0036100 - BRIGHTSTONE

Revision nr. 8 Dated 22/02/2022

Printed on 22/02/2022

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Replaced revision:7 (Dated: 16/10/2020)

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

0036100 Code: Product name **BRIGHTSTONE** Chemical name and synonym **BRIGHTSTONE**

1.2. Relevant identified uses of the substance or mixture and uses advised against Sector of use SU22 - Professional uses SU21-Consumer uses

Product category PC09a - Products for coatings and paints, thinners and pickling solutions

Description/Use Dry impregnating oil for absorbent stone materials

1.3. Details of the supplier of the safety data sheet

MARBEC S.R.L. Full address VIA CROCE ROSSA 5/i 51037 MONTALE (PISTOIA) District and Country

ITALIA

Tel. +039 0573/959848

Fax

e-mail address of the competent person

responsible for the Safety Data Sheet

Supplier: info@marbec.it

1.4. Emergency telephone number

For urgent inquiries refer to

0573959848 h8.30-13 h14-18 o 3357267921

Numero telefonico di Centri Antiveleni attivi 24/24 ore

IRCSS Fondazione Maugeri -Pavia 0039-0382-24444 CAV Ospedali Riuniti -Bergamo 0039-800-883300

CAV Ospedale Niguarda Ca` Granda -

Milano 0039-02-66101029

CAV Ospedale Careggi- Firenze 0039-055-7947819

CAV Policlinico Gemelli -Roma 0039-06-3054343 CAV Policlinico Umberto I -Roma 0039-06 49978000 CAV Ospedale Cardarelli -Napoli 0039-081 5453333

CAV Azienda Ospedaliera Integrata Verona - Verona 800011858

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

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The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 3 H226 Flammable liquid and vapour.

Aspiration hazard, category 1 H304 May be fatal if swallowed and enters airways.

Specific target organ toxicity - single exposure, category 3 H336 May cause drowsiness or dizziness.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:







Signal words: Danger

Hazard statements:

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH208 Contains:

May produce an allergic reaction.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P331 Do NOT induce vomiting.

P280 Wear protective gloves/ protective clothing / eye protection / face protection.

P261 Avoid breathing dust / fume / gas / mist / vapours / spray.
P312 Call a POISON CENTRE / doctor / . . . if you feel unwell.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Contains: Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

VOC (Directive 2004/42/EC) :

Binding primers.

VOC given in g/litre of product in a ready-to-use condition : 575,00 Limit value: 750,00

2.3. Other hazards

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On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification x = Conc. % Classification (EC) 1272/2008 (CLP)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic

CAS - 50 ≤ x < 100 Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066

EC 919-857-5 Asp. Tox. 1 H304: ≥ 1%

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REACH Reg. 01-2119463258-33

Hydrocarbons, C9, aromatic

CAS - $0 \le x < 0.5$ Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336,

Aquatic Chronic 2 H411

EC 918-668-5

INDEX 649-356-00-4

REACH Reg. 01-2119455851-35-

XXXX

Cobalt bis (2-ethylhexanoate)

CAS 136-52-7 $0 \le x < 0.5$ Repr. 2 H361f, Eye Irrit. 2 H319, Skin Sens. 1 H317, Aquatic Acute 1 H400

M=1, Aquatic Chronic 3 H412 EC 205-250-6

200 200 0

INDEX -

REACH Reg. 01-2119524678-29-

xxxx

Zirconium 2-ethylhexanoate

CAS 22464-99-9 $0 \le x < 0.5$ Repr. 2 H361d

EC 245-018-1 INDEX -

REACH Reg. 01-2119979088-21-

xxxx

2-Ethylhexanoate of calcium

CAS 136-51-6 $0 \le x < 0.5$ Repr. 2 H361, Eye Dam. 1 H318

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EC 205-249-0

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REACH Reg. 01-2119978297-19-

0001

DIPROPYLENE GLYCOL MONOMETHYL ETHER

CAS 34590-94-8 0≤x< 0.5

Substance with a community workplace exposure limit.

