

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

Product form : Mixture  
 Product name : Pavestone Driveway Cleaner  
 UFI :  
 Product code :  
 Type of product : Detergent

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

Main use category : Professional use, Industrial use  
 Industrial/Professional use spec : For Industrial and Professional Use Only  
 Use of the substance/mixture : Cleaning/washing agents and additives

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet**

Pavestone UK Limited, Westington Quarry, Chipping Campden,  
 Gloucestershire GL55 6EG.

Tel: +44 (0) 1386 848650  
 Email: enquiries@pavestone.co.uk  
 www.pavestone.co.uk

**1.4. Emergency telephone number**

Emergency number +44 (0) 1386 848650 Office Hours: Monday-Friday 8.30am - 5.30pm

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals
United Kingdom	NHS 111/NHS 24/NHS Direct		111 0845 4647	or call a doctor

**SECTION 2: Hazards identification**
**2.1. Classification of the substance or mixture**
**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Skin corrosion/irritation, Category 1, Sub-Category 1B H314  
 Serious eye damage/eye irritation, Category 1 H318  
 Hazardous to the aquatic environment – Acute Hazard, Category 1 H400  
 Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411  
 Full text of H- and EUH-statements: see section 16

**Adverse physicochemical, human health and environmental effects**

Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life with long lasting effects.

## 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

GHS09

Signal word (CLP) :

Danger

Contains :

sodium hypochlorite

Hazard statements (CLP) :

H314 - Causes severe skin burns and eye damage.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P102 - Keep out of reach of children.

P261 - Avoid breathing mist, spray, vapours, fume.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Immediately call a POISON CENTER, a doctor.

P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER, a doctor.

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER, a doctor.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P391 - Collect spillage.

P405 - Store locked up.

EUH-statements :

EUH031 - Contact with acids liberates toxic gas.

## 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sodium hypochlorite	CAS-No.: 7681-52-9 EC-No.: 231-668-3 EC Index-No.: 017-011-00-1	$\geq 5 - < 10$	Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
C14 amine oxide	CAS-No.: 3332-27-2 EC-No.: 222-059-3	$< 1$	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

**Specific concentration limits:**

Name	Product identifier	Specific concentration limits
sodium hypochlorite	CAS-No.: 7681-52-9 EC-No.: 231-668-3 EC Index-No.: 017-011-00-1	( 5 ≤C ≤ 100) EUH031

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

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

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

Treat symptomatically.

**SECTION 5: Firefighting measures**
**5.1. Extinguishing media**

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

**5.2. Special hazards arising from the substance or mixture**

Hazardous decomposition products in case of fire : Toxic fumes may be released.

**5.3. Advice for firefighters**

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**
**6.1.1. For non-emergency personnel**

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe vapours, spray.

**6.1.2. 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".

**6.2. Environmental precautions**

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorised 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

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe vapours, spray. Wear personal protective equipment.
Hygiene measures	: Wash contaminated clothing before reuse. 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

Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.
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### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

##### Personal protective equipment:

Corrosionproof clothing. Gloves. Protective goggles. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Personal protective equipment symbol(s):



### 8.2.2.1. Eye and face protection

**Eye protection:**

Chemical goggles or safety glasses

### 8.2.2.2. Skin protection

**Skin and body protection:**

Wear suitable protective clothing. Corrosive chemical-resistant protective suit

**Hand protection:**

Protective gloves. Wear chemically resistant gloves tested to EN374

### 8.2.2.3. Respiratory protection

**Respiratory protection:**

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

Respiratory protection			
Device	Filter type	Condition	Standard
Full face mask, Reusable half mask	Type B - Inorganic gases (hydrogen sulfide, chlorine, hydrogen cyanide), Type P3	Vapour protection, Protection for Liquid particles	EN 143

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. 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	: light yellow.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

## 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas.

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

Acids.

### 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 toxicological effects

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

<b>C14 amine oxide (3332-27-2)</b>	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
<b>sodium hypochlorite (7681-52-9)</b>	
LD50 oral rat	1100 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 20000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other:16 CFR 1500.40
LC50 Inhalation - Rat (Vapours)	> 10.5 mg/l

Skin corrosion/irritation : Causes severe skin burns.

<b>sodium hypochlorite (7681-52-9)</b>	
pH	11

Serious eye damage/irritation : Causes serious eye damage.

