SDS-CATIONICPOLY 10 Aug 2026

SAFETY DATA SHEET

CATIONIC POLYMER LIQUID COAGULANT

CAS No.: Proprietary polymer blend (aqueous solution of a cationic organic polymer, e.g. polyamine/poly-DADMAC type coagulant class) – exact formulation is manufacturer-proprietary; full composition available on request.

This Safety Data Sheet is issued by Suraj Chemicals as the distributor/supplier of record, based on manufacturer and published GHS / regulatory reference data for this substance. Users should also consult the specific manufacturer's SDS where available.

1. IDENTIFICATION

GHS Product identifier

CATIONIC POLYMER LIQUID COAGULANT
Low-to-medium molecular weight cationic polymer solution

CAS: Proprietary polymer blend (aqueous solution of a cationic organic polymer, e.g. polyamine/poly-DADMAC type coagulant class) – exact formulation is manufacturer-proprietary; full composition available on request.

Other means of identification

Not relevant

Recommended use of the chemical and restrictions on use

Relevant uses: Primary coagulant for raw water clarification, effluent treatment, sludge conditioning and colour/turbidity reduction in municipal and industrial water treatment plants. For industrial user only.

Uses advised against: All uses not specified in this section or in section 7.3.

Supplier's details

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS:
Classification of this product has been carried out in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), based on data available for this class of cationic liquid coagulant.

Eye Irrit. 2	Eye irritation, Category 2, H319
Skin Irrit. 2	Skin irritation, Category 2, H315

GHS label elements, including precautionary statements

GHS: Warning

Hazard statements

Eye Irrit. 2: H319 – Causes serious eye irritation.
Skin Irrit. 2: H315 – Causes skin irritation.

Precautionary statements

P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection.
P302+P352: IF ON SKIN: Wash with plenty of water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P501: Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification

Product/spilled solution creates very slippery surfaces. Not a PBT/vPvB substance based on available information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Chemical description: Aqueous solution of a cationic organic polymer coagulant, water balance.

Identification	Chemical Name / Classification	Concentration
Proprietary	Cationic organic polymer coagulant – Eye Irrit. 2 H319; Skin Irrit. 2 H315	10–50% (grade dependent – exact % available on request)
CAS: 7732-18-5	Water – Not classified	Balance

To obtain more information on the hazards of the substances, consult sections 11, 12 and 16.

4. FIRST AID MEASURES

Description of necessary first-aid measures

Request medical assistance immediately, showing the SDS of this product, if symptoms occur or persist.

By inhalation
Remove the person affected to fresh air and keep at rest.

By skin contact
Remove contaminated clothing. Wash skin thoroughly with plenty of water and soap. Seek medical attention if irritation persists.

By eye contact
Rinse eyes thoroughly with lukewarm water for at least 15 minutes, holding eyelids open. Remove contact lenses if present and easy to do. Seek immediate medical attention.

By ingestion/aspiration
Rinse mouth with water. Do not induce vomiting. Give water to drink if the person is conscious. Seek medical advice.

Most important symptoms/effects, acute and delayed

Eye and skin irritation. See sections 2 and 11.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Suitable: Water spray/fog, foam, dry chemical powder, carbon dioxide (product is an aqueous solution, non-flammable).
Unsuitable: None known

Specific hazards arising from the chemical

Not flammable. Aqueous solution. Combustion of the organic polymer content (in a surrounding fire) may produce carbon monoxide, carbon dioxide and oxides of nitrogen.

Special protective actions for fire-fighters

Wear self-contained breathing apparatus and full protective clothing in case of surrounding fire. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Use appropriate PPE (see Section 8). Note extreme slip hazard on spilled product.

For emergency responders
Wear protective equipment. Ventilate the area.

Environmental precautions

Prevent entry into drains, watercourses and soil.

Methods and materials for containment and cleaning up

Contain spill with sand/inert absorbent, collect into a labelled container for disposal/reuse. Wash residual area with water (small quantities only, per local discharge regulation) – do not flush concentrated product to drain.

Reference to other sections

See sections 8 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling

A. General precautions for safe use
Avoid contact with eyes and skin. Keep containers closed when not in use.

B. Technical recommendations for the prevention of fires and explosions
Non-flammable aqueous product – no special fire prevention measures required beyond good housekeeping.

C. Technical recommendations on general occupational hygiene
Do not eat, drink or smoke while handling. Wash hands after handling.