EC 252-104-2

INDEX -

REACH Reg. 01-2119450011-60-

XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

NOTE: The dearomatised white spirit present in this product is a UVCB (PrC3) complex, CAS n.a., EC 919-857-5, n. INDEX: n.a. ("C9-C11 hydrocarbons, n-alkanes, isoalkanes, cyclics, <2% aromatics" A complex and variable combination of paraffinic, cyclic and aromatic hydrocarbons, having carbon numbers predominantly in the range of C9-C11 and boiling point in the range 130 ° C - 210 ° C). Some manufacturers provide the following related CASs: 64742-48-9.

Note P of Annex 1 applies. Benzene concentration <0.1 & by weight.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: wash immediately and abundantly with soap and water. Take off your contaminated clothes. In case of irritation, swelling or redness, consult a specialist doctor. Wash contaminated clothing before re-use. For thermal burns, cool the injured part. Keep the burned part under cold running water for at least five minutes or until the pain disappears. Avoid a general hypothermia. When using high pressure equipment, a product injection can occur even without apparent external injury. In this case, transfer the injured person to the hospital immediately. Do not wait for symptoms to appear. INHALATION: In case of difficult breathing, bring the victim to the open air and keep him in a comfortable position for breathing. If the victim is unconscious and not breathing, check that there are no obstacles to breathing and practice artificial respiration by specialized personnel. If necessary, out external heart massage and consult a doctor. If the victim breathes, keep him in a safe lateral position. Administer oxygen if necessary. INGESTION: do not cause vomiting to avoid the risk of aspiration. Transport the injured person to hospital immediately. Do not wait for symptoms to appear. In case of spontaneous vomiting, keep your head down to avoid the risk of aspiration of vomiting into the lungs.

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

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Eye contact can cause irritation.

Contact with skin: redness. Repeated exposure can cause skin dryness or cracking.

Inhalation: headache, dizziness, drowsiness, nausea and other effects on the central nervous system.

Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. It can cause depression in the central nervous system. If ingested, the material can be aspirated into the lungs and cause chemical pneumonia.

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

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

If ingested accidentally the product can enter the lungs because of its low viscosity and provoke the rapid development of serious lung injuries (keep under medical supervision for 48 hours).

Notes for doctor: Treat symptomatically.

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SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

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7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Use appropriate personal protective equipment if necessary. Avoid contact with skin and eyes. Do not swallow. Avoid breathing the vapors. Do not release into the environment. Ensure that adequate cleaning measures (housekeeping) are taken. Contaminated material must not accumulate in the workplace and must never be kept in the pocket. Keep away from food and drink. Do not eat, drink or smoke while using the product. Wash hands thoroughly after handling. Do not reuse contaminated clothing.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Keep away from strong oxidants and reducing agents.

Keep away from food, drink and feed.

The structure of the storage area, the characteristics of the tanks, the equipment and the operating procedures shall comply with the relevant European, national or local legislation. Storage facilities shall be equipped with systems to prevent contamination of soil and water in the event of leakage or spillage. The cleaning, inspection and maintenance of the internal structure of storage tanks must be carried out by qualified and properly equipped personnel, as established by national, local or company regulations. Before entering the storage tanks and starting any type of intervention in a confined space, carry out appropriate remediation, check the atmosphere and verify the oxygen content and the degree of flammability. Keep separate from oxidizing agents.

Suitable materials: use mild steel or stainless steel for containers and coatings. For the realization of containers or interior coatings use approved material suitable for the use of the product. Some synthetic materials may not be suitable for containers or coatings based on material characteristics and intended uses. Check the compatibility of materials at the manufacturer in relation to the conditions of use. If the product is supplied in containers, store only in the original container or in a container suitable for the type of product. Store containers carefully closed and properly labelled. Empty containers may contain flammable product residues, which may cause a fire or explosion hazard. Open slowly to control any pressure release. Do not weld, braze, perforate, cut or incinerate empty containers unless they have been properly reclaimed.

