SAFETY DATA SHEET
ST202

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name ST202

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

Identified uses Non-oxidising biocide

1.3. Details of the supplier of the safety data sheet

Supplier

ISS Technical Services
Forge Lane
Stoke-on-Trent
ST1 5PZ
Tel: 08444 068842
Fax: 01782 284317
Web: www.uk.issworld.com

1.4. Emergency telephone number

ISS Technical Services: 08444 068842 (Mon- Fri 9.00am - 5.00pm)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Skin Corr. 1B - H314;Skin Sens. 1 - H317
Environment	Aquatic Chronic 3 - H412

Classification (1999/45/EEC) C;R34. R43. R52/53.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

Label In Accordance With (EC) No. 1272/2008

Signal Word Danger

Hazard Statements

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338	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 or doctor/physician.
P501	Dispose of contents/container in accordance with national regulations.

Supplementary Precautionary Statements

P273	Avoid release to the environment.
P260	Do not breathe vapour/spray.

P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 **1-5%**

CAS-No.: 55965-84-9 **EC No.:**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 3 - H301	T;R23/24/25
Acute Tox. 3 - H311	C;R34
Acute Tox. 3 - H331	R43
Skin Corr. 1B - H314	N;R50/53
Skin Sens. 1 - H317	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

Ingestion

DO NOT INDUCE VOMITING! Remove victim immediately from source of exposure. Immediately rinse mouth and provide fresh air. Get medical attention immediately! Never give liquid to an unconscious person.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothes and rinse skin thoroughly with water. Get medical attention immediately! Wash contaminated clothing before reuse.

Eye contact

Important! Immediately rinse with water for at least 15 minutes. Remove any contact lenses and open eyes wide apart. Immediate medical attention is required.

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

Skin contact

Corrosive. May cause sensitization by skin contact.

Eye contact

Corrosive

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

MATERIAL IS CORROSIVE. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock and convulsions may be necessary.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Combustion generates toxic fumes of the following: Hydrogen chloride (HCl). Nitrous gases (NOx). Sulphurous gases (SOx).

5.3. Advice for firefighters

Special Fire Fighting Procedures

Wear self contained breathing apparatus in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. MATERIAL IS CORROSIVE Use protective gloves, goggles and suitable protective clothing.

6.2. Environmental precautions

Avoid discharge to the aquatic environment. Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

DO NOT TOUCH SPILLED MATERIAL! Absorb in vermiculite, dry sand or earth and place into containers. WARNING: Keep spills and clean-up residuals out of municipal sewers and open bodies of water. Deactivate spill area with freshly prepared solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water. Apply solution to the spill area at a ratio of 10 volumes deactivation solution per estimated volume of residual spill to deactivate any residual active ingredient. Let stand for 30 minutes. Flush the spill area with copious amounts of water to chemical sewer (if in accordance with local procedures, permits and regulations). DO NOT add deactivation solution to the waste pail to deactivate the adsorbed material.

6.4. 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

Avoid spilling, skin and eye contact. Avoid eating, drinking and smoking when using the product. Persons susceptible to allergic reactions should not handle this product.

7.2. Conditions for safe storage, including any incompatibilities

Keep upright. Store in tightly closed original container in a dry and cool place. Store under well-ventilated conditions at a temperature below 25°C.

Storage Class

Corrosive storage.

7.3. 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

See ingredient comments below: Manufacturer's Exposure Limits Test Results for concentrated substance:: 5-chloro-2-methyl-2H-isothiazol-3-one: TWA 0.076 mg/m3; STEL 0.23 mg/m3 2-methyl-2H-isothiazol-3-one: TWA 1.5 mg/3; STEL 4.5 mg/m3

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 (CAS: 55965-84-9)

Ingredient Comments

No exposure limits noted for ingredients in accordance with EH40. Manufacturer's Exposure Limits Test Results for concentrated substance:: 5-chloro-2-methyl-2H-isothiazol-3-one: TWA 0.076 mg/m3; STEL 0.23 mg/m3 2-methyl-2H-isothiazol-3-one: TWA 1.5 mg/3; STEL 4.5 mg/m3

8.2. Exposure controls

Protective equipment

Process conditions

Use engineering controls to reduce air contamination to permissible exposure level.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Wear protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Use protective gloves made of: Butyl rubber. Nitrile. PVC gloves > 1 mm thickness Gloves should be removed and replaced immediately if there is any indication of degradation of chemical breakthrough. Rinse and remove gloves immediately after use. NOTE: Material is a possible skin sensitizer.

