



SAFETY DATA SHEET BI CHEM TD 507L 5X

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

1.1. Product identifier

Product name BI CHEM TD 507L 5X

Product number 14963

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

Identified uses Cleaner

1.3. Details of the supplier of the safety data sheet

Supplier Univar
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
sds@univar.com

1.4. Emergency telephone number

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

Sds No. 14963

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.

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Precautionary statements

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.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

ALCOHOLS, C8-10, ETHOXYLATED, 8EO, TETRASODIUM
ETHYLENEDIAMINETETRAACETATE, 1,2-BENZISOTHIAZOL-3(2H)-ONE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ALCOHOLS, C8-10, ETHOXYLATED, 8EO			5 - 10%
CAS number: 71060-57-6			
Classification			
Eye Dam. 1 - H318			
SODIUM NITRATE			5 - 10%
CAS number: 7631-99-4	EC number: 231-554-3	REACH registration number: 01-2119488221-41-XXXX	
Classification			
Ox. Sol. 2 - H272			
Eye Irrit. 2 - H319			
ALKYLBENZENE SULPHONIC ACID			2.5 - 5%
CAS number: 68584-22-5	EC number: 271-528-9	REACH registration number: 01-2119492632-34-XXXX	
Classification			
Eye Irrit. 2 - H319			
TETRASODIUM ETHYLENEDIAMINETETRAACETATE			1 - 2.5%
CAS number: 64-02-8	EC number: 200-573-9	REACH registration number: 01-2119486762-27-XXXX	
Classification			
Acute Tox. 4 - H302			
Eye Dam. 1 - H318			

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1,2-BENZISOTHIAZOL-3(2H)-ONE**0.05 - 0.1%**

CAS number: 2634-33-5

EC number: 220-120-9

REACH registration number: 01-
2120761540-60-XXXX

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

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**

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.
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

General information	Show this Safety Data Sheet to the medical personnel.
Skin contact	May cause an allergic skin reaction. Organisms used are non-pathogenic but can cause infection when in contact with open wounds.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated.

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

Notes for the doctor	Treat symptomatically.
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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

Specific hazards	The product contains a small amount of sensitising substance.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Irritating gases or vapours.

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5.3. Advice for firefighters

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. Organisms used are non-pathogenic but can cause infection when in contact with open wounds. Provide adequate ventilation. Avoid handling which leads to dust formation. Avoid the formation of mists.

6.2. Environmental precautions

Environmental precautions 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 Do not allow to dry out. Avoid the formation of mists. 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

Usage precautions Organisms used are non-pathogenic but can cause infection when in contact with open wounds. Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid the formation of mists. Avoid handling which leads to dust formation.

Advice on general occupational hygiene Eye wash facilities and emergency shower must be available when handling this product. 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. Wash after use and before eating, smoking and using the toilet.

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 0°C and 25°C. Protect from sunlight. Protect from moisture.

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

Ingredient comments No exposure limits known for ingredient(s).

SODIUM NITRATE (CAS: 7631-99-4)

DNEL

Industry - Inhalation; Long term systemic effects: 36.7 mg/m³
 Industry - Dermal; Long term systemic effects: 20.8 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 12.5 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 10.9 mg/m³
 Consumer - Oral; Long term systemic effects: 12.5 mg/kg/day

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PNEC

- Fresh water; 0.45 mg/l
- marine water; 0.045 mg/l
- Intermittent release; 4.5 mg/l
- STP; 18 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

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

Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Wear chemical splash goggles. 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/manufacture, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

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.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. 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	Liquid.
Colour	Yellowish.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.

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Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Other information	Not determined.
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SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity	No information available.
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10.2. Chemical stability

Stability	Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
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10.4. Conditions to avoid

Conditions to avoid	Protect from sunlight. Protect from moisture. Avoid heat.
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10.5. Incompatible materials

Materials to avoid	None known.
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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. Irritating gases or vapours.
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SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity - oral**

ATE oral (mg/kg)	20,000.0
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BI CHEM TD 507L 5X**Skin corrosion/irritation**

Animal data No information available.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

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

Skin contact May cause an allergic skin reaction. Organisms used are non-pathogenic but can cause infection when in contact with open wounds.

Eye contact Risk of serious damage to eyes.

