

**SAFETY DATA SHEET**  
(TOWER) INHIBITOR ULTRA CONCENTRATE

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Compilation date: 06/02/2019

Revision No: 1

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

**1.1. Product identifier**

**Product name:** (TOWER) INHIBITOR ULTRA CONCENTRATE

**Product code:** HC1199BC

**Synonyms:** HC1199 / TFC / TOWER

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

**Use of substance / mixture:** FOR PROFESSIONAL AND INDUSTRIAL USE ONLY. Water based corrosion inhibitor.

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

**Company name:** TFC GROUP LLP

Tower House

Vale Rise

Tonbridge

Kent

TN9 1TB

United Kingdom

**Tel:** 01732 226 247

**Email:** [mie@tfc.uk.com](mailto:mie@tfc.uk.com)

**1.4. Emergency telephone number**

**Emergency tel:** 01732 226 247

(office hours only)

**Section 2: Hazards identification**

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

**Classification under CLP:** Skin Irrit. 2: H315; Eye Irrit. 2: H319

**Most important adverse effects:** Causes skin irritation. Causes serious eye irritation.

**2.2. Label elements**

**Label elements:**

**Hazard statements:** H315: Causes skin irritation.

H319: Causes serious eye irritation.

**Hazard pictograms:** GHS07: Exclamation mark



**Signal words:** Warning

**Precautionary statements:** P102: Keep out of reach of children.

[cont...]

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P260: Do not breathe spray.

P262: Do not get in eyes, on skin, or on clothing.

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

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302+P352: IF ON SKIN: Wash with plenty of water.

**Haz. ingredients (label):** Contains:

BENZOTRIAZOLE

TETRAPOTASSIUM PYROPHOSPHATE

**2.3. Other hazards**

**PBT:** This product is not identified as a PBT/vPvB substance.

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

**3.2. Mixtures**

**Hazardous ingredients:**

MONO PROPYLENE GLYCOL - REACH registered number(s): 01-2119456809-23-XXXX

EINECS	CAS	PBT / WEL	CLP Classification	Percent
200-338-0	57-55-6	Substance with a Community workplace exposure limit.	-	10-30%

TRIETHANOLAMINE - REACH registered number(s): 01-2119486482-31-XXXX

203-049-8	102-71-6	Substance with a Community workplace exposure limit.	-	1-10%
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TETRAPOTASSIUM PYROPHOSPHATE - REACH registered number(s): 01-2119489369-18-XXXX

230-785-7	7320-34-5	-	Eye Irrit. 2: H319	1-10%
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BENZOTRIAZOLE - REACH registered number(s): 01-2119979079-20-XXXX

202-394-1	95-14-7	-	Acute Tox. 4: H302+H312+H332; Eye Irrit. 2: H319	1-10%
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**Section 4: First aid measures**

**4.1. Description of first aid measures**

**Skin contact:** Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes.

**Ingestion:** Wash out mouth with water.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours.

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

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

[cont...]

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**Ingestion:** There may be irritation of the throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** Not applicable.

**Section 5: Fire-fighting measures**

**5.1. Extinguishing media**

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

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

**Exposure hazards:** In combustion emits toxic fumes. Water based product. Advice relates to dry residues after water has evaporated.

**5.3. Advice for fire-fighters**

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

**Section 6: Accidental release measures**

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

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

**6.2. Environmental precautions**

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding. Warning relates to a large spillage, not a single bottle.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water.  
Single bottle spillage: wash down the drain with a large amount of water.

**6.4. Reference to other sections**

**Reference to other sections:** Refer to section 8 of SDS.

**Section 7: Handling and storage**

**7.1. Precautions for safe handling**

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

[cont...]

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

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed.

