



# COMMERCIAL INHIBITOR

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 1/9/2020 Revision date: 12/21/2022 Supersedes version of: 11/5/2019 Version: 1.1

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : COMMERCIAL INHIBITOR  
Type of product : Heating system water treatment

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Corrosion inhibitor, Scale inhibitor

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

BSS Group Ltd  
Lodge Way House, Lodge Way, Harlestone Road  
NN5 7UG Northampton – Northamptonshire  
United Kingdom  
T +44 (0)116 245 5500

##### Distributor

BSS Group Ltd  
Duncrue Industrial Estate  
36 - 38 Duncrue Road  
BT3 9BP Belfast  
T +44 (0) 116 245 5500

#### 1.4. Emergency telephone number

Emergency number : +44 (0)116 245 5500 (8:30 – 5pm)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH208 - Contains BENZISOTHIAZOLINONE. May produce an allergic reaction.  
EUH210 - Safety data sheet available on request.

#### 2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions.

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

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

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

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### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
BENZOTRIAZOLE	CAS-No.: 95-14-7 EC-No.: 202-394-1 REACH-no: 01-2119979079-20	≥ 1 – < 3	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
Propylene glycol substance with national workplace exposure limit(s) (GB)	CAS-No.: 57-55-6 EC-No.: 200-338-0 REACH-no: 01-2119456809-23-XXXX	≥ 1 – < 3	Not classified
1,2-benzisothiazol-3(2H)-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-60-XXXX	0.02 – 0.05	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
1,2-benzisothiazol-3(2H)-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-60-XXXX	( 0.05 ≤C ≤ 100) Skin Sens. 1, H317

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur.
First-aid measures after skin contact	: Take off contaminated clothing. Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Get medical advice/attention.

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

Symptoms/effects after inhalation	: In high concentrations, vapours may irritate throat and respiratory system and cause coughing.
Symptoms/effects after skin contact	: May cause an allergic skin reaction. irritation (itching, redness, blistering).
Symptoms/effects after eye contact	: May cause slight irritation.
Symptoms/effects after ingestion	: May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : The product is not flammable.  
Explosion hazard : Product is not explosive.  
Reactivity in case of fire : Not known.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Precautionary measures fire : No special measures required.  
Firefighting instructions : Use extinguishing media appropriate for surrounding fire.  
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.  
Other information : The product is not flammable.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid release to the environment.

##### 6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate spillage area. Stop leak if safe to do so. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

Protective equipment : Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area. Stop leak if safe to do so. Avoid contact with skin and eyes.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

Other information : Dispose of in accordance with relevant local regulations. This material and its container must be disposed of as hazardous waste.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product.

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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool. Keep out of reach of children. Keep container closed when not in use.
Incompatible materials	: Strong acids. Strong oxidizing agents.
Storage area	: Store in a well-ventilated place.
Special rules on packaging	: Keep only in original container.

### 7.3. Specific end use(s)

No special requirements.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

Propylene glycol (57-55-6)	
United Kingdom - Occupational Exposure Limits	
Local name	Propane-1,2-diol
WEL TWA (OEL TWA) [1]	10 mg/m <sup>3</sup> particulates 474 mg/m <sup>3</sup> total vapour and particulates
WEL TWA (OEL TWA) [2]	150 ppm total vapour and particulates
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Ensure adequate ventilation.

#### 8.2.2. Personal protection equipment

##### Personal protective equipment:

Gloves. Safety glasses.

##### Personal protective equipment symbol(s):



##### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses with side shields. The eye protection to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 166.

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### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing

#### Hand protection:

Protective gloves. Chemical resistant gloves (according to European standard NF EN 374 or equivalent)

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

#### Consumer exposure controls:

Observe the label precautions. Use as directed on label.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Pale yellow to yellow.
Odour	: Mild.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Explosive properties	: Product is not explosive.
Oxidising properties	: Oxidising liquids Not applicable.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 7.5 – 8.2
Viscosity, kinematic	: Not available
Solubility	: Miscible.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.06 – 1.15
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

VOC content : According to Swiss ordinance 814.018, we certify that the product mentioned above does not contain any Volatile Organic Compounds (VOC)