Eye protection

Use approved safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Promptly remove any clothing that becomes contaminated. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Colour	Light (or pale). Blue green.
Odour	Mild.
Solubility	Completely soluble in water
Melting point (°C)	- 16°C
Relative density	1.0 - 1.1 25°C
pH-Value, Conc. Solution	3.0 - 5.0
Viscosity	5 mPas @ 23°C

9.2. Other information

No further information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Stable under normal temperature conditions and recommended use.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials To Avoid

Oxidising agents. Amines Strong reducing agents. Mercaptans (thiols).

10.6. Hazardous decomposition products

When heated, toxic and corrosive vapours/gases may be formed. Nitrous gases (NOx). Sulphurous gases (SOx). Hydrogen chloride (HCl).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

Inhalation of spray mists may cause irritation.

Ingestion

Causes burns. May cause severe internal injury.

Skin contact

Causes burns. May cause sensitisation by skin contact. Corrosive. Prolonged contact causes serious tissue damage.

Eye contact

Causes burns. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

Toxicological information on ingredients.

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 (CAS: 55965-84-9)

Acute toxicity:

Acute Toxicity (Oral LD50)

457 mg/kg Rat

Acute Toxicity (Dermal LD50)

660 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

0.33 mg/l (dust/mist) Rat 4 hours

Mist may cause irritation of upper respiratory tract (nose and throat) and lungs.

Skin Corrosion/Irritation:

Species: Rabbit Result: Corrosive effects

Serious eye damage/irritation:

Species; Rabbit Result: Corrosive Effects

Respiratory or skin sensitisation:

Species: Guinea Pig Causes sensitization.

Germ cell mutagenicity:

In vitro tests did not show mutagenic effects.

In vivo tests did not show mutagenic effects.

Carcinogenicity:

Animal testing did not show any carcinogenic effects.

Reproductive Toxicity:

In animal studies, did not interfere with reproduction.

Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

Specific target organ toxicity - single exposure:

No data available.

Specific target organ toxicity - repeated exposure:

No data available

Aspiration hazard:

No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecological information on ingredients.

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 (CAS: 55965-84-9)

Acute Toxicity - Fish

LC50 96 hours 0.19 mg/l Onchorhynchus mykiss (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 0.16 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 72 hours 0.027 mg/l Selenastrum capricornutum

No data available.

No data available.

No data available.

Toxicity to soil:

No data available.

Toxicity to terrestrial plants:

No data available

12.2. Persistence and degradability

Ecological information on ingredients.

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 (CAS: 55965-84-9)

Degradability

Biodegradation (aquatic metabolism):5-chloro-2-methyl-4-isothiazolin-3-one (CMIT): t ½ anaerobic = 0.2 day. t ½ aerobic = 0.38 - 1.3 day
2-Methyl-4-isothiazolin-3--one (MIT): t ½ aerobic = 0.38 - 1.4 day.
Biodegradation (aquatic metabolism): 5-chloro-2-methyl-4-isothiazolin-3-one CMIT): t1/2 anaerobic = 0.2 day. t1/2 aerobic = 0.38 - 1.3 day.
2-methyl-4-isothiazolin-3-one (MIT): t 1/2 aerobic = 0.38 - 1.4 day

12.3. Bioaccumulative potential

Ecological information on ingredients.

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 (CAS: 55965-84-9)

Bioaccumulative potential

The bioconcentration potential of the substance is low (BCF <100 or Log Pow <3)

12.4. Mobility in soil

Ecological information on ingredients.

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 (CAS: 55965-84-9)

Mobility:

log Pow: -0, 486 Measured 2-methyl-4-isothiazolin-3-one (MIT); log Pow: 0, 401 Measured 5-chloro-2-methyl-4-isothiazolin-3-one (CMIT)

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 (CAS: 55965-84-9)

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Ecological information on ingredients.

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 (CAS: 55965-84-9)

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

Waste Class

No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: TRANSPORT INFORMATION

General The product is not covered by international regulation 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)

Transport Labels

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 MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

EU Legislation

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

Currently we do not have any information from our supplier about this.

SECTION 16: OTHER INFORMATION

Revision Date	01/12/2012
Revision	1

Risk Phrases In Full

R34	Causes burns.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R43	May cause sensitisation by skin contact.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H410	Very toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.