



SDS according to Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II-EU

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

Date issued 31.07.2014

1.1. Product identifier

Product name EcoLogic

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

Use of the substance/preparation Waterborne wood floor finish.

1.3. Details of the supplier of the safety data sheet

Company name Arboritec AB
 Postal address Olof Wijksväg 9
 Postcode SE-444 65
 City Jörlanda
 Country Sverige
 Tel 0303-563 30
 Fax 0303-563 32
 E-mail post@arboritec.com
 Website http://www.arboritec.com
 Contact person Jörgen Kaldemark

1.4. Emergency telephone number

Emergency telephone In case of medical emergency call:112

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

2.2. Label elements

Composition on the label Dpropylenglycolmonomethylether:2,5 - 5 %, Dipropylenglykol n-butyleter:2,5 - 5

2.3. Other hazards

Other hazards When spray applying see section 8.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Dpropylenglycolmonomethylether	CAS no.: 34590-94-8 EC no.: 252-104-2 Registration number: 02-2119666108-35-0000		2,5 - 5 %
Dipropylenglykol n-butyleter	CAS no.: 29911-28-2 EC no.: 249-951-5 Registration number: 01-2119451543-42-0000		2,5 - 5

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.
Inhalation	Use with adequate ventilation.
Skin contact	Remove/Take off immediately all contaminated clothing. IF ON SKIN: Wash with plenty of soap and water. Do NOT use solvents or thinners.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Recommended extinguishing media : alcohol resistant foam, CO ₂ , powders, water spray. Do not use water jet.
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5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Fire will produce dense black smoke. Decomposition products can be hazardous. At high temperatures create: Carbon monoxide (CO), carbon dioxide (CO ₂), smoke, nitrogen gases (NO _x).
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5.3. Advice for firefighters

Personal protective equipment	Wear respiratory protection.
Other Information	Eliminate all ignition sources if safe to do so. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	See section 7 and 8.
Personal protection measures	In case of inadequate ventilation wear respiratory protection. Wear fire / flame resistant / retardant clothing. Use personal protective equipment as required. Wear cold insulating gloves / face shield / eye protection. Wear protective gloves / protective clothing / eye protection / face protection. Avoid breathing dust / fume / gas / mist / vapours / spray. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

6.2. Environmental precautions

Environmental precautionary measures	Collect spillage. Avoid release to the environment. If the product contaminates lakes, rivers or sewers, inform appropriate authorities in accordance with local regulations.
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6.3. Methods and material for containment and cleaning up

Cleaning method	Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent; avoid use of solvents.
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6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Avoid spilling, skin- and eye contact. Avoid breathing dust / fume / gas / mist / vapours / spray. Avoid breathing dust.
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Protective Safety Measures

Protective Safety Measures	Smoking, eating and drinking should be prohibited in application area. Remove contaminated clothing and protective gear before you get to an area where meals are taken.
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Additional information	For personal protection see Section 8. Never use pressure to empty : container is not a pressure vessel.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	Keep only in original container. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Protect from sunlight. Store in a dry place. Tillse att gällande arbetsmiljölagstiftning följs.
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Conditions To Avoid	Keep away from heat / sparks / open flames / hot surfaces. — No smoking. Protect from sunlight. Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. Prevent unauthorized access.
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Conditions for safe storage

Storage Temperature	Value: 5-25 Celsius
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7.3. Specific end use(s)

Recommendations	Do not handle until all safety precautions have been read and understood.
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Specific end users

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure limit values

Substance	Identification	Value	TWA Year
Dpropylenglycolmonomethylether	CAS no.: 34590-94-8	8-hour TWA: 50 ppm	
	EC no.: 252-104-2 Registration number: 02-2119666108-35-0000	AFS 2011:18 (Sweden 12/2011). Absorbed through the skin 8-hour TWA: 300 mg/m3 AFS 2011:18 (Sweden 12/2011). Absorbed through the skin 15 min.: 75 ppm AFS 2011:18 (Sweden 12/2011). Absorbed through the skin	
Dipropylenglykol n-butyleter	CAS no.: 29911-28-2 EC no.: 249-951-5 Registration number: 01-2119451543-42-0000	8-hour TWA: 10 mg/m3 Dow IHG NGV aerosol	

Substance	Dpropylenglycolmonomethylether
Technical measures to prevent exposure	Airborne gas and dust concentrations should be kept to a minimum and under the existing limits (see above). Possibly use an exhaust in case the air in the work room is not enough. Provide clearly visible signs of eye shower and emergency showers.
Recommended type of equipment	Recommended: A, Class 1 (low Capacity), brown
Skin-/ hand protection, long term	See the manufacturer's instructions.

