

SAFETY DATA SHEET

SUNREDEP SC03 (ANTI-SOIL REDEPOSITION AND ANTI-ENCrustATION POLYMER)

CAS No.: Proprietary polymer blend

This Safety Data Sheet is issued by Suraj Chemicals, the manufacturer of this Sun Brand product, based on the product specification and published GHS / regulatory reference data for this class of substance.

1. IDENTIFICATION

GHS Product identifier	SUNREDEP SC03 (ANTI-SOIL REDEPOSITION AND ANTI-ENCrustATION POLYMER) Anionic polymer solution – Sun Brand CAS: Proprietary polymer blend
Other means of identification	Not relevant
Recommended use of the chemical and restrictions on use	Relevant uses: Anti-soil redeposition and anti-encrustation polymer for water-treatment and cleaning formulations. 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.
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
Emergency phone number	Emergency Contact No: +91 - 7092722822, +91 - 9840284032

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture	GHS: <table border="1"> <tr> <td>Skin Irrit. 2</td><td>Skin irritation, Category 2, H315</td></tr> <tr> <td>Eye Irrit. 2</td><td>Eye irritation, Category 2, H319</td></tr> </table> Classification is based on the acidic to mildly acidic pH typical of this grade (see section 9). Grade-to-grade pH varies; consult the batch Certificate of Analysis.	Skin Irrit. 2	Skin irritation, Category 2, H315	Eye Irrit. 2	Eye irritation, Category 2, H319
Skin Irrit. 2	Skin irritation, Category 2, H315				
Eye Irrit. 2	Eye irritation, Category 2, H319				
GHS label elements, including precautionary statements	GHS: Warning Hazard statements Skin Irrit. 2: H315 – Causes skin irritation. Eye Irrit. 2: H319 – Causes serious eye 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.				
Other hazards which do not result in classification	Spilled product forms a slippery film on floors. This substance/mixture does not meet the PBT/VPvB criteria based on available data.				

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances	Non-applicable – this product is an aqueous polymer formulation (see 3.2).		
Mixtures			
	Identification	Chemical Name / Classification	Concentration
	CAS: Proprietary polymer blend	anionic polymer (anionic polymer) – Not classified	Available on request (proprietary formulation)
	7732-18-5	Water – Not classified	Balance

Exact polymer composition, molecular weight and formulation additives are proprietary to the manufacturer. To obtain more information on the hazards of the components, consult sections 11, 12 and 16.

4. FIRST AID MEASURES

Description of necessary first-aid measures	By skin contact Remove contaminated clothing. Wash skin immediately with plenty of soap and water. If irritation persists, seek medical attention. By eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses if present and easy to do. If irritation persists, seek medical attention. By inhalation Remove to fresh air. If breathing is difficult, give oxygen; if not breathing, give artificial respiration and get medical attention. By ingestion Do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.
Most important symptoms/effects, acute and delayed	Causes skin and eye irritation. Symptoms detailed further in section 11.