D. Technical recommendations to prevent environmental risks
Provide bunding for bulk storage tanks. Prevent product from entering drains or watercourses.

Conditions for safe storage, including any incompatibilities

A. Specific storage requirements

Minimum Temp.	5°C (avoid freezing)
Maximum Temp.	35°C
Maximum time (unopened, original packaging)	6–12 Months

B. General conditions for storage
Store in tightly closed original containers, in a cool, dry, well-ventilated place, protected from direct sunlight and freezing temperatures. Store in compatible containers (HDPE/lined MS) as per manufacturer's recommendation.

Specific end use(s)

Except for the instructions already specified, it is not necessary to provide any special recommendation regarding the uses of this product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

No specific occupational exposure limit has been established for this product under the Factories Act, 1948.

Appropriate engineering controls

General ventilation is normally sufficient. Consult manufacturer's leaflet for storage, use, cleaning and maintenance of PPE.

B. Respiratory protection
Not normally required under normal conditions of use; use if mist/aerosol is generated.

C. Specific protection for the hands
Chemical-resistant gloves (nitrile or PVC).

D. Eye and face protection
Chemical splash goggles.

E. Bodily protection
Chemical-resistant apron/coveralls; non-slip footwear.

F. Additional emergency measures
Eyewash station and safety shower should be available.

Environmental exposure controls
Avoid environmental spillage of both the product and its container. See subsection 7.1.D.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	
Physical state at 20°C	Liquid
Appearance	Viscous liquid
Color	Colorless to pale yellow
Odor	Faint / characteristic
Odour threshold	Not relevant *
Volatility	
Boiling point at atmospheric pressure	≈100°C (water-based)
Vapour pressure at 20°C / 50°C	≈ that of water
Evaporation rate at 20°C	≈ that of water
Product Description	
Density / Relative density at 20°C	Approx. 1.02–1.10 g/cm³
Dynamic / Kinematic viscosity	Moderate to high (grade dependent) – available on request
Concentration	10–50% active polymer (grade dependent)
pH (as supplied)	Approx. 3–6 (mildly acidic, grade dependent)
Vapour density at 20°C	Not relevant *
Partition coefficient n-octanol/water 20°C	Not relevant (ionic polymer)
Solubility in water at 20°C	Fully miscible
Decomposition temperature	Not established for this grade
Melting point/freezing point	≈0°C (freezes; avoid freeze/thaw cycling)
Flammability	
Flash Point	Non-applicable (aqueous solution)
Flammability (solid, gas)	Non-applicable
Autoignition temperature	Not relevant *
Lower / Upper flammability limit	Not relevant *
Particle Characteristics	
Median equivalent diameter	Non-applicable (liquid)

** Not relevant due to the nature of the product, not providing information on the properties of its hazards.*

Other information

Explosive properties	Not explosive
Oxidising properties	Not an oxidizer
Corrosive to metals	Not classified as corrosive to metals
Heat of combustion	Not relevant *
Surface tension at 20°C	Not relevant *
Refraction index	Not relevant *

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use. May react with strong oxidizing agents.

Chemical stability

Chemically stable under the indicated conditions of storage, handling and use. Avoid freezing, which can cause irreversible phase separation.

Possibility of hazardous reactions

Under the specified conditions, hazardous reactions are not expected.

Conditions to avoid

Shock/Friction	Contact with Air	Increase in Temperature	Sunlight	Humidity
Not applicable	Not applicable	Avoid prolonged high heat	Avoid prolonged direct exposure	Not applicable (aqueous)

Incompatible materials

Strong Oxidizers	Strong Acids/Alkalis	Anionic Polymers (undiluted contact)
Avoid contact	Avoid contact (destabilization)	May cause premature gelling if mixed undiluted

Hazardous decomposition products

Thermal decomposition may release carbon monoxide, carbon dioxide and oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Quantitative endpoint data specific to this proprietary grade is not published by the manufacturer – Available on request. General class data for cationic liquid coagulants indicates low acute oral/dermal toxicity with irritant properties to eyes and skin at the concentrated (as-supplied) form.

A. Ingestion (acute effect)
May cause gastrointestinal irritation if swallowed.

B. Inhalation (acute effect)
Mist may cause irritation of the respiratory tract.

C. Contact with skin and eyes (acute effect)
Causes skin irritation. Causes serious eye irritation.

D. CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)
Classification criteria for carcinogenicity, mutagenicity and reproductive toxicity are not met based on available data.

