
MATERIAL SAFETY AND DATA SHEET

Section 1: Identification of the substance and company

Product Name: Cationic Liquids

Company Identification

Acorn Chemicals Ltd.
T/A Acorn Water
Glasslyn Rd.
Bandon,
Co. Cork.
Rep. Of Ireland.
Tel: (023) 43466
Fax: (023) 43467

Emergency Tel No.
(023) 43466

Section 2: Chemical composition/Information on Ingredients

Identification of the preparation: Cationic polymer in solution

Required Components	CAS Number	Weight %
Copolymer of Epichlorohydrin and Dimethylamine 25 - 50	R52/53	25988-97-0

Section 3: Hazards Identification

Spills produce extremely slippery surfaces.

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

Section 4: First Aid

<u>Skin contact:</u> skin	Wash with water and soap as a precaution. In case of persistent irritation, consult a physician.
<u>Eye contact:</u> case of	Rinse thoroughly with plenty of water, also under the eyelids. In persistent eye irritation, consult a physician.
<u>Inhalation:</u>	Move to fresh air.
<u>Ingestion:</u> animals.	The product is not considered toxic based on studies on laboratory animals.

Section 5: Fire fighting measures

<u>Suitable extinguishing media:</u> dry	water, water spray, foam, carbon dioxide (CO ₂), powder
<u>Special fire-fighting precautions:</u>	Spills produce extremely slippery surfaces.
<u>Special protective equipment for fire-fighters:</u>	No special protective equipment required.

Section 6: Accidental release measures

<u>Personal precautions:</u>	No special precautions required.
<u>Environmental precautions:</u>	Do not contaminate water.
<u>Methods for cleaning up:</u> in cleaning,	Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Keep suitable and closed containers for disposal. After flush away traces with water.

Section 7: Handling and Storage

<u>Handling:</u> solution ensure	Avoid contact with skin and eyes. When preparing the working there is adequate ventilation. When using do not smoke.
<u>Storage:</u> sources of the	Keep in a dry, cool place (0 - 30°C). Keep away from heat and ignition. Freezing will affect the physical condition and may damage material.

Section 8: Exposure controls/ Personal Protection

<u>Engineering measures to reduce exposure:</u>	Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.
<u>Personal protection equipment:</u>	
- Respiratory protection:	In case of insufficient ventilation wear suitable respiratory equipment.
- Hand protection:	Rubber gloves.
- Eye protection: contact	Safety glasses with side-shields. Do not wear lenses.
- Skin and body protection: splashing	Chemical resistant apron or protective suit if or repeated contact with solution is likely.
<u>Hygiene measures:</u> workday.	Wash hands before breaks and at the end of
hygiene and	Handle in accordance with good industrial safety practice.

Section 9: Physical and Chemical Properties

Appearance:	Clear/light yellow liquid
Odour:	None
Boiling Point:	101 °C
Flash point:	>100C
pH at 20 °C:	2.5 – 7.0
Autoignition Temperature:	
Flammability:	N/A
Explosive properties:	N/A
Oxidising properties:	N/A
Vapour pressure:	
Solubility:	

Section 10: Stability and reactivity

<u>Stability:</u>	Product is stable, no hazardous polymerization will occur.
<u>Materials to avoid:</u>	Oxidizing agents may cause exothermic reactions.
<u>Hazardous decomposition products:</u> directed. Burning of nitrogen	No decomposition if stored and applied as the dried material can produce : hydrogen chloride gas, oxides (NOx) carbon oxides.

Section 11: Toxicological Information

Acute toxicity

- Oral: LD50/oral/rat > 2000 mg/kg (estimated)
- Dermal: LD50/dermal/rat > 2000 mg/kg (estimated)
- Inhalation: The product is not expected to be toxic by inhalation.

Irritation

- 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: micronucleus test on

Not mutagenic in AMES Test. Not mutagenic in mice.

Section 12: Ecological Information

Acute aquatic toxicity

- Fish: LC50/Danio rerio /96 hours > 10 mg/L (OECD 203)
- Daphnids: EC50/Daphnia magna /48 hours > 10 mg/L (OECD 202)
- 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.
- Biodegradation: Not readily biodegradable.
- LogPOW: 0
- Bioaccumulation: Does not bioaccumulate.

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.

Section 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 regulations.

Section 14: Transport Information

Remarks : Not classified as dangerous in the meaning of transport
regulations.

Section 15: Regulatory Information

R -phrase(s): R52/53 - Harmful to aquatic organisms, may cause long-
term adverse effects in the aquatic environment.
S -phrase(s): S61 -Avoid release to the environment. Refer to special
instructions/Safety data sheets.

Section 16: Other Information

Other sources of data used to compile this information.

Draft BSEN 878-Chemicals used for the treatment of water intended for human
consumption.

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