Storage class TRGS 510 (Germany):

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Italia

Regulatory References:

ITA

DEU Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. Deutschland

MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher

Arbeitsstoffe, Mitteilung 56

ESP España Límites de exposición profesional para agentes químicos en España 2021 France

Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS

Decreto Legislativo 9 Aprile 2008, n.81

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PRT Portugal Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à

exposição durante o trabalho a agentes cancerígenos ou mutagénicos

GBR United Kingdom OEL EU EU

RCP TLV

EH40/2005 Workplace exposure limits (Fourth Edition 2020)
Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398;
Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
ACGIH TLVs and BEIs –

Appendix H

		TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
RCP TLV		1200	197					
Predicted no-effect concentration	on - PNEC							
Normal value in fresh water				NPI				
Normal value in marine water				NPI				
Normal value for fresh water se	ediment			NPI				
Normal value for marine water	sediment			NPI				
Normal value for water, intermittent release			NPI					
Normal value of STP microorga	anisms			NPI				
Normal value for the food chair	n (secondary poison	ing)		NPI				
Normal value for the terrestrial	compartment			NPI				
Normal value for the atmosphe	re			NPI				
Health - Derived no-effect	Effects on	OMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				125 mg/kg bw/d				
Inhalation				185 mg/m3 24h				871 mg/m3 8h
Skin				125 mg/kg bw/d				208 mg/kg bw/d
Hydrocarbons, C9, aror Threshold Limit Value	natic							
Type	Country	TWA/8h		STEL/15min		Remarks Observat		
		mg/m3	ppm	mg/m3	ppm			
OEL	EU	100						
Health - Derived no-effect	Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral								11 mg/kg bw/d
Inhalation				32 mg/m3				150 mg/m
Skin				11 mg/kg bw/d				25 mg/kg bw/d
Cobalt bis (2-ethylhexa								
Predicted no-effect concentration Normal value in fresh water	on - PNEC			0,00051	mç			

Revision nr. 8 MARBEC S.R.L. Dated 22/02/2022 Printed on 22/02/2022 0036100 - BRIGHTSTONE Page n. 8/23 Replaced revision:7 (Dated: 16/10/2020) 0,00236 Normal value in marine water mg/l 9.5 Normal value for fresh water sediment mg/kg Normal value for the terrestrial compartment 7,9 mg/kg Normal value for the atmosphere 0,37 mg/lt Health - Derived no-effect level - DNEL / DMEL Effects on Effects on consumers workers Acute local Chronic local Acute local Chronic local Chronic Route of exposure Acute systemic Chronic Acute systemic systemic systemic Oral 0,0558 mg/kg bw/d Inhalation 0,037 mg/m3 0,2351 mg/m3 Zirconium 2-ethylhexanoate **Threshold Limit Value** Туре Country TWA/8h STEL/15min Remarks / Observations mg/m3 ppm mg/m3 ppm OEL ΕU 5 (come Zr) Health - Derived no-effect level - DNEL / DMEL Effects on Effects on consumers workers Route of exposure Acute local Acute systemic Chronic local Chronic Acute local Acute Chronic local Chronic systemic systemic systemic Oral 4,51 mg/kg bw/d Inhalation 8,13 mg/m3 32,97 mg/m3 3,25 mg/kg 6,49 mg/kg Skin bw/d bw/d 2-Ethylhexanoate of calcium **Threshold Limit Value** Туре Country TWA/8h STEL/15min Remarks / Observations mg/m3 ppm mg/m3 ppm OEL EU 5000 Health - Derived no-effect level - DNEL / DMEL Effects on Effects on consumers workers Route of exposure Acute systemic Chronic local Chronic Acute Chronic local Chronic Acute local Acute local systemic systemic systemic Oral 2,83 mg/kg bw/d Inhalation 9,86 mg/m3 39,98 mg/m3 Skin 2,83 mg/kg 5,67 mg/kg bw/d bw/d **DIPROPYLENE GLYCOL MONOMETHYL ETHER Threshold Limit Value** Type Country TWA/8h STEL/15min Remarks / Observations mg/m3 ppm mg/m3 ppm 310 AGW DEU 310 50 50 MAK DEU 310 50 310 50 ESP 308 50 SKIN VLA **VLEP** FRA 308 50 SKIN VLEP 50 ITA 308 SKIN VLE PRT 308 50 SKIN

