

**Safety data sheet**

according to 1907/2006/EC, Article 31

Printing date 03.04.2023

Version number 5 (replaces version 4)

Revision: 15.12.2021

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

- **1.1 Product identifier**
- **Identification of the substance/preparation:** *KARNDEAN REFRESH*
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
  - SU21 Consumer uses: Private households / general public / consumers
  - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Application of the substance / the mixture** Maintenance product
- **1.3 Details of the supplier of the safety data sheet**
- **Company/undertaking identification:**
  - Karndean Designflooring
  - Crabapple Way - Vale Park - Evesham - Worcs - WR11 1GP - United Kingdom
  - Tel. +44 (0) 1386820100, Fax +44 (0) 1386 820198
- **Further information obtainable from:**
  - Karndean Designflooring
  - Tel. +44 (0) 1386 820100
  - info@karndean.co.uk
- **1.4 Emergency telephone number:**
  - Paul Staite, Karndean International Ltd, Bramley Drive, Vale Park, Evesham WR11 1JH
  - Tel. 01386 820180 (Mon - Fri 8.30 - 17.30)

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
  - The product is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Not applicable
- **Hazard pictograms** Not applicable
- **Signal word** Not applicable
- **Hazard statements** Not applicable
- **Additional information:**
  - EUH208 Contains 2-methyl-2H-isothiazol-3-one, reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1), 5-chloro-2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

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**· Dangerous components:**

CAS: 55965-84-9 Index number: 613-167-00-5	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) ⚠ Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330; ⚠ Skin Corr. 1C, H314; Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); ⚠ Skin Sens. 1A, H317 Specific concentration limits: Skin Corr. 1C; H314: $C \geq 0.6 \%$ Skin Irrit. 2; H315: $0.06 \% \leq C < 0.6 \%$ Eye Dam. 1; H318: $C \geq 0.6 \%$ Eye Irrit. 2; H319: $0.06 \% \leq C < 0.6 \%$ Skin Sens. 1A; H317: $C \geq 0.0015 \%$	$\geq 0.00025 - < 0.0015 \%$
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**· Regulation (EC) No 648/2004 on detergents / Labelling for contents**

TETRAMETHYLACETYLOCTAHYDRONAPHTHALENES	$< 5 \%$
preservation agents (2-BROMO-2-NITROPROPANE-1,3-DIOL, BENZISOTHIAZOLINONE, METHYLCHLOROISOTHIAZOLINONE / METHYLISOTHIAZOLINONE, METHYLISOTHIAZOLINONE), perfumes	

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

**· 4.1 Description of first aid measures**
**· General information:**

Immediately remove any clothing soiled by the product.

No special measures required.

· **After inhalation:** No special measures required.

**· After skin contact:**

Rinse with warm water.

After each cleaning use treatment creams, for very dry skin greasy ointments.

**· After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Rinse out mouth and then drink plenty of water.

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

No further relevant information available.

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

No further relevant information available.

### SECTION 5: Firefighting measures

**· 5.1 Extinguishing media**

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **For safety reasons unsuitable extinguishing agents:** Not applicable.

· **5.2 Special hazards arising from the substance or mixture** Danger of forming toxic pyrolysis products.

**· 5.3 Advice for firefighters**

· **Protective equipment:** Do not inhale explosion gases or combustion gases.

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**Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Avoid contact with the eyes and skin.  
Particular danger of slipping on leaked/spilled product.

**6.2 Environmental precautions:**

Prevent from spreading (e.g. by damming-in or oil barriers).  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.

**6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**6.4 Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Follow instructions on the label and in the Technical Product Information Sheet.  
Avoid contact with the eyes and skin.  
Store in cool, dry place in tightly closed receptacles.  
No special measures required.

**Information about fire - and explosion protection:**

No special precautions are necessary if used correctly.

**7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** Store only in unopened original receptacles.**Information about storage in one common storage facility:** Store away from foodstuffs.**Further information about storage conditions:**

Protect from frost.  
Store under lock and key and out of the reach of children.  
Store receptacle in a well ventilated area.

**7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Exposure limit values:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** The lists valid during the making were used as basis.**8.2 Exposure controls****Appropriate engineering controls** No further data; see item 7.

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- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
Do not eat, drink, smoke or sniff while working.  
Be sure to clean skin thoroughly after work and before breaks.
- **Respiratory protection:** Not required.
- **Hand protection**  
Avoid direct contact with the chemical/ the product/ the preparation by organisational measures.  
To avoid skin problems reduce the wearing of gloves to the required minimum.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
Nitrile rubber, NBR  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection**  
Where there is a danger of the eyes coming into contact with splashes of liquid (i.e. when refilling larger quantities), safety goggles according to EN 166 (i.e. goggles with side shields) are recommended.
- **Body protection:**  
Not required.  
Light weight protective clothing
- **Environmental exposure controls** Follow instructions for use, dosage and waste disposal.

