

Boric acid**11607-6X1KG**

Version 1.1

Revision Date 01/26/2022

Print Date 05/11/2023

SECTION 1. IDENTIFICATION

Product name : Boric acid

Number : 000000020832

Product Use Description : Chemical-technical application, Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : solid

Color : colourless

Odor : odourless

Classification of the substance or mixture

Classification of the substance or mixture : Reproductive toxicity, Category 1B

GHS Label elements, including precautionary statements

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Symbol(s)

:



Signal word

: Danger

Hazard statements

: May damage fertility or the unborn child.

Precautionary statements

: **Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Response:

IF exposed or concerned: Get medical advice/ attention.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula

: H3BO3

Chemical nature

: Substance

Chemical name	CAS-No.	Concentration
Boric acid	10043-35-3	100.00 %

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SECTION 4. FIRST AID MEASURES

- General advice : First aider needs to protect himself. Move out of dangerous area. Immediately take off contaminated clothing and rinse body with plenty of water.
- Inhalation : When inhaled remove to fresh air and seek medical aid.
- Skin contact : After contact with skin, wash immediately with plenty of water.
- Eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion : A person suspected to have swallowed the substance who is conscious should be given water to drink. Take to a doctor immediately together with this card

Notes to physician

- Most important symptoms/effects, acute and delayed : No information available.
- Indication of immediate medical attention and special treatment needed, if necessary : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry powder
- Specific hazards during firefighting : The product itself does not burn.
In case of fire hazardous decomposition products may be produced such as:
Boron oxides
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

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Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Wear personal protective equipment. Unprotected persons must be kept away.
Ensure adequate ventilation.
Avoid dust formation.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Use mechanical handling equipment.
Sweep up and shovel into suitable containers for disposal.
Dispose of in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE**Handling**

Precautions for safe handling : Wear personal protective equipment.
Use only in well-ventilated areas.
Avoid dust formation.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

Conditions for safe storage, including any incompatibilities : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.

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Keep locked up or in an area accessible only to qualified or authorised persons.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Avoid exposure - obtain special instructions before use.
- Engineering measures : Use with local exhaust ventilation.
- Eye protection : Safety goggles
- Hand protection : Latex gloves
Gloves must be inspected prior to use.
Replace when worn.
- Skin and body protection : Protective suit
- Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.
- Hygiene measures : Separate rooms are required for washing, showering and changing clothes.
Contaminated work clothing should not be allowed out of the workplace.
Wash hands before breaks and at the end of workday.

Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis
Boric acid	10043-35-3	STEL : Short term exposure limit	6 mg/m3	02 2012	ACGIH:US. ACGIH Threshold Limit Values, as amended
Further information	:	Form of exposure : Inhalable fraction.			
Boric acid	10043-35-3	TWA : Time weighted average	2 mg/m3	02 2012	ACGIH:US. ACGIH Threshold Limit Values, as amended

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Further
information

: Form of exposure : Inhalable fraction.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: solid
Color	: colourless
Odor	: odourless
Odor threshold	: Note: No data available
pH	: 3.6 - 4.0 at , 20 °C
Melting point/range	: 171 °C
Boiling point/boiling range	: Note: No data available
Flash point	: Note: Not applicable
Evaporation rate	: Note: No data available
Flammability	: The product is not flammable.
Lower explosion limit	: Note: Not applicable
Upper explosion limit	: Note: Not applicable
Vapor pressure	: Note: No data available
Vapor density	: Note: No data available
Density	: ca. 1.510 g/cm ³ at 20 °C

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Water solubility : 49.5 g/l at 20 °C

Partition coefficient:
n-octanol/water : log Pow: -0.757 at 25 °C

Ignition temperature : Note: Not applicable

Viscosity, dynamic : Note: No data available

Viscosity, kinematic : Note: No data available

Molecular weight : 61.83 g/mol

Bulk density : ca. 980 kg/m³**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous
reactions : Hazardous polymerisation does not occur.Conditions to avoid : Protect from heat/overheating.
Avoid dust formation.Incompatible materials : Bases
Acetic anhydride
PotassiumHazardous decomposition
products : In case of fire hazardous decomposition products may be
produced such as:
Boron oxides

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SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50: 2,660 mg/kg Species: Rat
Acute inhalation toxicity	: Exposure time: 4 h Species: Rat Method: OECD Test Guideline 403 Note: No deaths
Acute dermal toxicity	: LD50: > 2,000 mg/kg Species: Rabbit Note: No deaths
Skin irritation	: Species: Rabbit Result: slight irritation
Eye irritation	: Species: Rabbit Result: slight irritation
Sensitisation	: Species: Guinea pig Classification: non-sensitizing Method: OECD Test Guideline 406
Repeated dose toxicity	: Note: No data available
Genotoxicity in vitro	: Note: In vitro tests did not show mutagenic effects
Carcinogenicity	: Species: not specified Note: Not classified due to data which are conclusive although insufficient for classification.

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- Reproductive toxicity : Species: not specified
Note: Classification based on Annex VI of regulation 1272/2008/EC.
- Further information : Note: The reproduction-toxicological studies carried out shows signs of damage for the development. May impair fertility.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

- Toxicity to fish : Note: Not classified due to data which are conclusive although insufficient for classification.
- Toxicity to daphnia and other aquatic invertebrates : Note: Not classified due to data which are conclusive although insufficient for classification.
- Toxicity to algae : Note: Not classified due to data which are conclusive although insufficient for classification.

Elimination information (persistence and degradability)

- Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

Further information on ecology**SECTION 13. DISPOSAL CONSIDERATIONS**

- Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION**DOT** Not dangerous goods

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TDG Not dangerous goods**IATA** Not dangerous goods**IMDG** Not dangerous goods**SECTION 15. REGULATORY INFORMATION****Inventories**US. Toxic Substances : On TSCA Inventory
Control ActAustralia. Industrial : On the inventory, or in compliance with the inventory
Chemicals Act (AIC), as
amendedCanada. Canadian : All components of this product are on the Canadian DSL
Environmental Protection
Act (CEPA). Domestic
Substances List (DSL)

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals : On the inventory, or in compliance with the inventory
Inventory (KECI)Philippines. Inventory of : On the inventory, or in compliance with the inventory
Chemicals and Chemical
Substances (PICCS)China. Inventory of Existing : On the inventory, or in compliance with the inventory
Chemical Substances
(IECSC)New Zealand. Inventory of : On the inventory, or in compliance with the inventory
Chemicals (NZIoC), as
published by ERMA New
Zealand**National regulatory information**

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- SARA 302 Components** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 313 Components** : This material 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.
- SARA 311/312 Hazards** : Acute Health Hazard
Chronic Health Hazard
- California Prop. 65** : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

New Jersey RTK : Boric acid 10043-35-3

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 2*	2
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a

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warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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