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WEL	GBR	308	50	SKIN
OEL	EU	308	50	SKIN

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

Activities with large dispersion that lead to a probable consistent release of aerosols (e.g. use with airless spray application) are reserved for EXCLUSIVE PROFESSIONAL USE. Use additional protective measures: use an approved air-powered respirator operating at positive pressure. Air-powered respirators with an exhaust bottle may be appropriate when oxygen levels are inadequate, if the risks of gases/vapours are low, and if the capacity/values of the air purification filters can be exceeded. For high aerodisperse concentrations, also use waterproof clothing to protect the skin and protect the face.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Do not release into the environment. Storage facilities shall be equipped with systems to prevent contamination of soil and water in the event of leakage or spillage. Prevent the release of undissolved substances or recover them from wastewater. Do not distribute sludge generated by industrial water treatment on natural soils. Sludge generated by industrial water treatment must be incinerated, kept under containment or treated.

Other information Minimise exposure to mists/vapours/aerosols. Before entering the storage tanks and starting any type of intervention in a confined space, carry out appropriate remediation, check the atmosphere and verify the oxygen content and the degree of flammability.

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Value

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SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance liquid Colour dark brown Odour characteristic Melting point / freezing point Not available 165 °C Initial boiling point Flammability Not available Not available Lower explosive limit Upper explosive limit Not available

Flash point $23 \le T \le 60$ °C Auto-ignition temperature Not available

pH Not applicable

Kinematic viscosity

Not available

Solubility

immiscible with water

Partition coefficient: n-octanol/water Not available
Vapour pressure Not available
Density and/or relative density 0,815 kg/l
Relative vapour density Not available
Particle characteristics Not applicable

Information

Reason for missing data:substance/mixture is

non-soluble (in water)

9.2. Other information

Properties

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2004/42/EC): 70,55 % - 575,00 g/litre

Explosive properties Not explosive Oxidising properties Not oxidising

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

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10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic

Vapours can form explosive mixtures with air. Contact with strong oxidants (such as peroxides and chromates) can cause a fire hazard. A mixture with nitrates or other strong oxidants (such as chlorates, perchlorates and liquid oxygen) may generate an explosive mass. Sensitivity to heat, friction and shock cannot be assessed in advance.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information

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

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Local effects. Product information:

Skin contact. Symptoms: Redness. Repeated exposure may cause skin dryness or cracking. Eye Contact: Contact with eyes may cause irritation. Inhalation of the vapors may cause drowsiness and dizziness. It can cause irritation. Inhalation of vapors can cause headache, nausea, vomiting and changes in consciousness.

Ingestion: if accidentally ingested, the product can enter the lungs due to its low viscosity and cause the rapid development of serious lung lesions (keep under medical supervision for 48 hours). Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression.

Other adverse effects

Vapor concentrations above the recommended exposure levels are irritating to the eyes and respiratory tract, can cause headache and dizziness, have an anesthetic effect and cause other central nervous system effects. Repeated and / or prolonged skin contact with low viscosity materials can degrease the skin with possible development of irritation and dermatitis. Small amounts of fluid, aspirated into the lungs if swallowed or vomit, can cause chemical pneumonia or pulmonary edema.

oneumonia or pulmonary edema.	
Metabolism, toxicokinetics, mechanism of action and other information	

Information not available

Information on likely routes of exposure

Information not available

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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

ATE (Oral) of the mixture:

Not classified (no significant component)

