



BBG-XL4 (Cross Linker - Borate based) SDS GHS, Safety Data Sheet MSDS Sheet, Material Safety Data Sheet

1. Product Identification

Product Name/Synonyms: Cross Linker, BBGXL-4 XL335

CAS No.: Mixture

Recommended uses and uses advised against (if any): Fracturing and Industrial Manufacturing Use.

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

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 1A, B, C
Reproductive toxicity Category 1A, 1B
Hazardous to the aquatic environment, acute hazard Category 3

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



Signal Words: Danger

Hazard Statements:

H314: Causes severe skin burns and eye damage





H360: May damage fertility or the unborn child.

H402: Harmful to aquatic life

Precautionary Statements:

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P264: Wash contaminated parts thoroughly after handling. P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P281: Use personal protective equipment as required.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P362: Take off contaminated clothing and wash before reuse.

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local/national regulation.

Classification according to EU Directives 67/548/EEC or 1999/45/EC:

Hazard Symbol:

C = Corrosive

Risk Phrases:

R35 Causes severe burns.

R60 May impair fertility.

R52 Harmful to aquatic organisms.

R61 May cause harm to the unborn child.

3. Composition/Information on Ingredients

<u>Ingredient-1</u>: Sodium Borate or Borax or Sodium Tetraborate Borates, Tetra, Sodium Salts

EINECS EC Number: 215-540-4 CAS No.: 1303-96-4 (Decahydrate)

Percentage: 10-30%

Ingredient-2: Sodium Hydroxide Pellets

CAS No.: 1310-73-2

EINECS EC Number: 215-185-5

Percent: 15 - 40%

Ingredient-3--: Water and Non-hazardous additives.

4. First Aid Measures





Always seek medical attention after first aid measures are provided.

<u>Inhalation:</u> If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Never give anything by mouth to an unconscious person. Get medical attention.

<u>Skin Contact:</u> Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse. <u>Eye Contact:</u> Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

5. Fire Fighting Measures

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

<u>Fire Extinguishing Media:</u> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use means suitable for extinguishing surrounding fire.

<u>Special Information:</u> In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

<u>Personal precautions, protective equipment, environmental precautions and emergency procedures</u>: Do not breathe dust/fume/gas/mist/vapors/spray. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Methods and materials used for containment Cleanup procedures and Storage:

Small Spill: For small spills use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to legal requirements.

Large Spill: Absorb in an inert material and pick up. Use a shovel to put into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose as per legal requirement.

7. Handling and Storage

<u>Precautions for safe handling</u>: Do not breathe dust/fume/gas/mist/vapors/spray. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

<u>Conditions for safe storage, including any incompatibilities</u>: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Store locked up. Keep away from incompatibilities like Acids, alkaloids, and metallic salts. Containers of this material may be hazardous when empty since they retain product residues so dispose to authorized agents.

8. Exposure Controls/Personal Protection





Airborne Exposure Limits for Borax:

Sodium Tetraborate Decahydrate (1303-96-4) USA ACGIH, ACGIH TWA (mg/m³), 2 mg/m³

USA ACGIH, ACGIH STEL (mg/m³), 6 mg/m³

Sodium borate USA (OSHA) TWA 10 mg/m3

Airborne Exposure Limits for Sodium Hydroxide: USA ACGIH: 2 mg/m³ ACGIH Ceiling (mg/m³)

<u>USA OSHA</u>: 2 mg/m³ OSHA PEL (TWA) (mg/m³)

<u>Ventilation System:</u> A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred.

<u>Personal Respirators (NIOSH Approved):</u> If the exposure limit is exceeded and engineering controls are not feasible, a full face piece particulate respirator (NIOSH type N100 filters) may be worn for up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids. glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

<u>Skin Protection:</u> Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

<u>Eye Protection:</u> Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Yellow/Brown Liquid

Odor: Not available.

Odor threshold: Not available.

pH: 11-12

Relative density: 1.3 approximate.

Melting point/freezing point: Not available.

Initial boiling point and boiling range: Not available.

Flash Point: 160° C

<u>Auto-ignition temperature</u>: Not available. <u>Decomposition temperature</u>: 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.





Solubility in Water: Completely miscible

Viscosity: Not available.

10. Stability and Reactivity

<u>Stability</u>: It is stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Toxic gases and vapors may evolve if involved in a fire.

Hazardous Polymerization: Will not occur.

Incompatibilities: Acids, alkaloids, and metallic salts.

Conditions to Avoid: Incompatibles.

11. Toxicological Information

<u>Borax</u>: Oral rat LD50: 2660 mg/kg. Investigated as a mutagen, reproductive effector. Anhydrous: Investigated as a reproductive effector.

Sodium Hydroxide:

1350 mg/kg skin-rabbit LD50;

104-340 mg/kg oral-rat LD50;

Tests on laboratory animals indicate material may produce adverse mutagenic effects.

Carcinogenic Effects: H360: May damage fertility or the unborn child.

12. Ecological Information

Toxicity to fish for Borax: LC50 - Limanda: 74 mg/l - 96 h, EC50 Daphnia: 1085 mg/l

Toxicity to fish for Sodium Hydroxide:

LC50 - Gambusia affinis (Mosquito fish) - 125 mg/l - 96 h

LC50 - Oncorhynchus mykiss (rainbow trout) - 45,4 mg/l - 96 h

<u>Toxicity to daphnia and other aquatic invertebrates</u>: Immobilization EC50 - Daphnia - 40,38 mg/l - 48 h <u>Environmental Fate:</u> This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused Borax in accordance with federal, state and local requirements.

14. Transport Information



8115 Loop 540, Beasley, TX 77417 Toll Free: 1-855-FINORIC (1-855-346-6742) Email: info@finoric.com • www.finoric.com

US DOT & ADR/RID:

Identification No. UN1824

Shipping Name: Contains Sodium Hydroxide solution

Hazard Class/Division 8, Packing Group PG II

15. Regulatory Information

USA:

SARA 302/304 STATUS: No components is listed as Extremely Hazardous substances.

16. Other Information

Prepared by AJK on 27 November 2019 - Printed on: 18 January 2020

Disclaimer:

The information and recommendations set forth herein are presented in good faith and believed correct as of the date the SDS was created. 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 SDS 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. This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
