

SAFETY DATA SHEET



1. Identification

Product identifier **Boron 10**

Recommended use Agricultural- Micronutrient Fertilizer

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Fertizona Casa Grande LLC
Address 2580 South Peart Road
 Casa Grande, Arizona 85193-9024

Telephone Main Office (520)-836-7477
Website www.fertizona.com

Emergency phone number INFOTRAC (24 hours): (800) 535-5053

2. Hazard(s) identification

Physical hazards Acute oral Category 4

Health hazards Serious eye irritation Category 2A
 Specific target organ toxicity, repeated exposure Category 3

Environmental hazards Hazardous to aquatic environment Category 2

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Harmful if swallowed. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If swallowed: Call a Poison Control Center or Doctor if you feel unwell. If exposed or concerned: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Boric acid (H3BO3) reaction products with ethanolamine		94095-04-2	70 - < 80

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Exposed individuals may experience eye tearing, redness, and discomfort. Irritation of eyes. Prolonged exposure may cause chronic effects.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

Flash point:

> 200° F

Test Method:

ASTM D-56

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Storage and Handling

Storage:

Store in tightly closed original labeled containers in a cool, well ventilated, dry place at temperatures above 40° F, but less than 120° F. Do not store in contact with brass. Do not store near food or feeds. Do not stack pallets more than two (2) high.

Transfer Equipment:

Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.

Keep out of reach of children. Avoid contact with eyes, skin, and clothing. Avoid inhalation of spray mists. Wash thoroughly after handling. Remove contaminated clothing and wash thoroughly before reuse. Do not contaminate feed and foodstuffs. Pregnant or breastfeeding women must not handle this product. Observe good industrial hygiene practices.

Eyes: Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling.

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).
Biological limit values No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other

Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Aqueous solution.

Physical state Liquid.

Form Liquid.

Color Colourless to light yellow.

Odor Odorless.

Odor threshold Not available.

pH 7 - 9

Salt-Out / Crystallization Temp < 32 °F (< 0 °C) estimated

Melting point/freezing point Not available.

Initial boiling point and boiling range > 212 °F (> 100 °C) estimated

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0.26 hPa estimated

Vapor density Not available.

Relative density 1.34 g/cm³ (typical)

Solubility(ies)

Solubility (water) 100 %

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity	Not available.
Other information	
Percent volatile	60.59 % estimated
pH in aqueous solution	7.5 - 9.5 (10% Solution)
Pounds per gallon	11.2 lb/gal (typical)
Shelf life	> 2 years
VOC (Weight %)	20 % estimated

10. Stability and reactivity

Stability:	Stable under normal conditions.
Conditions To Avoid:	None known
Incompatibility:	Contact with brass or strong oxidizing agents.
Hazardous Decomposition Products:	Thermal degradation at high temperatures above 575° C (1067° F) may produce sulfur trioxide.
Hazardous Polymerization:	Will not occur

11. Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Exposed individuals may experience eye tearing, redness, and discomfort. Irritation of eyes.

Information on toxicological effects

Acute toxicity	Not available.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Reproductive toxicity	Suspected of damaging fertility or the unborn child.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect with long lasting effects on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	Not available.
Mobility in soil	No data available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

16. Other information, including date of preparation or last revision

Issue date

5/05

Revision date

2/18

Disclaimer

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