



SAFETY DATA SHEET CAFLON BIT 20

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

1.1. Product identifier

Product name CAFLON BIT 20

Product number 11624

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

Identified uses Biocide for industrial use

1.3. Details of the supplier of the safety data sheet

Supplier Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
SDS.EMEA@univarsolutions.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 11624

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements

P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/ doctor.

Contains 1,2-BENZISOTHIAZOL-3(2H)-ONE, SODIUM HYDROXIDE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. (@ >= 0.1%)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

1,2-BENZISOTHIAZOL-3(2H)-ONE	< 25%
CAS number: 2634-33-5	EC number: 220-120-9
M factor (Acute) = 1	

Classification

Acute Tox. 4 - H302
 Skin Irrit. 2 - H315
 Eye Dam. 1 - H318
 Skin Sens. 1 - H317
 Aquatic Acute 1 - H400
 Aquatic Chronic 2 - H411

SODIUM HYDROXIDE

>= 5 - < 10%

CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27-XXXX
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Classification

Met. Corr. 1 - H290
 Skin Corr. 1A - H314
 Eye Dam. 1 - H318

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Show this Safety Data Sheet to the medical personnel.

Inhalation Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention immediately.

Ingestion Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Do not induce vomiting. Give plenty of water to drink. Get medical attention.

Skin contact Remove contaminated clothing and rinse skin thoroughly with water. Continue to rinse for at least 10 minutes. Get medical attention if symptoms are severe or persist after washing.

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Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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

Ingestion Harmful if swallowed.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Blindness.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of nitrogen. Oxides of sulphur. Metal oxide(s).

5.3. Advice for firefighters

Protective actions during firefighting Avoid the spillage or runoff entering drains, sewers or watercourses. Contain and collect extinguishing water.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage.

6.2. Environmental precautions

Environmental precautions Avoid discharge into water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions

Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet.

Advice on general occupational hygiene

Do not eat, drink or smoke when using this product. Wash after use and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at temperatures between -10°C and 40°C. Keep away from food and drink. Avoid contact with strong oxidising agents.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit.

Ingredient comments

WEL = Workplace Exposure Limits

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL

Consumer - Inhalation; Long term local effects: 1 mg/m³
 Workers - Dermal; Short term local effects: 2 mg/kg/day
 Workers - Inhalation; Short term local effects: 2 mg/m³
 Workers - Inhalation; Long term local effects: 1 mg/m³

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Eye wash facilities and emergency shower must be available when handling this product. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Nitrile rubber. Chloroprene rubber. The selected gloves should have a breakthrough time of at least 1 hours. To protect hands from chemicals, gloves should comply with European Standard EN374.

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Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product. Take off immediately all contaminated clothing and wash it before reuse. Remove contaminated clothing and protective equipment before entering eating areas.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Respirator with ABEK filter. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Yellow. Orange.
Odour	Slight.
Odour threshold	No information available.
pH	pH (diluted solution): 10.8 - 11.2 (@ 1%)
Melting point	-33°C
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	103°C @ 1013 hPa
Flash point	> 103°C Closed cup.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	19 hPa @ 20°C 65 hPa @ 50°C 75 hPa @ 55°C
Vapour density	No information available.
Relative density	1.14 - 1.15 @ 20°C
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	375°C
Decomposition Temperature	No information available.
Viscosity	234.4 mm ² /s @ 20°C
Explosive properties	No information available.

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Explosive under the influence of a flame No information available.

Oxidising properties No information available.

9.2. Other information

Other information No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Strong oxidising agents.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Stable at normal ambient temperatures and when used as recommended.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of nitrogen. Oxides of sulphur. Metal oxide(s).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Harmful if swallowed.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,030.0

Species Rat

ATE oral (mg/kg) 2,380.95

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rat

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rat

Skin corrosion/irritation

Animal data Irritating. OECD 404

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage. OECD 405

Respiratory sensitisation

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Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion Harmful if swallowed. Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

Skin contact Irritating to skin. May cause an allergic skin reaction.