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

 LD50 (Dermal):
 > 2000 mg/kg

 LD50 (Oral):
 > 5000 mg/kg

 LC50 (Inhalation vapours):
 > 9300 mg/l/4h

Hydrocarbons, C9, aromatic

 LD50 (Dermal):
 > 2000 mg/kg

 LD50 (Oral):
 > 2000 mg/kg

 LC50 (Inhalation vapours):
 > 5 mg/l/4h

Cobalt bis (2-ethylhexanoate)

LD50 (Dermal): > 2000 mg/kg LD50 (Oral): 3129 mg/kg ratto

Zirconium 2-ethylhexanoate

 LD50 (Dermal):
 > 2000 mg/kg coniglio

 LD50 (Oral):
 > 2000 mg/kg

 LC50 (Inhalation mists/powders):
 > 8800 mg/m3/1h ratto

2-Ethylhexanoate of calcium

 $LD50 \; (Dermal): \qquad \qquad > 2000 \; mg/kg \; Ratto - wistar \\ LD50 \; (Oral): \qquad \qquad 2043 \; mg/kg \; Ratto - Fischer \; 344$

SKIN CORROSION / IRRITATION

Revision nr. 8 MARBEC S.R.L. Dated 22/02/2022 Printed on 22/02/2022 0036100 - BRIGHTSTONE Page n. 13/23 Replaced revision:7 (Dated: 16/10/2020) Repeated exposure may cause skin dryness or cracking. Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic" Repeated exposure can cause skin dryness and cracking. Slightly irritating to the skin on prolonged exposure. SERIOUS EYE DAMAGE / IRRITATION Does not meet the classification criteria for this hazard class Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic" EYE CONTACT: May cause mild, short-term eye discomfort. Based on test data for materials of similar structure to OECD guideline 405. RESPIRATORY OR SKIN SENSITISATION May produce an allergic reaction. Contains: Cobalt bis (2-ethylhexanoate) Respiratory sensitization Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic" Not assumed to be a respiratory sensitizer. Skin sensitization Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic" Not assumed to be a skin sensitizer to OECD 406 guidelines.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Revision nr. 8 MARBEC S.R.L. Dated 22/02/2022 Printed on 22/02/2022 0036100 - BRIGHTSTONE Page n. 14/23 Replaced revision:7 (Dated: 16/10/2020) The mutagenic potential of the substance has been extensively investigated in a range of in-vivo and in-vitro analyzes. Genetic toxicity: negative. It is assumed that it is not a germ cell mutagenic agent. Based on test data for materials of similar structure to OECD guidelines 471 473 474 476 478 479. CARCINOGENICITY Does not meet the classification criteria for this hazard class Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic" This product is not classified as a carcinogen. It is assumed that it does not cause cancer. Based on test data for materials of similar structure to OECD guideline 453. REPRODUCTIVE TOXICITY Does not meet the classification criteria for this hazard class Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic" No information available. It is assumed that it is not a toxic agent for reproduction. Based on test data for materials of similar structure to OECD guidelines 414 421 422. Cobalt bis (2-ethylhexanoate) NOAEL (rat; F1) = 100 mg / kg bw / day. Zirconium 2-ethylhexanoate NOAEL (rat; F1) = 100 mg / kg / bw / day. 2-Ethylhexanoate of calcium NOAEL (rat; F1) = 100 mg / kg bw / day.

Adverse effects on sexual function and fertility

Adverse effects on development of the offspring

Information not available

Target organs

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Single Exposure: May cause drowsiness and dizziness. This substance does not meet the EU criteria for classification.

Central nervous system

May cause drowsiness or dizziness

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Repeated Exposure: Not expected to cause organ damage following prolonged and repeated exposure. Based on test data for materials of similar structure to OECD guideline 408 413 422. No known effects based on information provided.

Target organs

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Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Central nervous system.

Route of exposure

Information not available

ASPIRATION HAZARD

Toxic for aspiration

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

The fluid can enter the lungs and cause damage (chemical pneumonia, potentially fatal).

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Use according to good working practices, avoiding to disperse the product in the environment. Notify the competent authorities if the product has reached waterways or sewers or if it has contaminated the soil or vegetation. C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5) hydrocarbons: Based on the ecological information below and according to the criteria indicated in the regulations on dangerous substances, this substance is not classified as hazardous to the environment.

