

POLYELECTROLYTE CATIONIC (POWDER & LIQUID)

Date of compilation: 08-08-2026 | Revised: 08-08-2026 | Version: 1

SECTION 1: IDENTIFICATION

1.1 GHS Product identifier:

POLYELECTROLYTE CATIONIC (Powder & Liquid) – SUNFLOC series
Cationic polyacrylamide-based flocculant
CAS: Proprietary polymer blend (principal reference component: cationic acrylamide-based copolymer, CAS 9003-05-8)

Other means of identification:

Not relevant

1.2 Recommended use of the chemical and restrictions on use:

Relevant uses: Flocculant/coagulant aid for mineral processing, municipal and industrial water & wastewater treatment, sludge dewatering, paper and textile processing. For industrial user only.
Uses advised against: All uses not specified in this section or in section 7.3. Not for use in direct contact with food/potable water unless the specific grade supplied is certified for that purpose.

1.3 Supplier's details:

SURAJ CHEMICALS
No 92, Govindappa Naicken Street, Shiva Complex, Chennai – 600001, Tamil Nadu, India
Tel: +91 - 7092722822, +91 - 9840284032 / +91 - 44 - 25393652, 42130281
Email: sales@surajchemicals.com | Website: www.surajchemicals.com
GST No: 33ACEPV8190L1ZZ

1.4 Emergency phone number:

Emergency Contact No: +91 - 7092722822, +91 - 9840284032

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GHS: Based on available data, this product does not meet the GHS classification criteria for physical, health, or environmental hazard classes.

2.2 GHS label elements, including precautionary statements:

No hazard pictograms or signal word are required. General precautionary statement: in case of contact with eyes, rinse immediately with plenty of water and seek medical advice; wear suitable protective clothing.

2.3 Other hazards which do not result in classification:

Dust or mist may be irritating to eyes, respiratory system and skin on prolonged/repeated contact (non-classifying effect; see section 11).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Non-applicable – this product is a polymer formulation (see 3.2).

3.2 Mixtures:

Identification	Chemical Name / Classification	Concentration
CAS: 9003-05-8 (reference)	Cationic acrylamide-based copolymer – Not classified	Available on request (proprietary formulation)

Exact monomer ratio and formulation are proprietary to the manufacturer. To obtain more information on the hazards of the components, consult sections 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of necessary first-aid measures:

By skin contact:

Immediately wash skin with soap and copious amounts of water. If irritation persists, call a physician.

By eye contact:

Flush with copious amounts of water for at least 15 minutes, separating the eyelids with fingers to assure adequate flushing. If irritation persists, call a physician.

By inhalation:

Remove to fresh air. If necessary, get medical attention.

By ingestion:

If swallowed and the person is conscious, immediately wash out mouth with water. Call a physician.

4.2 Most important symptoms/effects, acute and delayed:

May be irritating to eyes, respiratory system and skin.

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

Not relevant

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media:

Suitable: Water spray, dry chemical, carbon dioxide or appropriate foam.
Unsuitable: None known.

5.2 Specific hazards arising from the chemical:

Emits toxic fumes (carbon monoxide, carbon dioxide, nitrogen oxides) under fire conditions.

5.3 Special protective actions for fire-fighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Exercise appropriate precautions to minimize direct contact with skin and eyes.

6.2 Environmental precautions:

Avoid discharge to water bodies where practicable; contain spillage. Powder forms slippery surfaces when wetted – treat as a slip hazard.

6.3 Methods and materials for containment and cleaning up:

Sweep up with a spade and transfer to a dry, clean, lidded container for disposal. Avoid raising dust. Ventilate the area and wash the spill site after material pickup is complete.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

Wear appropriate clothing and gloves. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Mechanical exhaust ventilation is recommended. Keep away from ignition sources, heat and flame. Incompatible with strong oxidizing agents and food. No smoking at the working site.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area away from ignition sources, heat and flame, in a tightly closed container. Incompatible with strong oxidizing agents and food.

7.3 Specific end use(s):

No special requirement beyond the uses specified in section 1.2.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

No specific occupational exposure limit is established for this formulation; general nuisance dust limits apply for the powder grade.

8.2 Appropriate engineering controls:

Use ventilation equipment where available. Safety shower and eye bath should be accessible.

B. Respiratory protection:

Government-approved respirator if necessary (dusty conditions, powder grade).

C. Specific protection for the hands:

Compatible chemical-resistant protective gloves.

D. Eye and face protection:

Chemical safety goggles.

