



Multi-purpose Kettle & Iron Descaler

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.
Issue date: 23/04/2024 Version: 1.0

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

1.1. Product identifier

Product form : Substance
Substance name : Multi-purpose Kettle & Iron Descaler
Product code : KID
Type of product : Detergent
Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Consumer use
Use of the substance/mixture : Descaler for machines and kitchen appliances

1.2.2. Uses advised against

Restrictions on use : All other uses not recommended above

1.3. Details of the supplier of the safety data sheet

Distributor

HG UKI Ltd
Weston Business Centre
Parsonage Road
CM22 6PU Takeley – Essex
United Kingdom
T +44 (0) 345 230 4200
www.ecozone.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB CLP (SI 2019:720 as amended)

Serious eye damage/eye irritation, Category 2 H319
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H335

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

Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes serious eye irritation.

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2.2. Label elements

Labelling according to GB CLP (SI 2019:720 as amended)

Hazard pictograms (GB CLP) :



GHS07

Signal word (GB CLP) :

Warning

Hazard statements (GB CLP) :

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

Precautionary statements (GB CLP) :

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P261 - Avoid breathing dust.

P264 - Wash face thoroughly after handling.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 - Dispose of contents and container to an approved waste disposal plant.

Child-resistant fastening :

Not applicable

Tactile warning :

Not applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of UK REACH regulation, Annex XIII

This substance/mixture does not meet the vPvB criteria of UK REACH regulation, Annex XIII

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

The substance is not included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Multi-purpose Kettle & Iron Descaler

Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
citric acid	CAS-No.: 77-92-9 EC-No.: 201-069-1 UK Index-No.: 607-750-00-3 REACH-no: 01-2119457026-42	≥ 90	STOT SE 3, H335 Eye Irrit. 2, H319

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

3.2. Mixtures

Not applicable

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. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact :

Wash skin with plenty of water.

First-aid measures after eye contact :

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion :

Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

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.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard. Warning. May form explosive dust-air mixture if dispersed.
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO ₂).

5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Avoid dust to spread. Avoid breathing dust.

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".
Emergency procedures	: Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Avoid formation of dust.
Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use. Dust may form flammable and explosive mixture with air.
Precautions for safe handling	: Keep containers closed. Use only outdoors or in a well-ventilated area. Avoid breathing dust. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Remove contaminated clothes. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Use good housekeeping practices to avoid rendering dust airborne.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Keep only in original container. Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Incompatible materials	: Strong acids. Strong bases. Strong oxidizers. Sodium nitrite. Potassium nitrite.
Packaging materials	: Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

citric acid (77-92-9)	
PNEC (Water)	
PNEC aqua (freshwater)	0.44 mg/l
PNEC aqua (marine water)	0.044 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	34.6 mg/kg dwt
PNEC sediment (marine water)	3.46 mg/kg dwt
PNEC (Soil)	
PNEC soil	33.1 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1000 mg/l

8.1.5. Control banding

No additional information available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide adequate ventilation to minimize dust concentrations. Prevent the build-up of electrostatic charge. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment - Report preview:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection - Report preview:

Safety glasses with side shields

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses with side shields	Normal use conditions		EN 166

8.2.2.2. Skin protection

Skin and body protection - Report preview:

Long sleeved protective clothing. Chemical resistant safety shoes

Skin and body protection	
Type	Standard
Long sleeved protective clothing	
Chemical resistant safety shoes	EN ISO 20345

Hand protection - Report preview:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,35		EN ISO 374
Disposable gloves	Butyl rubber	6 (> 480 minutes)	0,5		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection - Report preview:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
Dust mask	FFFP2	Dust protection	EN 143

8.2.2.4. Thermal hazards

No additional information available

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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	: Solid
Colour	: White.
Appearance	: Crystalline.
Odour	: Odourless.
Odour threshold	: Not available
Melting point	: 153 °C
Freezing point	: Not applicable
Boiling point	: Decomposes before boiling
Flammability	: The product is not flammable Non flammable.
Explosive properties	: Product is not explosive.
Oxidising properties	: Not oxidising.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 170 °C
pH	: 1.7 at 20 °C
pH solution concentration	: 52 %
Viscosity, kinematic	: Not applicable
Solubility	: Water: 590 g/l at 20 °C Ethanol: Soluble
Partition coefficient n-octanol/water (Log Kow)	: 0.2 – 1.8
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.665 g/cm ³ at 20 °C
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

citric acid (77-92-9)

Boiling point	decomposes
Flash point	100 °C Source: Akron Univ
Auto-ignition temperature	1010 °C Source: ICSC
Vapour pressure	0.0000221 Pa Temp.: 25 °C Remarks on result: 'other:'

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Oxidising power (OP) : Not oxidising

9.2.2. Other safety characteristics

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.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4. Conditions to avoid

Keep away from heat. Avoid dust formation. Protect from humidity and water.

