

SAFETY DATA SHEET

EMJ110 W

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 W

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

Identified uses Printing ink.

Uses advised against No 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 3 - H412

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. The product contains organic solvents.

Environmental The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements	<p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p>
Contains	<p>HEXAMETHYLENE DIACRYLATE, Dipropylene glycol diacrylate, 2-propenoic acid, 2-(2-Vinyloxyethoxy) ethyl ether ester, 2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester, Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, BUTANOL-norm, Triazine derivative, PHENYL BIS(2,4,6-TRIMETHYLBENZOYL)-PHOSPHINE OXIDE, 2-phenoxyethyl acrylate</p>
Supplementary precautionary statements	<p>P261 Avoid breathing vapour/ spray.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>

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

HEXAMETHYLENE DIACRYLATE	30-60%
CAS number: 13048-33-4 EC number: 235-921-9	
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
Dipropylene glycol diacrylate	5-10%
CAS number: 57472-68-1	
Classification	
Skin Irrit. 2 - H315	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
2-propenoic acid, 2-(2-Vinyloxyethoxy) ethyl ether ester	5-10%
CAS number: 86273-46-3	
Classification	
Acute Tox. 4 - H302	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	

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2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester 1-5%		
CAS number: 84434-11-7	EC number: 282-810-6	
Classification Skin Sens. 1B - H317 Aquatic Chronic 2 - H411		
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 1-5%		
CAS number: 75980-60-8	EC number: 278-355-8	
Classification Skin Sens. 1B - H317 Repr. 2 - H361fd Aquatic Chronic 2 - H411		
Triazine derivative 1-5%		
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		
BUTANOL-norm 1-5%		
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		
PHENYL BIS(2,4,6-TRIMETHYLBENZOYL)-PHOSPHINE OXIDE 0.1-1%		
CAS number: 162881-26-7	EC number: 423-340-5	
Classification Skin Sens. 1 - H317 Aquatic Chronic 4 - H413		
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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2-phenoxyethyl acrylate		0.1-1%
CAS number: 48145-04-6	REACH registration number: 01-2119980532-35-0001	
Classification		
Skin Sens. 1A - H317		
Repr. 2 - H361d		
Aquatic Chronic 2 - H411		
METHANOL		0.1-1%
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		

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.
Skin contact	May cause sensitisation by skin contact.
Eye contact	Causes serious eye damage.

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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

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.

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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

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

Sk = Can be absorbed through the skin.

HEXAMETHYLENE DIACRYLATE (CAS: 13048-33-4)

DNEL	Industry - Dermal; Long term systemic effects: 2.77 mg/kg/day Industry - Inhalation; Long term systemic effects: 24.88 mg/m ³ Professional - Dermal; Long term systemic effects: 1.66 mg/m ³ Professional - Oral; Long term systemic effects: 2.08 mg/kg/day Professional - Inhalation; Long term systemic effects: 7.24 mg/m ³
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PNEC	- Fresh water; 0.0015 mg/l - Marine water; 0.00015 mg/l - Sediment; 0.0137 mg/kg - Soil; 0.00397 mg/kg - STP; 2.7 mg/l
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Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (CAS: 75980-60-8)

DNEL	Industry - Inhalation; Long term systemic effects: 3.5 mg/m ³ Industry - Dermal; Long term systemic effects: 1 mg/m ³
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PNEC	- Fresh water; 0.00353 mg/l - Marine water; 0.000353 mg/l - Intermittent release; 0.0353 mg/l - Sediment (Freshwater); 0.29 mg/kg - Sediment (Marinewater); 0.029 mg/kg - Soil; 0.0557 mg/kg
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Triazine derivative (CAS: 187547-46-2)

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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/m ³
	Industry - Inhalation; Long term : 369 mg/m ³
	Industry - Dermal; Long term : 50.6 mg/m ³
PNEC	- Fresh water; 10 mg/l
	- Sediment; 41.6 mg/kg
	- Soil; 2.47 mg/kg
	- STP; 100 mg/l

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

DNEL	Workers - Inhalation; Long term, Short term systemic effects: 21 mg/m ³
	Workers - Dermal; Long term, Short term systemic effects: 3.3 mg/kg
	Consumer - Inhalation; Long term systemic effects: 5.2 mg/m ³
	Consumer - Dermal; Long term systemic effects: 1.5 mg/kg
	Consumer - Oral; Long term systemic effects: 1.5 mg/kg

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.

SECTION 9: Physical and Chemical Properties

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9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Green.
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 factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	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.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Kinematic viscosity $\leq 20.5 \text{ mm}^2/\text{s}$.
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.
Critical temperature	Not determined.

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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 products Thermal decomposition or combustion products may include the following substances: Acrid smoke or fumes. Oxides of carbon. Oxides of nitrogen.

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) 12,248.46

Acute toxicity - dermal

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

ATE dermal (mg/kg) 238,891.54

Acute toxicity - inhalation

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

ATE inhalation (gases ppm) 557,413.6

ATE inhalation (vapours mg/l) 2,388.92

ATE inhalation (dusts/mists mg/l) 398.15

Skin corrosion/irritation

Animal data No information available.

Human skin model test No 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.

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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.

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 - development Based on available data the classification criteria are not met. Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

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

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

Acute toxicity - fish Not determined.

Acute toxicity - aquatic invertebrates Not determined.

Acute toxicity - aquatic plants Not determined.

Acute toxicity - microorganisms Not determined.

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Acute toxicity - terrestrial Not determined.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage Not determined.

Short term toxicity - embryo and sac fry stages Not determined.

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.

Biodegradation Not determined.

Biological oxygen demand Not determined.

Chemical oxygen demand Not determined.

12.3. Bioaccumulative potential

Bioaccumulative potential Not determined.

Partition coefficient Not determined.

12.4. Mobility in soil

Adsorption/desorption coefficient 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 methods Dispose 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

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

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Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

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 (Title VII Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006)

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

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Classification procedures according to Regulation (EC) 1272/2008 : Calculation method.

Issued by HS&E Manager.

Revision date 07/02/2019

Revision 2

Supersedes date 12/12/2018

SDS number 20802

Hazard statements in full

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- 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.
- H361d Suspected of damaging the unborn child.
- H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
- H370 Causes damage to organs .
- 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.