contact	
Suitable gloves type	Rekommenderad: Nitril
Eye protection	At the risk of splashing, close-fitting goggles or face shield.
Specific hygiene measures	The exposed area of the body should be washed at every pause when use the product, and after work. Wash always hands, forearms and face.
Environmental exposure controls	No special requirements.
Exposure control comments	Professionals are covered by safety legislation on maximum concentrations of exposure.
Substance	Dipropylenglykol n-butyleter
Tasks needing respiratory protection	Respiratory protection should be worn when there is risk of exposure abandoned or recommended occupational exposure limit. If such limits do not exist, wear respiratory protection when adverse effects, such as irritation of the respiratory tract or discomfort experienced, or where the risk assessment indicates that necessary. Under most conditions, no respiratory protection should be needed; if discomfort is experienced, use an approved respirator. Use the following CE approved air-purifying respirator: air-purifying respirator towards Organic vapor, type A (boiling point above 65 C)
Filter apparatus type	air-purifying respirator towards Organic vapor, type A (boiling point above 65 C)
Additional respiratory protection measures	Use local exhaust ventilation, or other technical controls to maintain air levels below or recommended exposure limits. If the exposure limit is exist, good general ventilation should be enough
Skin-/ hand protection, long term contact	Use gloves chemically resistant to this material when prolonged or repeated contact.
Required properties for hand protection	Use chemical resistant gloves classified under Standard SS-EN 374: Protective gloves against chemicals and micro-organisms.
Suitable gloves type	Butyl rubber, Etylvinylalkoholacetatlaminat (EVAL), natural rubber (latex), Neoprene, Nitrile / butadiene rubber (NBR or nitrill), Polyvinyl chloride (PVC or vinyl), Viton.
Reference to relevant standard	EE-EN 374
Wear duration for occasional contact	If only short contact is expected, use gloves with protection class 1 or higher (breakthrough time greater than 10 minutes according to the standard SS-EN 374).
Wear duration for constant contact	If prolong or repeated contact, use gloves with protection class of 4 or higher (breakthrough time greater than 120 min according to the standard SS-En 374)
Additional hand protection measures	Selection of a specific glove for a particular operation and duration of use should also be assessed on the basis of factors such as: other chemicals being handled, physical requirements (protection against cutting or stick injuries, dexterity, thermal protection), potential body reactions to glove materials, as well as instructions and specifications provided by the gloves provider.
Eye protection	Use goggles.
Required Properties	The goggles should meet the standard EN 166 or equivalent.
Safety measures for consumer use of the chemical	Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating. Wear clean, body-covering protection clothing.

DNEL / PNEC from substances

Substance	Dipropylenglykol n-butyleter
DNEL	Group: Worker Exposure route: Dermal Exposure frequency: Short term (acute) Type of effect: Systemic effect Remarks: No applicable
DNEL	Group: Worker

	Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 1,1 mg/kg/body weight/day
DNEL	Group: Worker Exposure route: Inhalation Exposure frequency: Short term (acute) Type of effect: Local effect Remarks: Not applicable.
DNEL	Group: Worker Exposure route: Dermal Exposure frequency: Short term (acute) Type of effect: Local effect Remarks: Not applicable.
DNEL	Group: Worker Exposure route: Oral Exposure frequency: Short term (acute) Type of effect: Systemic effect Remarks: Not applicable.
DNEL	Group: Worker Exposure route: Inhalation Exposure frequency: Short term (acute) Type of effect: Systemic effect Remarks: Not applicable.
DNEL	Group: Consumer Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Local effect Remarks: Not applicable.
DNEL	Group: Consumer Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Local effect Remarks: Not applicable.
DNEL	Group: Consumer Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 10 mg/m3
DNEL	Group: Consumer Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 3 mg/kg/body weight/day
DNEL	Group: Consumer Exposure route: Inhalation Exposure frequency: Short term (acute) Type of effect: Local effect Remarks: Not applicable.
DNEL	Group: Consumer Exposure route: Dermal Exposure frequency: Short term (acute) Type of effect: Local effect Remarks: Not applicable.
DNEL	Group: Consumer Exposure route: Inhalation Exposure frequency: Short term (acute)

	Type of effect: Systemic effect Remarks: Not applicable.
DNEL	Group: Consumer Exposure route: Dermal Exposure frequency: Short term (acute) Type of effect: Systemic effect Remarks: Not applicable.
DNEL	Group: Worker Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Local effect Remarks: Not applicable.
DNEL	Group: Worker Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Local effect Remarks: Not applicable.
DNEL	Group: Worker Exposure route: Oral Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 7,5 mg/kg/body weight/day
DNEL	Group: Worker Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 1,2 mg/m ³
PNEC	Group: Consumer Exposure route: Saltwater sediments Value: 0,296 mg/kg d.w.
PNEC	Group: Consumer Exposure route: Freshwater sediments Value: 2,96 mg/kg d.w.
PNEC	Group: Consumer Exposure route: Saltwater Value: 0,519 mg/l
PNEC	Group: Consumer Exposure route: Freshwater Value: 0,519 mg/l
PNEC	Group: Consumer Exposure route: Soil Value: 0,287 mg/kg d.w.