E. Bodily protection:

Appropriate protective clothing. No smoking, drinking or eating at the working site; wash thoroughly after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties (Powder grade):

Item	Result
Physical state	Solid, granular/powder (water-soluble organic polymer)
Solid content	≥ 90%
Volume/bulk density	0.77 g/cm³
Soluble matter	> 99.2%
Insoluble matter	< 0.8%
Moisture and impurities	< 10%

Liquid/emulsion grade: physical properties are grade-dependent and available on request from Suraj Chemicals.

9.2 Other information (heavy metal content, powder grade, typical):

Item	Result
Cadmium	≤ 1 mg/kg
Lead	≤ 5.02 mg/kg
Mercury	≤ 0.48 mg/kg

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No specific reactivity hazard identified under normal conditions.

10.2 Chemical stability:

Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions:

Hazardous polymerization will not occur.

10.4 Conditions to avoid:

Ignition Sources	Heat/Flame	Strong Oxidizers
Avoid	Avoid	Avoid contact

10.5 Incompatible materials:

Strong oxidizing agents; food.

10.6 Hazardous decomposition products:

Carbon monoxide, carbon dioxide, nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Irritation data: may be irritating to eyes, respiratory system and skin.

Product-specific toxicological information:

Test	Species/Route	Value
Oral LD50	Rat	> 1000 mg/kg
Oral LD50	Rat	12,990 mg/kg
Intraperitoneal LD50	Rat	3,670 mg/kg
Oral LD50	Rabbit	11,520 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

- 12.1 Toxicity:**
Not established for this specific formulation. Polymerized cationic polyacrylamide flocculants are generally of low aquatic toxicity in their polymerized form; however, residual unreacted monomer (acrylamide) is toxic to aquatic organisms and neurotoxic. Avoid direct discharge to water bodies.
- 12.2 Persistence and degradability:**
No data available.
- 12.3 Bioaccumulative potential:**
No data available.
- 12.4 Mobility in soil:**
Soluble/dispersible in water.
- 12.5 Results of PBT and vPvB assessment:**
Not established.
- 12.6 Other adverse effects:**
No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1 Disposal methods:**
Spent or discarded material is not normally classified as hazardous waste. Dispose of via a licensed waste disposal contractor, or dissolve and dispose of in accordance with local, state and national environmental regulations.

SECTION 14: TRANSPORT INFORMATION

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

14.1 UN number	None – non-hazardous for transport
14.2 UN proper shipping name	Non-applicable
14.3 Transport hazard class(es)	None
14.4 Packing group	Non-applicable
14.5 Environmental hazard	No
14.6 Special precautions for user	None
14.7 Transport in bulk	Not relevant

Transport of dangerous goods by sea (IMDG/IMO):

14.1 UN number	None – non-hazardous for sea transport
14.2 UN proper shipping name	Non-applicable
14.3 Transport hazard class(es)	None
14.4 Packing group	Non-applicable
14.5 Marine pollutant	No
14.6 Special precautions for user	None
14.7 Transport in bulk	Not relevant

Transport of dangerous goods by air (IATA):

14.1 UN number	None – non-hazardous for air transport
14.2 UN proper shipping name	Non-applicable
14.3 Transport hazard class(es)	None
14.4 Packing group	Non-applicable
14.5 Environmental hazard	No
14.6 Special precautions for user	None
14.7 Transport in bulk	Not relevant

SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations specific for the product in question:**
Handle in accordance with general workplace chemical safety norms under the Factories Act, 1948 (as amended, 1987). Not classified as hazardous chemical under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- Other legislation:**
The Factories Act, 1948 (Act No. 63 of 1948), as amended by the Factories (Amendment) Act, 1987 (Act 20 of 1987)

SECTION 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:**
Not applicable – this product is not classified as hazardous under GHS.
- Advice related to training:**
Minimal training is recommended to prevent industrial risks for staff using this product, to facilitate comprehension of this safety data sheet and the product label.
- Principal bibliographical sources:**
Manufacturer's Material Safety Data Sheet for the polyacrylamide-based reference polymer (ISO 11014-1:1994 format); general public reference data on cationic polyacrylamide flocculants.
- Abbreviations and acronyms:**
LD50: Lethal Dose 50 | PPE: Personal Protective Equipment

END OF SAFETY DATA SHEET

SURAJ CHEMICALS | No 92, Govindappa Naicken Street, Shiva Complex, Chennai – 600001 | +91 - 7092722822, +91 - 9840284032 | sales@surajchemicals.com | www.surajchemicals.com