

Poly(vinylsulfonic acid, sodium salt) solution SDS Safety Data Sheet MSDS Sheet, Material Safety Data Sheet

Section 1: Chemical Product

<u>Product Name</u>: Poly(vinylsulfonic acid, sodium salt) solution <u>Formula</u>: (C₂H₃NaO₃S)_x <u>CAS#</u>: 9002-97-5 <u>Recommended uses and uses advised against (if any)</u>: Oil & Gas Wells fracturing and Industrial Manufacturing.

SUPPLIER Company: Finoric LLC Address: 8115 Loop 540, Beasley, Texas, 77417 USA

In case of emergency contact: InfoTrac US: 1-800-535-5053 International: 352-323-3500

Section 2: Hazards Identification

GHS, Globally Harmonized System Classification in accordance with 29 CFR 1910 Classification according to Regulation (EC) No 1272/2008

Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Specific target organ toxicity, single exposure; Respiratory tract irritation Category 3

Labeling according GHS USA & Regulation (EC) No 1272/2008



Signal Word: Warning

Hazard statements: H315: Causes skin irritation.



H319: Causes serious eye irritation. H335: May cause respiratory irritation.

Precautionary statements:

P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ eye protection/ face protection. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER or doctor/ physician if you feel unwell. P332 + P313 If skin irritation occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant.

Section 3: Composition and Information on Ingredients

<u>Name</u>: Poly(vinylsulfonic acid, sodium salt) solution <u>CAS#</u>: 9002-97-5 <u>% by Weight</u>: 10-30%

Section 4: First Aid Measures

<u>Eye Contact</u>: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

<u>Skin Contact</u>: After contact of with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

<u>Inhalation</u>: Allow the victim to rest in a well ventilated area. Seek immediate medical attention. <u>Serious Inhalation</u>: Not available.

<u>Ingestion</u>: Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. Seek immediate medical attention.



Section 4 - First Aid Measures

Always consult a physician after the first aid is given.

<u>Eyes:</u> Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Do NOT allow victim to rub or keep eyes closed. <u>Skin:</u> Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

<u>Ingestion</u>: Do NOT induce vomiting. To prevent aspiration of swallowed product, lay victim on side. Never give anything by mouth to an unconscious person. Get medical aid.

<u>Inhalation:</u> Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Section 5: Fire and Explosion Data

<u>Flammability of the Product</u>: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are fumes, carbon oxides (CO, CO2), sulfur

compounds. Some metallic oxides..

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam, dry chemicals and carbon dioxide.

Section 6: Accidental Release Measures

<u>Personal precautions, protective equipment, environmental precautions and emergency</u> <u>procedures</u>: Avoid breathing dust/fumes/gas/mist/vapors/spray. Use individual protective equipment (waterproof boots, suitable protective clothing, safety glasses, etc). Restrict unprotected personnel from the area. Prevent any contact with hot surfaces. Do not approach facing the wind. Do not touch the spilled material. Keep away from drains, surface and groundwater and soil.

Methods and materials used for containment Cleanup procedures and Storage:

Small Spill: Use appropriate tools to put the spilled material in a convenient waste disposal container.

Large Spill: Use personal protective equipment. Avoid breathing vapors, mist or gas. Soak up with inert absorbent material and dispose of as hazardous waste. Sweep up, and remove to an approved disposal container. Keep in suitable, closed containers for disposal. Ensure adequate ventilation. Evacuate personnel to safe areas. Do not let product enter drains.



Section 7: Handling and Storage

<u>Precautions for safe handling</u>: Apply according to good manufacturing and industrial hygiene practices with proper ventilation. Wash thoroughly after handling. Do not drink, eat or smoke while handling. Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust/fumes/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use individual protective equipment (waterproof boots, suitable protective clothing, safety glasses, etc). Prevent any contact with hot surfaces. Containers of this material may be hazardous when empty since they retain product residues.

<u>Conditions for safe storage, including any incompatibilities</u>: Store in cool, dry and ventilated area away from heat sources and protected from sunlight in tightly closed original container. Keep air contact to a minimum. Store protected from heat, sparks and ignition sources and incompatible materials. Avoid contact with skin and eyes. Avoid inhalation of dust/mist/vapor. Do not store with incompatible materials.

Section 8: Exposure Controls/Personal Protection

<u>Engineering Controls</u>: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

<u>Personal Protection</u>: Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

<u>Personal Protection in Case of a Large Spill</u>: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Appearance: Liquid. Odor: Typical. Odor threshold: Not available. pH (1% solution/water): 5 [Acidic.] Relative density: 1.2-1.3 approximately. Melting point/freezing point: Not available. Initial boiling point and boiling range: Not available. Flash point: Not available. Auto-ignition temperature: Not available. Decomposition temperature: Not available. Upper/lower flammability or explosive limits: Not available.



<u>Vapor pressure</u>: Not available. <u>Vapor density</u>: Not available. <u>Evaporation rate</u>: Not available. <u>Flammability (solid, gas)</u>: Not available. <u>Partition coefficient: n-octanol/water</u>: Not available. <u>Solubility(ies)</u>: Not available. <u>Viscosity</u>: Not available. <u>Molecular Weight</u>: 142. g/mole

Section 10: Stability and Reactivity Data

<u>Stability</u>: It is stable. <u>Incompatibility with various substances</u>: Not. <u>Special Remarks on Reactivity</u>: Not available. <u>Special Remarks on Corrosivity</u>: Not available. <u>Polymerization</u>: No.

Section 11: Toxicological Information

Toxicity to Animals: LD50: Not available. LC50: Not available. <u>Chronic Effects on Humans</u>: Not available. <u>Special Remarks on Toxicity to Animals</u>: Not available. <u>Special Remarks on Chronic Effects on Humans</u>: Not available. <u>Special Remarks on other Toxic Effects on Humans</u>: Not. <u>Carcinogenicity</u>: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, OSHA. The chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

<u>Ecotoxicity</u>: Not available. <u>BOD5 and COD</u>: Not available. <u>Products of Biodegradation</u>: Not available.

Section 13: Disposal Considerations

<u>Waste Disposal</u>: To be done as per local regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.



Section 14: Transport Information

<u>DOT Classification</u>: Not a DOT controlled material (United States). <u>IMDG</u>: Not dangerous goods. <u>IATA</u>: Not dangerous.

Section 15: Other Regulatory Information

Federal and USA State Regulations:

<u>SARA 302</u>: Not subject to the reporting requirements of SARA Title III, Section 302. <u>SARA 313</u>: Does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. <u>SARA 311/312 Hazards</u>: Acute Health Hazard

<u>California Prop. 65 Components</u>: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16:Other Information

Prepared by AJK on 27 November 2019 - Printed on: 20 February 2020

DISCLAIMER: The information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed correct as of the date hereof. It is compiled from various sources and it is not necessarily all inclusive nor fully adequate in every circumstance. In addition, these suggestions should not be confused with nor followed in violation of applicable laws, regulations, rules or insurance requirements applicable. This MSDS sheet is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.