

# Material Safety Information



# BORIC ACID

**KERR-McGEE CHEMICAL CORPORATION**  
KERR-McGEE CENTER ■ OKLAHOMA CITY, OKLAHOMA 73125

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For more detailed information on the hazards of this product, contact Technical Service Department at the address above.

For emergency information, telephone 405 270-1313 any time.

Although we believe the information given here is correct, we recommend that you verify it with independent authoritative sources.

## NOMENCLATURE

Chemical name . . . Boric acid ✓  
Brand name . . . . . THREE ELEPHANT® boric acid  
Common name . . . Boric acid  
Formula . . . . . H<sub>3</sub>BO<sub>3</sub> or B(OH)<sub>3</sub>  
Shipping names:  
DOT . . . . . Not applicable  
IATA . . . . . Not applicable  
CAS number . . . . . 10044-35-3

## PHYSICAL PROPERTIES

State . . . . . Granular solid  
Melting point °C . . . . . 170.9°  
Color . . . . . White  
Odor . . . . . None  
Bulk density, lb/cu ft . . . . . 70 to 30  
Water solubility, % by wt @ 20°C . 4.8

pH of 1% solution . . . . 5.1±0.2

## HAZARDOUS INGREDIENTS

COMPONENT	CAS NUMBER	%	HAZARD
None			

## CHEMICAL REACTIVITY

Boric acid is a mild antiseptic commonly found in hospitals and first aid stations. In water solutions it acts as a weak monobasic acid.

## STABILITY

Stable at ordinary temperatures. When heated above 100°C it gradually loses water, changing to meta-boric acid, HBO<sub>2</sub>. On continued heating all water is lost and anhydrous oxide B<sub>2</sub>O<sub>3</sub> is formed.

## FIRE HAZARD and FIRE FIGHTING PROCEDURES

Not flammable. Does not support combustion. Used as a fire retardant.

REPRESENTED BY  
**Kraft Chemical Company**



1975 North Hawthorne Avenue  
Melrose Park, Illinois 60160  
1-312/345-8210

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## RECOMMENDED SAFETY EQUIPMENT

Dust respirator if dust concentration is above TLV.

## CORROSIVITY TO MATERIALS OF CONSTRUCTION<sup>3</sup>

Carbon steel and aluminum are suitable materials for dry boric acid at ambient temperatures.

## STORAGE

Bagged material should be stored in a dry place. Bulk material should be stored in such a manner so as to minimize moisture pickup from the air.

## CONTAINER DISPOSAL

No specific procedures.

## UNUSED MATERIAL and WASTE DISPOSAL

Dissolve in water and wash to an industrial sewer. Do not wash to open ditches as this material has herbicidal properties.

## HANDLING SPILLS

No specific procedures.

## REFERENCES

- <sup>1</sup> Dangerous Properties of Industrial Materials, 4th Ed., N. Irving Sax. VanNostrand Reinhold, New York, 1975.
- <sup>2</sup> Threshold Limit Values for Chemical Substances and Physical Agents for 1977 - ACGIH, P.O. Box 1937, Cincinnati, OH 45201.
- <sup>3</sup> Corrosion Data Survey, 5th Ed., Norman E. Hamner, NACE, P.O. Box 1499, Houston, TX 77001.