12.1. Toxicity

Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5): below is a summary of the most representative studies of the Registration Dossier . Aquatic toxicity:

Endpoint: Invertebrates - Short term (Daphnia magna)

Result: EL50 (48 h): >1000 mg/L (mobility); EL50 (24 h): >1000 mg/L (mobility)

Comments: Key study (C9-C11, <2% aromatic) - OECD Guideline 202 - SRC (1995)

Endpoint: Invertebrates - Short term (Chaetogammarus marinus)

Result: LL50 (48 h): > 1000 mg/L (mortality); LL50 (24 h): >1000 mg/L (mortality)

Comments: Key study (C9-C11 <2 % aromatic) OECD Guideline 202 - TNO (1992)

Endpoint: Invertebrates - Long term (Daphnia magna)

Result: NOELR (21 days): 0.23 mg/L (reproduction)

Comments: Support study (C9-C11 <2 % aromatic) (Q)SAR Modeled date - CONCAWE (2010)

Endpoint: Algae (Pseudokirchnerella subcapitata) Inhibition of growth

Result: EC50 (72 h): > 1000 mg/L (Growth); EC50 (72 h): > 1000 mg/L (biomassa); NOELR (72 h): 3 mg/L (cell number); NOELR (72

h): 100 mg/L (Growth)

Comments: Key study (C9-C11 <2 % aromatic) OECD Guideline 201 - SRC (1995)

Endpoint: Fish - Short term (Oncorhynchus mykiss)

Result: LL50 (24 h):>1000 mg/L; LLó (24 h):1000 mg/L; LLó (24 h):1000 mg/L; LL50 (48 h): >1000 mg/L; LLO (48 h): >1000 mg/L; LL50 (72): >1000 mg/L; LLO (72 h) mg/L:

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Comments: Key study (C9-C11 <2 % aromatic) OECD Guideline 203 - SRC (1995).

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

 LC50 - for Fish
 > 1000 mg/l/96h

 EC50 - for Crustacea
 > 1000 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 > 1000 mg/l/72h

Hydrocarbons, C9, aromatic

 LC50 - for Fish
 > 1 mg/l/96h

 EC50 - for Crustacea
 > 10 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 > 100 mg/l/72h

Cobalt bis (2-ethylhexanoate)

LC50 - for Fish

8,9 mg/l/96h Onch. mykiss

EC50 - for Crustacea

3,6 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants

0,85 mg/l/72h Pseudokirhneriella

Chronic NOEC for Fish

2,07 mg/l Pimephales promelas

Chronic NOEC for Crustacea

0,032 mg/l Crustaceans 28 giorni

2-Ethylhexanoate of calcium

 LC50 - for Fish
 180 mg/l/96h

 EC50 - for Crustacea
 85,4 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 49,3 mg/l/72h

Zirconium 2-ethylhexanoate

 LC50 - for Fish
 > 100 mg/l/96h

 EC50 - for Crustacea
 85,4 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 49,3 mg/l/72h

12.2. Persistence and degradability

C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5):

Abiotic degradability: Hydrolysis: this substance is resistant to hydrolysis Therefore, this process will not contribute to a measurable loss of degradation of the substance in the environment.

Biodegradation: Based on available studies and the properties of C9-C16 hydrocarbons, this substance is considered inherently biodegradable.

Method: Non-adapted microorganisms OECD Guideline 301 F

Result : Readily biodegradable 80 % (28 days)

Comments: Reliable key study without restrictions (C9-C11, <2% aromatic)

Source: Shell (1997).

DIPROPYLENE GLYCOL MONOMETHYL ETHER

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Solubility in water

1000 - 10000 mg/l

Rapidly degradable

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Entirely degradable

Hydrocarbons, C9, aromatic

Rapidly degradable

Cobalt bis (2-ethylhexanoate)

Solubility in water > 10000 mg/l

Rapidly degradable

2-Ethylhexanoate of calcium

Solubility in water > 10000 mg/l

Rapidly degradable

Zirconium 2-ethylhexanoate

Solubility in water < 0,1 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5): Standard tests for this endpoint are not applicable for UVCB substances.

