



Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Boric Acid Crystals, ACS
NCL Catalog Number B-13B
Product Description Laboratory chemical
Manufacturer EMD Chemicals Inc. PO Box 70, 480 Democrat Road
Gibbstown, NJ 08027
Supplier NCL of Wisconsin, Inc. PO Box 8, Birnamwood, WI 54414
Telephone: 1-800-648-7836 Fax: 715-449-2454
Email: nclabs@nclabs.com Emergency Contact: 1-800-424-9300 (Chemtrec)

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Reproductive Toxicity Category 1B

Signal Word Danger



Hazard Statements
H360 May damage fertility or the unborn child.

Precautionary Statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container to comply with local, state and federal regulations.

Other Hazards Not Contributing to the Classification None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Formula H₃BO₃

Substance

Name	CAS #	Approximate %
Boric Acid	10043-35-3	100

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.
If Inhaled Remove person to fresh air and keep comfortable for breathing. Allow victim to rest.
In Case of Skin Contact Remove contaminated clothing and wash exposed skin with mild soap and water. Rinse with warm water.
In Case of Eye Contact Immediately flush eyes with plenty of water. Remove contact lenses if present, and easy to do. Get medical attention if irritation develops.
If Swallowed Rinse mouth. Do NOT induce vomiting. Get medical attention if you feel unwell.

Most Important Symptoms/Effects Acute and Delayed

Symptoms/Injuries	May damage fertility. May damage the unborn child.
After Inhalation	May cause respiratory irritation.
After Skin contact	Slight irritation.
After Eye Contact	May cause slight irritation.
After Ingestion	Nausea, vomiting, diarrhea. May cause cyanosis.
Chronic Symptoms	Cracking of the skin.

Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical attention if you feel unwell.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media Foam. Dry powder. Sand. Carbon dioxide. Water spray.

Unsuitable Extinguishing Media Do not use high pressure water stream.

Special Hazards Arising from the Chemical No additional information available.

Special Protective Actions for Fire-Fighters Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources. Isolate from fire, if possible, without unnecessary risk.

Environmental Precautions Prevent entry to surface and ground waters.

Methods and Materials for Containment and Cleaning Up Sweep or shovel into suitable containers. Collect spillage. Store away from other materials. Ensure compliance with local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

Conditions for Safe Storage Including any Incompatibilities Keep in a tightly closed container, stored in a cool, dry, ventilated area. Store away from strong bases.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Boric Acid (10043-35-3)		
USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
USA ACGIH	ACGIH Ceiling (mg/m ³)	6 mg/m ³

Appropriate Engineering Controls Provide adequate general ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures Avoid all unnecessary exposure.

Eye/Face Protection Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye-wash fountain and quick-drench facilities in work area.

Skin Protection Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection Wear appropriate mask.

Other Information

Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid, powder
Molecular Mass	61.83 g/mol
Color	White
Odor	Odorless
Odor Threshold	Not determined
pH	3.4-4.8 (3.3% Solution)
Melting Point/Freezing Point	169°C/Not determined
Initial Boiling Point and Boiling Range	Not determined
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	Not determined
Solubility	Soluble in water. Water: 6.35 g/100ml. Ethanol: 5.56 g/100ml. Ether: 0.0078 g/100ml.
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	184.85°C
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	No data available
Incompatible Materials	Strong bases
Hazardous Decomposition Products	No data available

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Not classified
Boric Acid (10043-35-3)	
LD50 oral rat	2500 mg/kg
LD50 dermal rabbit	2000 mg/kg
Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	May damage fertility or the unborn child.
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified

Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	No data available
Symptoms/Injuries After Inhalation	May cause respiratory irritation.
Symptoms/Injuries After Skin Contact	Slight Irritation
Symptoms/Injuries After Eye Contact	May cause slight irritation.
Symptoms/Injuries After Ingestion	Nausea. Vomiting. Diarrhea. May cause cyanosis.
Symptoms/Injuries Upon Intravenous Administration.	Not available
Chronic Symptoms	Cracking of skin.
Other Information	Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Not applicable
Persistence and Degradability	Not applicable
Bioaccumulative Potential	Not applicable
Mobility in Soil	Not applicable
Other Adverse Effects	Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations	Dispose of contents/containers in accordance with local, state and federal regulations.
Other Information	Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number	Not applicable
UN Shipping Name	Not applicable
Transport Hazard Class(es)	Not applicable
Packing Group	Not applicable
Environmental Hazards	Not applicable
Transport in Bulk	Not applicable
Other Precautions	Not applicable

SECTION 15: REGULATORY INFORMATION

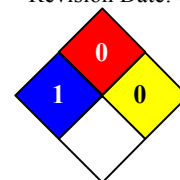
Boric Acid (10043-35-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: OTHER INFORMATION

Revision Date: 04/03/2015

NFPA Hazards

Health Hazard 1: May cause irritation; minimal residual injury.
Fire Hazard 0: Materials that will not burn.
Reactivity/Instability 0: Normally stable, even under fire exposure conditions, and is not reactive with water.



HMIS III Rating

Health 1: Irritation or minor reversible injury possible.
Flammability 0: Materials that will not burn.
Physical Hazard 0: Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.
Personal Protection E

B-13B	
Health	1
Flammability	0
Physical Hazard	0
Personal Protection	E

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END OF SAFETY DATA SHEET