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

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Suitable: Water spray, dry chemical, carbon dioxide or appropriate foam – product is an aqueous solution and is not itself flammable. Unsuitable: None known.
Specific hazards arising from the chemical	Non-flammable aqueous liquid. Thermal decomposition may release carbon monoxide, carbon dioxide and sodium oxides.
Special protective actions for fire-fighters	Wear self-contained breathing apparatus and full protective clothing in case of fire in the surrounding area. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Avoid contact with skin and eyes. Use personal protective equipment as described in section 8. Ensure adequate ventilation. Spilled material is slippery – caution against falls.
Environmental precautions	Prevent entry into drains, watercourses or soil. Contain spillage with an inert absorbent.
Methods and materials for containment and cleaning up	Dike and contain spill. Absorb with inert material (sand, earth, vermiculite) and transfer to a suitable container for disposal. Flush residual traces with water; treat according to local regulations.
Reference to other sections	See sections 8 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Use with adequate ventilation. Wash thoroughly after handling. Keep container tightly closed when not in use. Do not mix with strong oxidizers or strong alkalis unless as directed by application dosing procedure.
Conditions for safe storage, including any incompatibilities	Store in tightly closed original containers in a cool, dry, well-ventilated area, protected from freezing and direct sunlight. Keep away from strong oxidizing agents and strong bases. Typical shelf life: 12 months from date of manufacture in unopened packaging.
Specific end use(s)	No special requirement beyond the uses specified in section 1.2. Dosing rates and application procedures are grade- and system-specific – consult Suraj Chemicals for guidance.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters	No specific occupational exposure limit is established for this formulation under the Factories Act, 1948 (as amended).
Appropriate engineering controls	Use local exhaust ventilation where mist/aerosol may be generated. Emergency eyewash and safety shower should be accessible near the work area. B. Respiratory protection Not normally required under normal handling; use a mist respirator if spraying/misting operations generate airborne droplets. C. Specific protection for the hands Chemical-resistant gloves (nitrile or PVC). D. Eye and face protection Chemical safety goggles or face shield. E. Bodily protection Acid-resistant apron/protective clothing recommended for bulk handling. No smoking, drinking or eating at the working site; wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties	Item	Result
	Physical state at 20°C	Liquid (aqueous polymer solution)
	Appearance	Clear colourless to pale yellow liquid
	Non-volatile solids	47.0 – 53.0%
	pH of solution	2.5 – 4.0
	Brookfield viscosity	100 – 800 cP (LV1, 30 rpm); typical 200 – 600 cP
	Ionic character / charge density	Anionic / high
	pH of solution (typical)	2.0 – 4.0
	Solubility in water	Miscible
	Flash point	Non-applicable (aqueous solution)
	Storage temperature	0 – 35°C
	Shelf life	12 months
Precise batch values are grade-dependent and available on request via the Certificate of Analysis.		
Other information	Explosive properties	Not relevant
	Oxidising properties	None
	Corrosive to metals	May be mildly corrosive to mild steel/carbon steel at low pH; not corrosive to stainless steel or plastics normally used for dosing systems

10. STABILITY AND REACTIVITY

Reactivity	No specific reactivity hazard identified under normal conditions of use and storage.
Chemical stability	Stable under normal temperatures and pressures. May be affected by prolonged exposure to freezing temperatures (may cause irreversible phase separation) – store as per section 7.2.

Possibility of hazardous reactions	Hazardous polymerization will not occur.		
Conditions to avoid	Freezing	Strong Oxidizers	Strong Alkalies
	Avoid	Avoid contact	Avoid uncontrolled mixing
Incompatible materials	Strong oxidizing agents; strong alkalis/bases (uncontrolled mixing may cause exothermic neutralisation).		
Hazardous decomposition products	None under normal conditions; thermal decomposition may release carbon oxides and sodium oxides.		

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Based on available data for anionic polymer dispersants, the classification criteria for acute toxicity, CMR, sensitisation and STOT are not met.

Product-specific toxicological information (reference: anionic polymer class)

Test	Species/Route	Value
Acute oral toxicity	Rat	LD50 > 5,000 mg/kg
Acute dermal toxicity	Rabbit	LD50 > 2,000 mg/kg
Skin irritation	Rabbit	Mild to moderate irritant (acidic pH)
Eye irritation	Rabbit	Irritant (acidic pH)

Values are class-typical reference data for anionic dispersants; batch-specific toxicology testing has not been performed on this proprietary formulation.

12. ECOLOGICAL INFORMATION

Toxicity	Not established for this specific formulation. anionic polymer dispersants are generally of low aquatic toxicity; avoid uncontrolled discharge due to low pH and dispersant action on suspended solids.
Persistence and degradability	anionic polymers show limited biodegradability under standard test conditions; not readily biodegradable.
Bioaccumulative potential	Not expected to bioaccumulate (high molecular weight, water-soluble polymer).
Mobility in soil	Miscible with water; expected to be mobile in aqueous environments.
Results of PBT and vPvB assessment	Not established for this formulation.
Other adverse effects	No data available.

13. DISPOSAL CONSIDERATIONS

Disposal methods	Neutralise if necessary and dispose of via a licensed waste disposal contractor in accordance with local, state and national environmental regulations. Do not discharge to drains/watercourses without treatment. Rinse empty containers with water before disposal or recycling; do not reuse for food/potable purposes.
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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

15. REGULATORY INFORMATION

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 listed as a scheduled hazardous chemical under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, but standard irritant-handling precautions apply.
	Other legislation
	The Factories Act, 1948 (Act No. 63 of 1948), as amended by the Factories (Amendment) Act, 1987 (Act 20 of 1987)

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 alone; they reflect the general hazard profile of this substance class and are present for informative purposes.

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

General public reference data for anionic polymer / anionic dispersant class chemistry.

Abbreviations and acronyms

LD50: Lethal Dose 50 | PPE: Personal Protective Equipment | 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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