

SAFETY DATA SHEET

RNR ZORBZALL® | Sodium Polyacrylate

Prepared in accordance with the 16-section format of 29 CFR 1910.1200.

1. Identification

Product identifier	RNR ZORBZALL®
Chemical name	Homopolymer of acrylic acid, partial sodium salt
Other identification	Cross-linked sodium polyacrylate; superabsorbent polymer
Recommended use	Superabsorbent polymer for absorbing and solidifying aqueous liquids in industrial and commercial applications.
Restrictions on use	None known. Use only in accordance with product information and this Safety Data Sheet.

Supplier / Distributor

Company	RNR Environmental
Address	477 Twin Springs Road, Georgetown, Texas 78633, USA
Telephone	818-606-1673
Email	rob@rnr-enviro.com
Emergency - US/Canada	+1 800-424-9300 (CHEMTREC)
Emergency - Mexico	800-681-9531 (CHEMTREC)
Emergency - International	+1 703-527-3887 (CHEMTREC)

2. Hazard(s) identification

GHS classification	Not classified as hazardous under the applicable OSHA Hazard Communication criteria.
Signal word	None
Hazard pictogram	None
Hazard statement	Not applicable
Other hazards	Dust may form an explosive mixture with air. Product forms slippery surfaces when wet.

3. Composition / information on ingredients

Chemical identity	CAS number	Concentration
Cross-linked sodium polyacrylate	9003-04-7	90-100%

All concentrations are percent by weight unless otherwise stated. Exact concentration may be withheld as a trade secret.

4. First-aid measures

General	Remove contaminated clothing. Seek medical advice if symptoms occur.
Inhalation	Move person to fresh air. Seek medical advice if symptoms occur.
Skin contact	Wash with soap and water. Seek medical advice if irritation persists.
Eye contact	Rinse cautiously with plenty of water. Seek medical advice if symptoms persist.
Ingestion	Rinse mouth thoroughly with water. Seek medical advice if symptoms occur.
Important symptoms/effects	No specific symptoms known. Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	Foam, carbon dioxide, dry chemical or water spray.
Unsuitable media	High-volume water jet.
Specific hazards	Fire may release carbon monoxide and carbon dioxide. Airborne dust may present a dust-explosion hazard.
Protective equipment	Do not inhale combustion gases. Wear self-contained breathing apparatus and appropriate protective equipment.

6. Accidental release measures

Personal precautions	Avoid generating or inhaling dust. Use appropriate personal protective equipment. Wet material is slippery.
Containment and cleanup	Pick up mechanically while minimizing dust. Place recovered material in a suitable container for disposal.
Environmental precautions	Do not allow material to enter drains, waterways, soil or subsoil.

7. Handling and storage

Safe handling	Avoid breathing dust and contact with eyes or skin. Provide adequate ventilation. Keep away from ignition sources where dust may be generated.
Hygiene	Wash hands after handling and before breaks. Do not eat, drink or smoke while using the product. Remove contaminated clothing.
Storage	Keep container tightly closed and dry. Protect from moisture.

8. Exposure controls / personal protection

Exposure limits	No component-specific occupational exposure limits assigned in the supplied data. Control airborne particulate according to applicable nuisance-dust limits.
Engineering controls	Use adequate general or local exhaust ventilation where dust may be generated.
Eye/face protection	Select safety glasses or goggles based on workplace risk assessment.
Skin protection	Wear protective clothing and suitable gloves as required by workplace conditions.
Respiratory protection	If dust is generated and ventilation is insufficient, use an appropriately approved particulate respirator. Prior data identified a P1 filter for short-term dust exposure.

9. Physical and chemical properties

Property	Value	Property	Value
Physical state / form	Solid / granular	Color	White
Odor	Odorless	pH	5.5-6.5 (1 g/L, 22°C)
Melting point	>390°F	Boiling point	Not applicable
Flash point	Not applicable	Evaporation rate	No data available
Flammability	No data available	Explosive limits	Not measured
Vapor pressure	<13 hPa	Vapor density	No data available
Density	0.600 g/cm ³ (25°C)	Water solubility	Insoluble; swells in water
Auto-ignition	Not measured	Decomposition	>200°C
Viscosity	Not applicable	Oxidizing properties	No data available

10. Stability and reactivity

Reactivity	No specific reactive hazards identified under recommended handling and storage conditions.
Chemical stability	Stable under recommended storage and handling conditions.
Hazardous reactions	Airborne dust may present a dust-explosion risk.
Conditions to avoid	Avoid temperatures above 200°C, moisture exposure and conditions that generate suspended dust near ignition sources.
Incompatible materials	None known from the supplied data.
Decomposition products	Carbon monoxide and carbon dioxide may be produced during combustion or thermal decomposition.