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

Strong acids. Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

<b>1,2-benzisothiazol-3(2H)-one (2634-33-5)</b>	
LD50 oral	1020 mg/kg bodyweight
LD50 dermal	4115 mg/kg bodyweight
LC50 Inhalation - Rat	100 mg/l
LC50 Inhalation - Rat (Dust/Mist)	100 mg/l

<b>BENZOTRIAZOLE (95-14-7)</b>	
LD50 oral	560 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	1910 mg/l

<b>Propylene glycol (57-55-6)</b>	
LD50 oral rat	22000 mg/kg bodyweight Animal: rat, Remarks on results: other:
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit
LC50 Inhalation - Rat	> 44.9 mg/l air Animal: rat, Guideline: other:, Remarks on results: other:

Skin corrosion/irritation : Not classified  
pH: 7.5 – 8.2  
Serious eye damage/irritation : Not classified  
pH: 7.5 – 8.2  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified

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STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified

### Propylene glycol (57-55-6)

NOAEL (subchronic, oral, animal/male, 90 days) 443 mg/kg bodyweight Animal: cat, Animal sex: male

Aspiration hazard : Not classified

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.  
Ecology - water : The product does not have any known adverse effect on the tested aquatic organisms.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

### 1,2-benzisothiazol-3(2H)-one (2634-33-5)

LC50 - Fish [1] 2.18 mg/l  
EC50 - Other aquatic organisms [1] 2.94 mg/l waterflea  
EC50 - Other aquatic organisms [2] 0.11 mg/l

### BENZOTRIAZOLE (95-14-7)

LC50 - Fish [1] 55 mg/l Test organisms (species): *Cyprinodon variegatus*  
LC50 - Fish [2] 180 mg/l Test organisms (species): *Danio rerio* (previous name: *Brachydanio rerio*)  
EC50 - Crustacea [1] 137 mg/l Test organisms (species): *Daphnia magna*  
EC50 - Other aquatic organisms [1] 91 mg/l waterflea  
EC50 - Other aquatic organisms [2] 231 mg/l  
EC50 72h - Algae [1] 75 mg/l Test organisms (species): *Pseudokirchneriella subcapitata* (previous names: *Raphidocelis subcapitata*, *Selenastrum capricornutum*)  
EC50 72h - Algae [2] 29 mg/l Test organisms (species): *Pseudokirchneriella subcapitata* (previous names: *Raphidocelis subcapitata*, *Selenastrum capricornutum*)  
NOEC chronic crustacea 0.97 mg/l

### Propylene glycol (57-55-6)

LC50 - Fish [1] 51600 mg/l Test organisms (species): *Oncorhynchus mykiss* (previous name: *Salmo gairdneri*)  
LC50 - Fish [2] 51400 mg/l Test organisms (species): *Pimephales promelas*  
EC50 72h - Algae [1] 24200 mg/l Test organisms (species): *Pseudokirchneriella subcapitata* (previous names: *Raphidocelis subcapitata*, *Selenastrum capricornutum*)  
EC50 72h - Algae [2] 19300 mg/l Test organisms (species): *Skeletonema costatum*  
EC50 96h - Algae [1] 19000 mg/l Test organisms (species): *Pseudokirchneriella subcapitata* (previous names: *Raphidocelis subcapitata*, *Selenastrum capricornutum*)  
EC50 96h - Algae [2] 19100 mg/l Test organisms (species): *Skeletonema costatum*

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### 12.2. Persistence and degradability

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Persistence and degradability	No data available.
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### 12.3. Bioaccumulative potential

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Bioaccumulative potential	No data available.
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#### 1,2-benzisothiazol-3(2H)-one (2634-33-5)

Partition coefficient n-octanol/water (Log Pow)	1.3
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#### BENZOTRIAZOLE (95-14-7)

Partition coefficient n-octanol/water (Log Pow)	1.34
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### 12.4. Mobility in soil

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Ecology - soil	Miscible with water.
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### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

Other adverse effects : None known  
Additional information : No other effects known

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.  
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## SECTION 14: Transport information

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable



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ADR	IMDG	IATA	ADN	RID
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

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

VOC content : According to Swiss ordinance 814.018, we certify that the product mentioned above does not contain any Volatile Organic Compounds (VOC)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
EUH208	Contains BENZISOTHIAZOLINONE. May produce an allergic reaction.

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### Full text of H- and EUH-statements:

EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
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.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.