8.2. Exposure controls

Precautionary measures to prevent exposure

Appropriate engineering controls	Use with adequate ventilation. If possible this should be achieved by local extraction and good exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory equipment.
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Respiratory protection

Respiratory protection	Respiratory protection with gas filter (brown A) must be used if air concentration exceeds acceptable level (OEL).
Mask type	When spraying, use half- or full face mask with filter P2 (IIB) to spray.

Hand protection

Hand protection	Wear cold insulating gloves / face shield / eye protection.
Skin-/ hand protection, long term	For prolonged or repeated contact use gloves made of butyl rubber.

contact	
Suitable materials	Barrier creams may help to protect the skin, but they should however not be used once exposure has occurred.

Eye / face protection

Suitable Eye Protection	Wear cold insulating gloves / face shield / eye protection.
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Skin protection

Skin protection (except hands)	Wear fire / flame resistant / retardant clothing.
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Exposure controls

Safety measures for consumer use of the chemical	Read label before use.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Odour	Faint.
Comments, Odour limit	Not applicable.
Comments, pH (as supplied)	Not determined.
Comments, pH (aqueous solution)	Not determined.
Comments, Melting point / melting range	Not determined.
Comments, Boiling point / boiling range	Not determined.
Flash point	Value: > 100
Comments, Evaporation rate	Not determined.
Flammability (solid, gas)	Not determined
Lower explosion limit with unit of measurement	0,8%
Upper explosion limit with units of measurement	9,4%
Comments, Vapour pressure	Not determined.
Comments, Vapour density	Not determined.
Specific gravity	Value: 1,05 g/ml Method of testing: ASTM 6450 Test temperature: 23 °C
Solubility in water	unlimited.
Comments, Partition coefficient: n-octanol / water	Not applicable.
Comments, Decomposition temperature	Not determined
Comments, Viscosity	Ej bestämd. Påverkar inte bedömningen.
Explosive properties	Not explosive.
Oxidising properties	Not Oxidising.

9.2. Other information

Content Of Voc	Value: 63 g/l Comments: Initial boiling point less than or equal to 250°C
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No reactive.
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10.2. Chemical stability

Stability	Stable under recommended storage and handling conditions (see section 7).
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No dangerous if handled according to Technical Information.

10.4. Conditions to avoid

Conditions to avoid No applicable.

10.5. Incompatible materials

Materials to avoid Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reaction.

10.6. Hazardous decomposition products

Hazardous decomposition products When exposed to high temperature may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological data for substances

Substance	Dpropylenglycolmonomethylether
LD50 oral	Value: 5,5 mL/kg Animal test species: Rat
LD50 dermal	Value: 10 ml/kg Animal test species: Rabbit
Comments	Neurotoxic effects: This product contains solvents, which can have an effect on the nervous system. Symptoms of neurotoxicity may include: loss of appetite, headache, dizziness, ringing in the ears, tingling sensation of the skin, cold sensitivity, seizures, difficulty concentrating, tiredness, etc.. Repeated exposure to solvents can result in the degradation of the skin's natural layer of fat. The skin is then exposed to uptake of harmful substances, such as allergens.
Substance	Dipropylenglykol n-butyleter
LD50 oral	Value: 3700 mg/kg Animal test species: Rat
LD50 dermal	Value: 2000 mg/kg Animal test species: Rat
LC50 inhalation	Value: > 2.04 mg/l Animal test species: Rat Duration: 4 h Test reference: Aerosol Comments: No mortality was observed at this concentration.
Acute toxicity	Inhalation: Prolonged exposure is not expected to cause adverse effects. Narcotic effect was not observed based on available data. Irritation of the respiratory tract has not been observed, based on available data. Skin: Prolonged skin contact is unlikely to result in absorption of harmful amounts. Ingestion: Low toxicity at Ingestion. Small amounts (eg. drops of stönk) during normal handling is likely to cause no harm: ingestion of large amounts can be dangerous.
CMR effects	Reproductive toxicity: Did not cause birth defects or any other fetal effects in laboratory experiments. In animal studies the product did not affect reproduction.
STOT-repeated exposure	In animals, effects have been reported on the following organs: effects on the kidney have been observed in male rats. These effects are considered to be species-specific and not likely in humans.
Aspiration hazard	Based on physical properties, not likely to be an aspiration hazard.
Eye damage or irritation other info	May cause slight eye irritation. May cause slight corneal injury.