11. Toxicological information

Likely routes of exposure and acute effects

Inhalation / skin / eyes / ingestion	No product-specific data available. Dust may cause mechanical irritation. Follow the first-aid guidance in Section 4.
Acute oral toxicity	LD50 (rat): >5,000 mg/kg.
Acute dermal toxicity	LD50 (rat): >2,000 mg/kg.
Acute inhalation toxicity	Not classified for acute toxicity based on available data.

Irritation, sensitization and chronic endpoints

Endpoint	Available information
Skin irritation	Cross-linked sodium polyacrylate: not irritating (OECD 404, rabbit).
Eye irritation	Rabbit data referenced in prior product data; no definitive product classification stated.
Sensitization	Not sensitizing (OECD 406, guinea pig).
Mutagenicity	No evidence of mutagenic effects in cited OECD 471, mouse lymphoma and OECD 474 tests.
Carcinogenicity	No carcinogens present in regulated quantities under IARC, NTP or OSHA listings in the supplied data.
Reproductive toxicity	No evidence for hazardous properties in the supplied component data.
STOT - single exposure	No data available.
Aspiration hazard	Not classified.

Repeated inhalation: A two-year rat inhalation study using micronized superabsorbent-polymer dust produced nonspecific lung inflammation and tumors at the highest chronic concentration. Tumors are not expected without chronic inflammation. The cited NOEL was 0.05 mg/m³ of micronized superabsorbent-polymer dust. Minimize dust exposure and follow Section 8.

12. Ecological information

Fish	LC50, golden orfe, 96 h: >5,500 mg/L; LC50, zebrafish, 96 h: >4,000 mg/L.
Aquatic invertebrates	EC50, Tetrahymena pyriformis, 48 h: >6,000 mg/L.
Aquatic plants	No data available.
Persistence / degradability	No data available.
Bioaccumulation	No data available.
Mobility in soil	No data available.
Other adverse effects	Avoid release to soil, drains, waterways or wastewater systems.

13. Disposal considerations

Dispose of product, residues and contaminated packaging in accordance with applicable federal, state and local regulations. Do not discharge to drains or waterways. Inform the waste receiver of relevant product characteristics. Empty containers may retain residue.

14. Transport information

Transport mode	Classification
US DOT / 49 CFR	Not regulated as a dangerous good.
UN Model Regulations	Not regulated as a dangerous good.
IATA-DGR	Not regulated as a dangerous good.
IMDG Code	Not regulated as a dangerous good.
MARPOL Annex II / IBC Code	Not applicable for product as supplied.

15. Regulatory information

Based on the supplied regulatory data, the product contains no substances present in regulated quantities under the following cited programs:

Program	Status in supplied data
TSCA Section 12(b) export notification	None present in regulated quantities.
TSCA significant new use rules (40 CFR 721)	None present in regulated quantities.
OSHA specifically regulated substances	None present in regulated quantities.
CERCLA hazardous substances	None present in regulated quantities.
SARA hazard categories	Not classified.
SARA 304 / CERCLA reportable substances	None present in regulated quantities.
SARA 313 toxic chemicals	None present in regulated quantities.
Clean Air Act Section 112(r)	None present in regulated quantities.
Clean Water Act Section 311	None present in regulated quantities.
California Proposition 65	No ingredient requiring a warning in the supplied data.
NJ, MA, PA and RI right-to-know lists	No listed ingredient identified in the supplied data.

Users are responsible for determining the applicability of current federal, state, local and international requirements to their operations and uses.

16. Other information

Original issue date	07/28/2020
Revision date	09/15/2026
Version	2.0
Revision summary	RNR contact information, recommended-use statement, format, disposal wording and company-specific disclaimer updated. Technical hazard information consolidated from the prior version.

Disclaimer

The information in this Safety Data Sheet is presented in good faith and is believed to be accurate as of the revision date. It is provided for health, safety and environmental guidance and is not a product specification or warranty. Conditions of handling, storage, use and disposal are beyond RNR Environmental's control. Recipients are responsible for evaluating the product for their intended use, complying with applicable requirements and establishing appropriate workplace controls. To the extent permitted by law, RNR Environmental disclaims implied warranties, including merchantability and fitness for a particular purpose, and is not responsible for loss or damage resulting from improper handling, use, storage or disposal.

END OF SAFETY DATA SHEET