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** Whitish
- **Odour:** Pleasant
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** Undetermined.
- **Boiling point or initial boiling point and boiling range** Undetermined.
- **Flammability** Undetermined.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** >100°C (Seta Flash Closed Cup)
- **Decomposition temperature:** Not determined.
- **pH at 20°C** 8.7
- **Viscosity:**
- **Kinematic viscosity at 20°C** 23 s (ISO 3 mm)

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· <b>Dynamic:</b>	Not determined.
· <b>Solubility</b>	
· <b>water:</b>	Fully miscible.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure at 20°C:</b>	23 hPa
· <b>Density and/or relative density</b>	
· <b>Density at 20°C:</b>	1.027 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.

### · 9.2 Other information

· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	2.8 %
· <b>VOC (EC)</b>	2.8 %
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not determined.

### · Information with regard to physical hazard classes

· <b>Explosives</b>	Not applicable
· <b>Flammable gases</b>	Not applicable
· <b>Aerosols</b>	Not applicable
· <b>Oxidising gases</b>	Not applicable
· <b>Gases under pressure</b>	Not applicable
· <b>Flammable liquids</b>	Not applicable
· <b>Flammable solids</b>	Not applicable
· <b>Self-reactive substances and mixtures</b>	Not applicable
· <b>Pyrophoric liquids</b>	Not applicable
· <b>Pyrophoric solids</b>	Not applicable
· <b>Self-heating substances and mixtures</b>	Not applicable
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Not applicable
· <b>Oxidising liquids</b>	Not applicable
· <b>Oxidising solids</b>	Not applicable
· <b>Organic peroxides</b>	Not applicable
· <b>Corrosive to metals</b>	Not applicable
· <b>Desensitised explosives</b>	Not applicable

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** see section "Possibility of hazardous reactions".
- **10.2 Chemical stability** No information available.
- **Conditions to avoid:**  
 Protect from frost.  
 No decomposition if used and stored according to specifications.

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- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No dangerous reactions known.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

#### · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

- **Acute toxicity** Based on available data, the classification criteria are not met.

#### · LD/LC50 values relevant for classification:

##### 52-51-7 bronopol (INN)

Oral	LD50	305 mg/kg (rat) (OECD 401)
Dermal	LD50	1,600 mg/kg (rabbit)

#### · Skin corrosion/irritation

No data available.

Based on available data, the classification criteria are not met.

#### · Serious eye damage/irritation

No data available.

Based on available data, the classification criteria are not met.

#### · Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

#### · Germ cell mutagenicity

Based on available data, the classification criteria are not met.

#### · Carcinogenicity

Based on available data, the classification criteria are not met.

#### · Reproductive toxicity

Based on available data, the classification criteria are not met.

#### · STOT-single exposure

Based on available data, the classification criteria are not met.

#### · STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### · Aspiration hazard

Based on available data, the classification criteria are not met.

#### · Additional toxicological information:

#### · Repeated dose toxicity

Undetermined.

#### · CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Undetermined.

#### · 11.2 Information on other hazards

#### · Endocrine disrupting properties

None of the ingredients is listed.

### SECTION 12: Ecological information

#### · 12.1 Toxicity

#### · Aquatic toxicity:

Undetermined.

##### 52-51-7 bronopol (INN)

LC50/96h	41.2 mg/l (Oncorhynchus mykiss (Rainbow trout))
EC50/72h	0.4-2.8 mg/l (algae)

#### · 12.2 Persistence and degradability

Elimination of contained polymers is possible through precipitation or flocculation.

The solvent is biodegradable.

The surfactants contained in the product correspond to the legislation on the environmental compatibility of detergents and are biodegradable.

#### · 12.3 Bioaccumulative potential

Undetermined.

#### · 12.4 Mobility in soil

No further relevant information available.

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- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

- **12.7 Other adverse effects**

- **Behaviour in sewage processing plants:**

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge. Before allowing large quantities to be fed into sewage plants, obtain the approval of the responsible authorities.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow to reach ground water/water course. Do not allow undiluted product or large quantities of it to reach sewage system.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation** Must be specially treated adhering to official regulations.

- **Uncleaned packaging:**

- **Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- **14.1 UN number or ID number**

- **ADR, ADN, IMDG, IATA**

Not applicable

- **14.2 UN proper shipping name**

- **ADR, ADN, IMDG, IATA**

Not applicable

- **14.3 Transport hazard class(es)**

- **ADR, ADN, IMDG, IATA**

- **Class**

Not applicable

- **14.4 Packing group**

- **ADR, IMDG, IATA**

Not applicable

- **14.5 Environmental hazards:**

Not applicable.

- **14.6 Special precautions for user**

Not applicable.

- **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

- **UN "Model Regulation":**

Not applicable

GB

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**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**  
Other regulations (EC): Regulation (EC) No 648/2004
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Relevant phrases**

- H301 Toxic if swallowed.
- H310 Fatal in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H330 Fatal if inhaled.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

**Training hints ---****Recommended restriction of use ---****Abbreviations and acronyms:**

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 3: Acute toxicity – Category 3
- Acute Tox. 2: Acute toxicity – Category 2
- Skin Corr. 1C: Skin corrosion/irritation – Category 1C
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Skin Sens. 1A: Skin sensitisation – Category 1A
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1