DIPROPYLENE GLYCOL MONOMETHYL

ETHER

Partition coefficient: n-octanol/water 0,0043

Cobalt bis (2-ethylhexanoate)

BCF 15600

Zirconium 2-ethylhexanoate

BCF 2,96

12.4. Mobility in soil

C9-C11 hydrocarbons, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5): Koc absorption: standard tests for this endpoint are not applicable to substances UVCB.

12.5. Results of PBT and vPvB assessment

C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5):

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Comparison with the criteria of Annex XIII of the REACH Regulation

Persistence assessment: Some hydrocarbon structures contained in this substance have characteristics of P (Persistent) or vp (very Persistent).

Evaluation of bioaccumulation potential: the structure of most hydrocarbons contained in this substance DO NOT have characteristics of vb (very Bioaccumulative) however some components have characteristics of B (Bioaccumulative).

Toxicity assessment: For hydrocarbon structures showing P and B characteristics, toxicity has been assessed but no relevant components meet the toxicity criteria except for anthracene, which has been confirmed as a PBT. Since anthracene is not present, the product is not considered PBT/vPvB.

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5): Dispersion in the environment can lead to contamination of environmental matrices (air, soil, subsoil, surface water and groundwater). Use according to good working practice, avoiding to disperse the products in the environment

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, 1263

IATA:

14.2. UN proper shipping name

ADR / RID: PAINTS and varnishes (including paints, lacquers, enamels, dyes, shellac, varnishes, polishes, liquid fillers and bases

liquid lacquers) or PAINT-like materials (including solvents and paint thinners)

IMDG: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT

RELATED MATERIAL (including paint thinning and reducing compound)

IATA: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT

RELATED MATERIAL (including paint thinning and reducing compound)

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14.3. Transport hazard class(es)

ADR / RID:

Class: 3

Label: 3

IMDG:

Class: 3

Label: 3

IATA:

Class: 3 Label: 3



14.4. Packing group

ADR / RID, IMDG, IATA:

Ш

14.5. Environmental hazards

ADR / RID:

NO

IMDG:

NO

IATA:

NO

14.6. Special precautions for user

ADR / RID:

HIN - Kemler: 30

Limited Quantities: 5 Tunnel restriction

I

code: (D/E)

Special provision: -

IMDG:

IATA:

EMS: F-E, <u>S-E</u>

Cargo:

Pass.:

Limited Quantities: 5

Quantilles: 5

Maximum quantity: 220

instructions: 366

L

Maximum quantity: 60 L

Packaging instructions:

Packaging

355

Special provision:

A3, A72, A192

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EU: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product Point

Point 3 - 40

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Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent dangerous to health must be subject to health surveillance carried out in accordance with the provisions of art. 41 of D.Lgs. 81 of 9 April 2008 unless the risk to the safety and health of the worker has been assessed irrelevant, in accordance with art. 224 paragraph 2.

VOC (Directive 2004/42/EC) :

Binding primers.

15.2. Chemical safety assessment

A chemical safety assessment has been prepared for the following substances in the mixture: Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3 Flammable liquid, category 3

Repr. 2 Reproductive toxicity, category 2

Asp. Tox. 1 Aspiration hazard, category 1

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Eye Dam. 1 Serious eye damage, category 1

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin Sens. 1 Skin sensitization, category 1

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1 **Aquatic Chronic 2** Hazardous to the aquatic environment, chronic toxicity, category 2

H226 Flammable liquid and vapour.

H361 Suspected of damaging fertility or the unborn child.

H361d Suspected of damaging the unborn child.

H361f Suspected of damaging fertility.

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage. H335 May cause respiratory irritation. H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament

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- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP) 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. 10th Edition Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 09 / 11 / 12 / 15 / 16.