<b>sodium hypochlorite (7681-52-9)</b>	
pH	11

Respiratory or skin sensitisation : Not classified  
 Germ cell mutagenicity : Not classified  
 Carcinogenicity : Not classified

<b>sodium hypochlorite (7681-52-9)</b>	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
<b>C14 amine oxide (3332-27-2)</b>	
NOAEL (oral, rat, 90 days)	40 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Aspiration hazard	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.
Not rapidly degradable	

<b>C14 amine oxide (3332-27-2)</b>	
LC50 - Fish [1]	10.3 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
LC50 - Fish [2]	2.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
NOEC (chronic)	0.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.42 mg/l Test organisms (species): Pimephales promelas Duration: '302 d'
<b>sodium hypochlorite (7681-52-9)</b>	
LC50 - Fish [1]	0.033 – 0.097 mg/l Source: International Uniform Chemical Information Database
EC50 - Crustacea [1]	141 µg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	35 µg/l Test organisms (species): Ceriodaphnia dubia
EC50 72h - Algae [1]	0.0365 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.0183 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available






### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
HP Code	: HP8 - "Corrosive:" waste which on application can cause skin corrosion. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

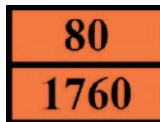
ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
UN 1760	UN 1760	UN 1760	UN 1760	UN 1760
<b>14.2. UN proper shipping name</b>				
CORROSIVE LIQUID, N.O.S. (sodium hypochlorite ; C14 amine oxide)	CORROSIVE LIQUID, N.O.S. (sodium hypochlorite)	Corrosive liquid, n.o.s. (sodium hypochlorite)	CORROSIVE LIQUID, N.O.S. (sodium hypochlorite)	CORROSIVE LIQUID, N.O.S. (sodium hypochlorite)
<b>Transport document description</b>				
UN 1760 CORROSIVE LIQUID, N.O.S. (sodium hypochlorite ; C14 amine oxide), 8, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 1760 CORROSIVE LIQUID, N.O.S. (sodium hypochlorite), 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1760 Corrosive liquid, n.o.s. (sodium hypochlorite), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 1760 CORROSIVE LIQUID, N.O.S. (sodium hypochlorite), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 1760 CORROSIVE LIQUID, N.O.S. (sodium hypochlorite), 8, III, ENVIRONMENTALLY HAZARDOUS
<b>14.3. Transport hazard class(es)</b>				
8	8	8	8	8
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				



**14.6. Special precautions for user****Overland transport**

Classification code (ADR)	: C9
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1, TP28

Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Hazard identification number (Kemler No.)	: 80
Orange plates	:



Tunnel restriction code (ADR)	: E
EAC code	: 2X
APP code	: B

**Transport by sea**

Special provisions (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
Properties and observations (IMDG)	: Causes burns to skin, eyes and mucous membranes.

**Air transport**

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L

**Inland waterway transport**

Classification code (ADN)	: C9
Special provisions (ADN)	: 274
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0

**Rail transport**

Classification code (RID)	: C9
Special provisions (RID)	: 274
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1, TP28
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80

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

Not applicable

**SECTION 15: Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
**15.1.1. EU-Regulations**

Other information, restriction and prohibition regulations : The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) N° 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request or at the request of a detergent manufacturer.

**REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	Black Spot & Algae Remover ; sodium hypochlorite	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	Black Spot & Algae Remover ; sodium hypochlorite	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

**REACH Annex XIV (Authorisation List)**

Contains no REACH Annex XIV substances

**REACH Candidate List (SVHC)**

Contains no substance on the REACH candidate list

**PIC Regulation (Prior Informed Consent)**

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

**POP Regulation (Persistent Organic Pollutants)**

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

**Ozone Regulation (1005/2009)**

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

**Detergent Regulation (648/2004)**

Ingredient data sheet		
Component	CAS-No.	%
AQUA	7732-18-5	≥10%
SODIUM HYPOCHLORITE	7681-52-9	1 - 10%
MYRISTAMINE OXIDE	3332-27-2	<0.1%

**Explosives Precursors Regulation (2019/1148)**

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

**Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

**15.1.2. National regulations**

No additional information available

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

**SECTION 16: Other information****Indication of changes:**

Modified.

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes version of	Modified	
	Revision date	Modified	
	Type of product	Added	
15.1	Other information, restriction and prohibition regulations	Added	

**Abbreviations and acronyms:**

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
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
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
OEL	Occupational Exposure Limit
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
SDS	Safety Data Sheet

**Abbreviations and acronyms:**

vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

**Full text of H- and EUH-statements:**

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
EUH031	Contact with acids liberates toxic gas.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
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.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2

The classification complies with : ATP 12

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.