**7.3. Specific end use(s)**

**Specific end use(s):** No data available.

**Section 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Hazardous ingredients:**

**MONO PROPYLENE GLYCOL**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	150 ppm	No standard	-	-

**TRIETHANOLAMINE**

UK	5 mg/m3 (no std.)	-	-	-
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**DNEL/PNEC Values**

**DNEL / PNEC** No data available.

**8.2. Exposure controls**

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Protective gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

**Section 9: Physical and chemical properties**

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

**State:** Liquid

**Colour:** Pale straw

**Odour:** Faint aromatic

**Evaporation rate:** Slow

**Solubility in water:** Highly soluble

**Viscosity:** Non-viscous

**Boiling point/range°C:** 100

**Melting point/range°C:** 0

**Flammability limits %: lower:** Not applicable.

**upper:** Not applicable.

**Flash point°C:** Not applicable.

**Part.coeff. n-octanol/water:** No data available.

**Autoflammability°C:** Not applicable.

**Vapour pressure:** Not applicable.

**Relative density:** 1.175-1.185

**pH:** 8.0 - 9.0

**VOC g/l:** 0

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**9.2. Other information**

**Other information:** No data available.

**Section 10: Stability and reactivity**

**10.1. Reactivity**

**Reactivity:** Stable under recommended transport or storage conditions.

**10.2. Chemical stability**

**Chemical stability:** Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

**10.4. Conditions to avoid**

**Conditions to avoid:** Heat.

**10.5. Incompatible materials**

**Materials to avoid:** Strong oxidising agents. Strong acids.

**10.6. Hazardous decomposition products**

**Haz. decomp. products:** In combustion emits toxic fumes.

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Hazardous ingredients:**

**MONO PROPYLENE GLYCOL**

ORL	RAT	LD50	>5000	mg/Kg
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**TRIETHANOLAMINE**

ORL	RAT	LD50	>2	g/kg
SKN	RBT	LD50	>10	g/kg

**TETRAPOTASSIUM PYROPHOSPHATE**

ORL	RBT	LD50	>2000	mg/kg
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**BENZOTRIAZOLE**

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	RAT	LD50	560	mg/kg

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**Relevant hazards for product:**

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

**Symptoms / routes of exposure**

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

**Section 12: Ecological information**

**12.1. Toxicity**

**Hazardous ingredients:**

**TRIETHANOLAMINE**

FISH	48H EC50	1390	mg/l
FISH	96H LC50	>5000	mg/l

**TETRAPOTASSIUM PYROPHOSPHATE**

RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> )	96H LC50	100	mg/l
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**BENZOTRIAZOLE**

ZEBRAFISH ( <i>Brachydanio rerio</i> )	96H LC50	>100	mg/l
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**12.2. Persistence and degradability**

**Persistence and degradability:** Biodegradable. The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** No bioaccumulation potential.

**12.4. Mobility in soil**

**Mobility:** Readily absorbed into soil. Volatile. Soluble in water.

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

**PBT identification:** This product is not identified as a PBT/vPvB substance.

**12.6. Other adverse effects**

**Other adverse effects:** Negligible ecotoxicity.

[cont...]

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**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal operations:** Flush down sewerage drain with copious amounts of water.

**Recovery operations:** Not applicable.

**Waste code number:** 20 01 30

**Disposal of packaging:** Dispose of as normal industrial waste. Clean with water.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**Section 14: Transport information**

**Transport class:** This product does not require a classification for transport.

**Section 15: Regulatory information**

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

**Specific regulations:** Not applicable.

**15.2. Chemical Safety Assessment**

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information**

**Other information**

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

IMPORTANT NOTE:

Risk phases in this section below relate to the INDIVIDUAL COMPONENTS in the formulation when used at their FULL CONCENTRATIONS, and not at the reduced levels in the mixed product.

See sections 2 and 3 for the calculated hazard and risk phrases for the blended product.

**Phrases used in s.2 and s.3:** H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled

H315: Causes skin irritation.

H319: Causes serious eye irritation.

**Legend to abbreviations:** PNEC = predicted no effect concentration

DNEL = derived no effect level

LD50 = median lethal dose

LC50 = median lethal concentration

LDLO = lethal dose low

EC50 = median effective concentration

IC50 = median inhibitory concentration

dw = dry weight

[cont...]

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bw = body weight  
cc = closed cup  
oc = open cup  
MUS = mouse  
GPG = guinea pig  
RBT = rabbit  
HAM = hamster  
HMN = human  
MAM = mammal  
PGN = pigeon  
IVN = intravenous  
IPR = intraperitoneal  
SCU = subcutaneous  
ORL = oral  
SKN = skin  
DRM = dermal  
OCC = ocular/corneal  
OPT = optical  
ING = ingestion  
INH = inhalation  
PCP = physico-chemical properties

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