Toxicological information on ingredients.**ALCOHOLS, C8-10, ETHOXYLATED, 8EO****Skin corrosion/irritation**

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

SODIUM NITRATE**Acute toxicity - oral**

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Acute toxicity oral (LD₅₀ mg/kg) 3,430.0

Species Rat

Notes (oral LD₅₀) OECD 401

Acute toxicity - dermal

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

Species Rat

Notes (dermal LD₅₀) OECD 402

Skin corrosion/irritation

Animal data OECD 404 Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Irritating.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: OECD 429 Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

IARC carcinogenicity IARC Group 2A Probably carcinogenic to humans.

Reproductive toxicity

Reproductive toxicity - fertility - NOAEL 1500 mg/kg/day, Oral,

Reproductive toxicity - development Teratogenicity: - NOAEL: 1500 mg/kg/day, Oral,

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 1500 mg/kg, Oral, Rat

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust in high concentrations may irritate the respiratory system. Vapour from this product may be hazardous by inhalation. Inhalation of vapour or mist may cause lung oedema.

Ingestion May cause discomfort if swallowed.

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Skin contact Powder may irritate skin.

Eye contact May cause severe eye irritation.

TETRASODIUM ETHYLENEDIAMINETETRAACETATE**Acute toxicity - oral**

Notes (oral LD₅₀) Harmful if swallowed.

ATE oral (mg/kg) 500.0

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

1,2-BENZISOTHIAZOL-3(2H)-ONE**Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg) 670.0

Species Rat

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

ATE oral (mg/kg) 670.0

Acute toxicity - dermal

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

Species Rat

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

ATE dermal (mg/kg) 5,000.0

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

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

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SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

SODIUM NITRATE

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity No information available.

Ecological information on ingredients.

ALCOHOLS, C8-10, ETHOXYLATED, 8EO

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , : 1 - 10 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.586 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 0.83 mg/l, Algae OECD 201

SODIUM NITRATE

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 6650 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 24 hours: 6000 mg/l, Daphnia magna
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: > 1000 mg/l, Activated sludge

TETRASODIUM ETHYLENEDIAMINETETRAACETATE

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , : > 100 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , : > 100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 100 mg/l, Algae

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

Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 1.3 - 1.6 mg/l, Fish OECD 203

BI CHEM TD 507L 5X**Acute toxicity - aquatic invertebrates**EC₅₀, 48 hours: 1.5 - 3.3 mg/l, Daphnia magna
OECD 202**Acute toxicity - aquatic plants**IC₅₀, 72 hours: 0.15 mg/l, Algae
OECD 201**12.2. Persistence and degradability****Persistence and degradability** Inherently biodegradable.**Ecological information on ingredients.****ALCOHOLS, C8-10, ETHOXYLATED, 8EO****Persistence and degradability**

The substance is readily biodegradable.

SODIUM NITRATE**Persistence and degradability**

There are no data on the degradability of this product.

TETRASODIUM ETHYLENEDIAMINETETRAACETATE**Persistence and degradability**

Not readily biodegradable.

1,2-BENZISOTHIAZOL-3(2H)-ONE**Persistence and degradability**

The product is readily biodegradable.

Biodegradation- Degradation 100%: 28 day
(OECD 301B)**12.3. Bioaccumulative potential****Bioaccumulative potential** Bioaccumulation is unlikely.**Partition coefficient** No information available.**Ecological information on ingredients.****SODIUM NITRATE****Bioaccumulative potential**

The product is not bioaccumulating.

Partition coefficient

No information available.

TETRASODIUM ETHYLENEDIAMINETETRAACETATE**Bioaccumulative potential**

The product is not bioaccumulating.

Partition coefficient

log Pow: < 0

1,2-BENZISOTHIAZOL-3(2H)-ONE**Partition coefficient**

log Pow: 0.6 - 1.3

12.4. Mobility in soil**Mobility**

Miscible with water.

BI CHEM TD 507L 5X**Ecological information on ingredients.****SODIUM NITRATE****Mobility**

The product is soluble in water.

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.

Ecological information on ingredients.**SODIUM NITRATE****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**

Not determined.

Ecological information on ingredients.**SODIUM NITRATE****Other adverse effects**

Not available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****General information**

Waste is classified as hazardous waste. 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

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

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

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.
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Health and environmental listings	Organisms used are non-pathogenic but can cause infection when in contact with open wounds.
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15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

BI CHEM TD 507L 5X**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

04/07/2019

Version number

2.000

Supersedes date

13/05/2015

SDS number

14963

BI CHEM TD 507L 5X**SDS status**

Approved.

Hazard statements in full

H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

Signature

J Spenceley