Respiratory sensitisation other info	No relevant data.
Skin sensitisation, other info	No allergic skin reactions when tested in humans and in guinea pigs.
Carcinogenicity	Toxicity type: Kronisk Method: Orsakade inte cancer i djurstudier. Route of exposure: Inandning
Assessment Germ Cell Mutagenicity, Classification	In vitro gene toxicity tests were negative. Genotoxicity Experiments on animals were negative.

Potential acute effects

Inhalation	May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	No information is available.
Eye contact	No information available.
Ingestion	Ingestion may cause nausea and vomiting.
Skin corrosion / irritation, other information	No information available.
Aspiration hazard, comments	When applying see section 8.
Eye damage or irritation other info	If splashed in the eyes, the liquid may cause irritation and reversible damage.

Delayed effects / repeated exposure

General respiratory or skin sensitisation	Prolonged or repeated contact may defat the skin, resulting in non-allergic contact eczema and absorption through the skin.
STOT-single exposure	No information available.
STOT-repeated exposure	No information available.

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity human experience	No information is available.
Germ Cell Mutagenicity, human experience	No information available.
Reproductive toxicity	No information available.

SECTION 12: Ecological information

12.1. Toxicity

Toxicological data for substances

Substance	Dipropylenglykol n-butyleter
Acute aquatic, fish	Value: 841 mg/l Method of testing: LC50 Species: Guppy (Poecilia reticulata) Duration: 96 h Test reference: Statistisk
Acute aquatic, Daphnia	Value: > 1000 mg/l Method of testing: LC50 Species: Daphnia magna Duration: 48 h Test reference: immobilisation.
Aquatic, comments	This material is not classified as dangerous to aquatic organisms (LC50 / EC50 / IC50 for the sensitive species is higher than 100 mg / l).
Water solubility	Value: 4 %
Biodegradability	Comments: Material is readily biodegradable. Passes OECD test for biodegradability. The material is completely biodegradable. More than 70% mineralization in OECD test for natural biodegradation.
Distribution coefficient	Value: 1,523 Comments: Uppskattad.
Bioconcentration factor (BCF)	Value: < 100 Comments: Bioconcentration potential is low.
Result of PBT assessment for the substance	This substance is not considered to be persistent, bioaccumulative and toxic (PBT).

vPvB evaluation results	The substance is not considered to be very persistent and very bioaccumulative (vPvB).
Other negative effects	This substance is not in Annex I Regulation (EC) 2037/2000 for substances that deplete the ozone layer.
Chemical safety report (CSR) completed	No

12.2. Persistence and degradability

Persistence and degradability description	Not determined.
Comments, Biodegradability	(2-metoximetyloxi)propanol är mycket biologiskt nedbrytbar.

12.3. Bioaccumulative potential

Bioaccumulative potential	(2-metoximetyloxi)propanol Not Bioaccumulative.
Comments, BCF	Log Pow=0,0646

12.4. Mobility in soil

Mobility	Not applicable.
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12.5. Results of PBT and vPvB assessment

PBT assessment results	Not classified as PBT / vPvB of current EU criteria.
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12.6. Other adverse effects

Other adverse effects / Remarks	None known.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Avoid release to the environment. Collect spillage. Wastes and empty containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.
Product classified as hazardous waste	No
EWC waste code	EWC: 08 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS, National waste code: 01, National wastegroup: 12

SECTION 14: Transport information

14.1. UN number

Comments	Not dangerous goods. Transport in accordance with national law and ADR for road, RID for rail, IMDG for sea and ICAO / IATA for air. For complete information on transport, see transport document.
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14.2. UN proper shipping name

ADR	---
RID	---
IMDG	---
ICAO/IATA	---

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

IMDG Marine pollutant	No
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14.6. Special precautions for user

14.7. Transport in bulk according to 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

Legislation and regulations	<p>The labeling of the product according to EC directives 67/548/EEC, 1999/45/EC, see section 2.</p> <p>Classification and labeling of substances under Directive 67/548/EC, 1999/45/EC, see section 3.</p> <p>Classification and labeling of substances according to Regulation (EC) 1272/2008 (CLP) is in section 3.</p> <p>Safety data sheet is designed according to EU Commission Regulation No. 1907/2006.</p>
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15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

Version	1
Responsible for safety data sheet	Arboritec AB
Comments	<p>The information of this SDS is based on the present state of our knowledge and on current EU and national laws. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfill the demand laid down in the local rules and legislation. The information in this SDS is meant as a description of the safety requirements of our product : it is not to be considered as a guarantee of the products' properties.</p>