E. Sensitizing effects
Classification criteria for respiratory or skin sensitisation are not met based on available data.

F. Specific target organ toxicity (STOT) – single exposure
Classification criteria are not met based on available data.

G. Specific target organ toxicity (STOT) – repeated exposure
Classification criteria are not met based on available data.

H. Aspiration hazard
Classification criteria are not met based on available data.

Product-specific toxicological information

Identification	Acute Toxicity	Genus
Finished product (class data)	Oral LD50: >2000 mg/kg (typical for this polymer class, not batch-specific – available on request)	Rat

12. ECOLOGICAL INFORMATION

Quantitative aquatic toxicity data specific to this grade is not published – Available on request.

Toxicity
Cationic polymer coagulants as a class can be toxic to fish and aquatic invertebrates at concentrated/undiluted levels due to charge-driven interaction with gill membranes; toxicity decreases rapidly with dilution and adsorption to suspended solids, which is the mechanism of the product's intended use.

Persistence and degradability
Not readily biodegradable; degrades slowly via hydrolysis/UV over time.

Bioaccumulative potential
Not expected to bioaccumulate significantly.

Mobility in soil

Koc	Henry	Dry Soil	Moist Soil
Not relevant	Not relevant	Low mobility (binds to soil particles)	Low mobility

Results of PBT and vPvB assessment
Not expected to meet PBT/vPvB criteria based on available information.

Other adverse effects
Not described

13. DISPOSAL CONSIDERATIONS

Disposal methods

Do not discharge undiluted product to drains or watercourses. Dilute product may be used within its intended dosing process; excess/off-spec material should be disposed of as per local industrial effluent/waste regulations. Empty containers may retain product residue.

Refer to national and local regulations on waste management.

14. TRANSPORT INFORMATION

Transport of dangerous goods by land (ADR 2023 / RID 2023)

14.1 UN number	Not regulated as dangerous goods
14.2 UN proper shipping name	Non-applicable
14.3 Transport hazard class(es)	Non-applicable
14.4 Packing group	Non-applicable
14.5 Environmental hazard	No
14.6 Special precautions for user	Physico-chemical properties: see section 9
14.7 Transport in bulk (Annex II MARPOL 73/78, IBC Code)	Not relevant

Transport of dangerous goods by sea (IMDG 41-22)

14.1 UN number	Not regulated as dangerous goods
14.2 UN proper shipping name	Non-applicable
14.3 Transport hazard class(es)	Non-applicable
14.4 Packing group	Non-applicable
14.5 Marine pollutant	No
14.6 Special precautions for user	Not regulated
14.7 Transport in bulk (Annex II MARPOL 73/78, IBC Code)	Not relevant

Transport of dangerous goods by air (IATA/ICAO 2024)

14.1 UN number	Not regulated as dangerous goods
14.2 UN proper shipping name	Non-applicable
14.3 Transport hazard class(es)	Non-applicable
14.4 Packing group	Non-applicable
14.5 Environmental hazard	No
14.6 Special precautions for user	Not regulated
14.7 Transport in bulk (Annex II MARPOL 73/78, IBC Code)	Not relevant

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of local circumstances, in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation

Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 (India)
The Factories Act, 1948 (Act No. 63 of 1948), as amended by the Factories (Amendment) Act, 1987 (Act 20 of 1987)
Public Liability Insurance Act, 1991

16. OTHER INFORMATION

Legislation related to safety data sheets

This safety data sheet has been designed in accordance with Annex 4 – Guidance on the preparation of Safety Data Sheets of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Texts of the legislative phrases mentioned in sections 2 and 3

H315: Causes skin irritation.
H319: Causes serious eye irritation.

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3.

Advice related to training

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources

The United Nations Economic Commission for Europe (UNECE); publicly available GHS classification reference data for cationic liquid coagulant/polymer products of this class.

Abbreviations and acronyms

ADR: European agreement concerning the international carriage of dangerous goods by road | IMDG: International maritime dangerous goods code | IATA: International Air Transport Association | ICAO: International Civil Aviation Organisation | LD50: Lethal Dose 50 | Koc: Partition coefficient of organic carbon | PBT: Persistent, Bioaccumulative and Toxic | vPvB: very Persistent, very Bioaccumulative

Disclaimer: The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product; it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within Suraj Chemicals' awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

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