Eye contact Causes serious eye damage. Blindness.

Toxicological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 670 mg/kg, Oral, Rat NOAEL 25 mg/kg/day, Oral, Rat 90 days

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rat

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ 5.71 mg/l, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

Germ cell mutagenicity

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Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
Genotoxicity - in vivo	Based on available data the classification criteria are not met. OECD 474
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Fertility, Two-generation study - NOAEL 56.6 mg/kg, Oral, Rat Based on available data the classification criteria are not met.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 112 mg/kg, Oral, Rat Based on available data the classification criteria are not met.

SODIUM HYDROXIDE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >500 mg/kg, Oral, Rabbit

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

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Inhalation	Dust is severely irritating to the upper respiratory system. Symptoms following overexposure may include the following: Coughing. Wheezing/breathing difficulties. May cause an asthma-like shortness of breath. Sore throat. Burning sensation in mouth. Upper respiratory irritation. Tracheobronchitis, pulmonary oedema.
Ingestion	Causes severe burns. May cause burns in mucous membranes, throat, oesophagus and stomach. Symptoms following overexposure may include the following: Chemical burns. Burning sensation in mouth. Nausea, vomiting. Vomiting of blood. Swallowing concentrated chemical may cause severe internal injury.
Skin contact	Causes severe burns. Blistering may occur. May cause serious chemical burns to the skin. Prolonged contact causes serious tissue damage.
Eye contact	Causes serious eye damage. May cause chemical eye burns. Symptoms following overexposure may include the following: Severe irritation, burning and tearing. Corneal damage. May cause permanent damage if eye is not immediately irrigated.

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

SODIUM HYDROXIDE

Ecotoxicity The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

12.1. Toxicity

Toxicity Harmful to aquatic life with long lasting effects.

Acute aquatic toxicity

Acute toxicity - fish No information available.

Ecological information on ingredients.

1,2-BENZISOTHAZOL-3(2H)-ONE

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 2.15 mg/l, Oncorhynchus mykiss (Rainbow trout)
OECD 203

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1.5 - 3.3 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants IC₅₀, 72 hours: 0.11 mg/l, Pseudokirchneriella subcapitata
OECD 201
NOEC, 72 hour: 0.0403 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - microorganisms EC₅₀, 3 hours: 12.8 mg/l, Activated sludge

SODIUM HYDROXIDE

Toxicity The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

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Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 33-189 mg/l mg/l, Fish
	LC ₅₀ , 96 hour: 45.5 mg/l, Oncorhynchus mykiss (Rainbow trout)
	LC ₅₀ , 96 hour: 125 mg/l, Freshwater fish
	Gambusia affinis (Mosquito fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 40-240 mg/l mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 100%: 28 day (OECD 301B)

SODIUM HYDROXIDE

Persistence and degradability	The product contains only inorganic substances which are not biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	No information available.

Ecological information on ingredients.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Bioaccumulative potential	BCF: 6.95,
Partition coefficient	log Pow: 0.6 - 1.3

SODIUM HYDROXIDE

Bioaccumulative potential	The product is not bioaccumulating.
Partition coefficient	No information available.

12.4. Mobility in soil

Mobility	Soluble in water.
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Ecological information on ingredients.

SODIUM HYDROXIDE

Mobility	The product is water-soluble and may spread in water systems.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB. (@ >= 0.1%)
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Ecological information on ingredients.

SODIUM HYDROXIDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects No information available.

Ecological information on ingredients.

SODIUM HYDROXIDE

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Harmful to aquatic life with long lasting effects. Do not discharge into drains or watercourses or onto the ground. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

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EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

Restrictions (Annex XVII Regulation 1907/2006)

This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

27/04/2020

Version number

2.000

Supersedes date

18/11/2016

SDS number

11624

CAFLON BIT 20

SDS status

Approved.

Hazard statements in full

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Signature

J Spenceley