10.5. Incompatible materials

Strong acids. Strong bases. Oxidising agents. Sodium nitrite. Potassium nitrite.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Conclusive but not sufficient for classification)
Acute toxicity (dermal) : Not classified (Conclusive but not sufficient for classification)
Acute toxicity (inhalation) : Not classified (Conclusive but not sufficient for classification)

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LD50 oral rat	5400 ml/kg (OECD 401 method)
LD50 dermal	> 2000 ml/kg (OECD 402 method)

citric acid (77-92-9)

LD50 oral	5400 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other., 95% CL: 4500 - 6400
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE GB CLP (oral)	5400 mg/kg bodyweight

Skin corrosion/irritation : Not classified (Conclusive but not sufficient for classification).
pH: 1.7 at 20 °C
Serious eye damage/irritation : Causes serious eye irritation.
pH: 1.7 at 20 °C
Respiratory or skin sensitisation : Not classified (Conclusive but not sufficient for classification)
Germ cell mutagenicity : Not classified (Conclusive but not sufficient for classification)
Carcinogenicity : Not classified (Conclusive but not sufficient for classification)
Reproductive toxicity : Not classified (Conclusive but not sufficient for classification)
STOT-single exposure : May cause respiratory irritation.

citric acid (77-92-9)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure : Not classified (Conclusive but not sufficient for classification)

citric acid (77-92-9)

LOAEL (oral, rat, 90 days)	8000 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	4000 mg/kg bodyweight Animal: rat

Aspiration hazard : Not classified (Conclusive but not sufficient for classification)

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Viscosity, kinematic	Not applicable
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11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties

: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute)

: Not classified (Conclusive but not sufficient for classification)

Hazardous to the aquatic environment, long-term (chronic)

: Not classified (Conclusive but not sufficient for classification)

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LC50 - Fish [1]	440 mg/l (OECD 203 method)
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LC50 - Other aquatic organisms [1]	1.535 mg/l static test
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citric acid (77-92-9)

LC50 - Fish [1]	440 mg/l
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EC50 - Crustacea [1]	1535 mg/l
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EC50 - Other aquatic organisms [1]	85 mg/l waterflea
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EC50 96h - Algae [1]	1690000 mg/l Source: Ecological Structure Activity Relationships
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12.2. Persistence and degradability

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Persistence and degradability	Readily biodegradable.
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Biodegradation	97 % (OECD 301B method)
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citric acid (77-92-9)

Persistence and degradability	Rapidly degradable
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Biochemical oxygen demand (BOD)	0.526 g O ₂ /g substance
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Chemical oxygen demand (COD)	0.728 g O ₂ /g substance
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Biodegradation	97 %
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12.3. Bioaccumulative potential

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Partition coefficient n-octanol/water (Log Kow)	0.2 – 1.8
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Bioaccumulative potential	No bioaccumulation expected.
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citric acid (77-92-9)

Partition coefficient n-octanol/water (Log Pow)	-1.67
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of UK REACH regulation, Annex XIII

This substance/mixture does not meet the vPvB criteria of UK REACH regulation, Annex XIII

12.6. Other adverse effects

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

Additional information : Do not flush into surface water or sewer system

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Do not flush down sewers. Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Transport document description				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

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14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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 : No labelling applicable.

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Detergent Regulation (648/2004)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. United Kingdom

UK REACH Annex XIV (Authorisation List)

Not listed on UK REACH Annex XIV (Authorisation List): Multi-purpose Kettle & Iron Descaler

UK REACH Candidate List (SVHC)

Not listed on the UK REACH Candidate List

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

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SECTION 16: Other information

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
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Full text of H- and EUH-statements:

H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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.