 1907/2006)

No specific authorisations are known for this product.

No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification procedures according to Regulation (EC)

: Calculation method.

1272/2008

Issued by HS&E Manager.

Revision date 12/07/2019

Revision 1

SDS number 20839

EMJ110 N

Hazard statements in full H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H311 Toxic 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.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H370 Causes damage to organs.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.