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<b>Product name:</b>	4559		
<b>Code: 4559</b>	<b>Revision: 1</b>	<b>Date:</b>	7.11.05

### 1. CHEMICAL PRODUCT AND COMPANY

**Product name:** 4559  
**Use:** Product for water treatment.  
**Company:** **Accepta Ltd**  
 Statham House, Talbot Road, Manchester M32 0FP  
 Tel. (0) 161 877 2334 - Fax (0) 870 135 6389  
**Emergency telephone number:** (0) 161 877 2334

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical description:** Dimethylamine-epichlorhydrine copolymer in aqueous solution.

**Hazardous components:**

SUBSTANCE	CONC.%	#CAS	#EINECS	SYMBOL	R PHRASES
Dimethylamine -epichlorhydrine copolymer	25-75	25988-97-0	Polymer	None	52/53

See point 16 for notes and eminent R phrases descriptions.

### 3. HAZARDS IDENTIFICATION

This product is classified as dangerous (European Directive 1999/45/CE).

**HUMAN HEALTH HAZARDS-ACUTE:**

**INHALATION:** May cause irritation with prolonged contact.  
**SKIN CONTACT:** Can cause mild irritation.  
**EYE CONTACT:** Can cause mild irritation.  
**INGESTION:** Can cause hazards in mucous membrane.

**ENVIRONMENTAL HAZARDS:**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Spills produce extremely slippery surfaces.

### 4. FIRST-AID MEASURES

**Skin contact:** Remove contaminated clothing. Wash off affected area immediately with plenty of water. Obtain medical attention.

**Eyes contact:** Immediately gently irrigate with clean water for at least 15 minutes. Move eyeball and keep eyelids wide open and apart whilst irrigating. Obtain medical attention.

**Inhalation:** Remove to fresh air, rest, treat symptomatically. Obtain medical attention.

**Ingestion:** If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

**Additional information:** Note to Physician: Ingestion of product may cause the formation of a jelly-like mass which may result in an intestinal obstruction.

### 5. FIRE-FIGHTING MEASURES

**Fire extinguishing agents recommended:** Water, water spray, CO<sub>2</sub>, Foam, dry powders.

**Fire and explosion hazard:** Oxides of nitrogen, Oxides of carbon.

**Personal protecting equipment:** Wear a full face positive-pressure self contained breathing apparatus and protective suit.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal caution:** Avoid contact with the skin and the eyes. In case of eye contact, rinse thoroughly with plenty of water and consult a physician. After skin contact, wash off immediately with soap and plenty of water. Use personal protective equipment.

**Washing procedures:** Small spills: Soak up with inert absorbent material. Clean up promptly by scoop or vacuum. Large spills: Sweep up and shovel. Reclaim into recovery or salvage drums. Clean contaminated surfaces with water or aqueous cleaning agents.

**Environmental procedures:** Limit leakages with earth or sand. If the product has escaped into a water course, into drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

**7. HANDLING AND STORAGE**

**Handling:** Avoid contact with skin, eyes and clothes. Avoid inhalation of the vapours. Do not eat or drink while working. Follow the industrial hygiene norms as for the handling of chemicals.

**Storage conditions:** Store the product in a well-ventilated area, dry place (0-30°C). Store the container well closed. Avoid freezing, it may damage the product. Keep away from heat and sources of ignition.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Technical protection measures:** Give adequate ventilation to the premises where the product is stored and/or handled. Natural ventilation is adequate in absence of mist.

**Respiratory protection:** An approved respirator must be worn if the occupational exposure limit is likely to be exceeded, filter-type A.

**Hands protection:** Nitrile gloves, Viton gloves. Most glove materials are of low chemical resistance. Replace gloves regularly.

**Eyes protection:** Chemical splash goggles. Do not wear contact lenses.

**Skin protection:** Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

**Hygiene recommendations:**

Keep an eye wash fountain available. Keep a safety shower available. Wash hands during breaks and at end of the shift. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form:</b>	Liquid
<b>Colour:</b>	Clear –amber.
<b>pH:</b>	4,0-6,0
<b>Bulk Density:</b>	1.0-1.2
<b>Viscosity:</b>	650-1000.
<b>Solubility in water:</b>	Completely.
<b>Autoignition temperature (°C):</b>	>200
<b>Flash point (°C):</b>	>100

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**Product name:** 4559**Code:** 4559**Revision:** 1**Date:** 7.11.05**Abbreviations:** nd: not determined na: not applicable**10. STABILITY AND REACTIVITY****Stability:** Product is stable, no hazardous polymerization will occur.**Conditions to avoid:** Freezing temperatures.**Materials to avoid:** Strong oxidizing agents.**Hazardous decomposition products:** Oxides of nitrogen, Oxides of carbon (under fire conditions) and hydrogen chloride gas.**11. TOXICOLOGICAL INFORMATION****ACUTE TOXICITY DATA:**

Oral (rat): LD050 > 2000 mg/kg (estimated)  
Dermal(rabbit): LD050 > 2000 mg/kg (estimated)  
Inhalation: The product is not expected to be toxic by inhalation.

**SKIN AND EYES PRIMARY IRRITATION(DRAIZE ESCALE) :****Skin:** Testing conducted on rabbits according to the Draize technique showed the material to be mildly irritating to the skin.**Eyes:** Testing conducted according to the Draize technique showed the material produces no corneal or iridial effects and only slight conjunctival effects.**SENSITIZATION:** Not sensitizing.**CHRONIC TOXICITY:** NOEL/oral/rat/90days=2000 mg/kg**OTHER INFORMATION:** Not mutagenic in AMES Test. Not mutagenic in micronucleus test on mice.**12. ECOLOGICAL INFORMATION****PERSISTENCE AND DEGRADATION:**

Not readily biodegradable.

**POTENTIAL MOBILITY AND BIOACUMULATION:**

Bioaccumulation is not likely . The big polymer size and hydrophilia are incompatible with the transport through biological membranes.

**ACUTE AQUATIC TOXICITY:**

**Fish:** LC50/96H/Danio rerio >10 mg/l (OECD 203)  
**Daphnids:** LC50/48H/Daphnia magna > 10 mg/l (OECD 203)  
**Algae:** Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

**HYDROLYSIS:** Does not hydrolyse.

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**OTHER ECOLOGICAL INFORMATION:**

The effects of this product on aquatic organisms are rapidly and significantly mitigated by the presence of dissolved organic carbon in the aquatic environment.

**13. DISPOSAL CONSIDERATIONS****Waste from residues/unused products:** In accordance with local and national regulations.**Contaminated packaging:** Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulation.**14. TRANSPORT INFORMATION****Remarks:** Not classified as dangerous in the meaning of transport regulations.**15. REGULATORY INFORMATION****CLASSIFICATION:**

The product is classified and labelled in accordance with EC directives or respective national laws.

**RISK PHRASES:**

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**SAFETY PHRASES:**

S24/25. Avoid contact with skin and eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 After contact with skin, wash immediately with plenty of soap and water. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

**INVENTORY STATUS:**

EINECS (Europe): Existing polymer according to the definition in the 7<sup>th</sup> Amendment to Directive 67/548/EEC. All starting materials and additives are listed in EINECS.

TSCA(USA): Complies with all applicable rules and orders under TSCA.

DSL(Canada): All components listed on inventory.

AICS(Australia): All components listed on inventory.

ECL(Korea): All components listed on inventory.

**16. OTHER INFORMATION**

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**SAFETY DATA SHEET****Page:5/5****Product name:****4559****Code: 4559****Revision: 1****Date:****7.11.05****RELEVANT R PHRASES:**

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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**The information and recommendations are offered for the user's consideration, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use.**

**The manufacturer provides no warranties, either expressed or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein.**

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