

Section 1: Product & Company Information

Product Identifier: Borax Anhydrous 12-30 Mesh

Other Means of Identification

Product Number: 131004
131005

Recommended Use and Restrictions on Use

Recommended Use: Metallurgical, Fluxes, Flame retardants, Fertilizers, Glass, Fiber glass, Ceramics.
Restrictions on Use: None Known

Manufacturer / Importer / Supplier / Distributor Information

Company Name: CORECHEM Inc.
Address: 4320 Greenway Drive
Knoxville, TN 37918 USA

Information Telephone Number: 1-865-524-4239

Fax Number: 1-865-524-3375

Website: www.corecheminc.com

Contact Person: Regulatory Manager

E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

Section 2: Hazards Identification

GHS Hazard Classification(s)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Physical Hazard(s)

Not classified.

Health Hazard(s)

Acute Toxicity, Oral - 5
(Corrosion) Damage/Irritation, Eye - 2A
Toxic to Reproduction - 2

Environmental Hazard(s)

Not classified.

Label Elements

Signal Word

WARNING

Hazard Symbol(s)



Hazard Statement(s)

H303: May be harmful if swallowed.
H319: Causes serious eye irritation.
H361: Suspected of damaging fertility or the unborn child.

Precautionary Statements

General

Not applicable.

Prevention

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P264: Wash face, hands and any exposed skin thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P281: Use personal protective equipment as required.

Response

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313: IF exposed or concerned: Get medical advice/attention.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P337 + P313: If eye irritation persists: Get medical advice/attention.

Storage

P405: Store locked up.

Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC)

None known.

Section 3: Composition/Information on Ingredients

Substance

Chemical Identity ²	Common Name/Synonym(s)	CAS # ³	Weight %	Impurity or Stabilizing Additive
Anhydrous Borax	Dehydrated Borax, borax, Sodium Tetraborate Anhydrous	1330-43-4	99.9%	No

- Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
- Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
- "—"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information

Move out of dangerous area. Seek medical attention. Show this safety data sheet to the doctor in attendance.

Inhalation

If symptoms such as nose or throat irritation are observed, remove person to fresh air. If not breathing give artificial respiration. Seek medical attention.

Skin Contact

Wash with soap and water. Seek medical attention.

Eye Contact

Flush eyes with water for at least 20 minutes. Seek medical attention.

Ingestion

If large amounts are swallowed (i.e. more than one teaspoon), give two glasses of water or mil to drink and seek medical attention. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Symptoms

No data available.

Indication of immediate medical attention and special treatment needed

Hazards

No data available.

Treatment

Observation is only required for adult ingestion of less than 7 grams. For ingestion of more than 7 grams, maintain adequate kidney function and force fluids. Gastric Lavage is recommended for symptomatic patients only. Hemodialysis should be reserved for massive acute ingestion, or patients with renal failure. Boron analysis of urine or blood are only useful for documenting exposure and should not be used to evaluate severity of poisoning or to guide treatment.

Section 5: Fire-Fighting Measures

General Fire Hazards

No data available.

Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media

Use fire extinguishing media suitable for surrounding fire.

Unsuitable Extinguishing Media

No data available.

Specific Hazards Arising from the Chemical

None, nonflammable, combusive, or explosive. The product is itself a flame retardant.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

None Known

Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Avoid Dust formation. In case of exposure to prolonged or high level of airborne dust, wear a personal respirator in compliance with national legislation.

Methods and Materials for Containment and Clean-Up

Land Spill: Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

Spillage into water: Where possible, remove any intact containers from the water. Advise local water authority that none of the affected water should be used for irrigation or for the abstraction of potable water until natural dilution returns the boron value to its normal environmental background level.

Notification Procedures

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions

Borax is a water-soluble white powder that may, at high concentrations cause damage to trees or vegetation by root absorption (see section 12).

Section 7: Handling and Storage

Precautions for Safe Handling

To maintain package integrity, and to minimize caking of the product, Bags should be handled on a first in, first out basis. Good housekeeping and dust prevention procedures should be followed to minimize dust generation and accumulation. The product should be kept away from strong reducing agents. Apply above handling advise when mixing with other substances.

Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (See Section 10). Ensure that all local regulations regarding handling and storage facilities are followed.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Value	Source
Disodium Tetraborate Decahydrate	TLV	10 mg/m3	US. ACGIH Threshold Limit Values
Disodium Tetraborate Decahydrate	PEL	10 mg/m3	US OSHA Table Z-1
Disodium Tetraborate Decahydrate	PEL	15 mg/m3	US OSHA Table Z-1
Disodium Tetraborate Decahydrate	PEL	5 mg/m3	US OSHA Table Z-1

Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

Appropriate Engineering Controls

Maintain air concentrations below occupational exposure Standards. Use local exhaust ventilation to keep airborne concentrations of borax dust below permissible exposure levels. Wash hands before breaks and at the end of the workday. Remove and wash soiled clothing.

Individual protection measures, such as personal protective equipment (PPE)

General Information

No data Available.

Eye/Face Protection

Wear eye protection Suitable for job.

Skin Protection

Hand Protection

Wear appropriate chemical resistant gloves.

Other

None known

Respiratory Protection

Where risk assessment shows air purifying respirators are appropriate, use full-face particle respirator type N100 (US) or type P3 (en 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full- face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Hygiene Measures

Wash hands before breaks, and at the end of workdays. Remove and wash all soiled clothing.

Section 9: Physical and Chemical Properties

Appearance:

Physical State: Powder or granular solid
Color: White

Odor:

Odorless

Odor Threshold:

No data available.

pH:

9.2 (1% Solution)

Melting Point/Freezing Point:

741°C

Initial Boiling Point and Boiling Range:

1575°C

Flash Point:

Not applicable.

Evaporation Rate (butyl acetate=1):

Not applicable

Flammability (solid, gas):	Not Applicable
Upper/Lower Limit on Flammability or Explosive Limits	
Flammability Limit – Upper:	Not applicable.
Flammability Limit – Lower:	Not applicable.
Explosive Limit – Upper:	Not applicable.
Explosive Limit – Lower:	Not applicable.
Vapor Pressure:	Negligible at 20°C
Vapor Density (air =1):	Not applicable
Relative Density (water=1):	2.37 @ 20°C
Solubility(ies):	
Solubility in water:	2.48% @ 20°C
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-Ignition Temperature:	Not applicable.
Decomposition Temperature:	No data available
Viscosity:	not applicable
Other Information:	
Molecular Weight:	207.22
Formula:	Na ₂ [B ₄ O ₅ (OH) ₄] · 8H ₂ O

Section 10: Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical Stability

Borax is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. When heated it losses water, eventually forming anhydrous borax (Na₂ B₄ O₇).

Possibility of Hazardous Reactions

Reaction with strong reducing agents such as metal hydrides, acetic anhydride, or alkali metals will generate flammable hydrogen gas which could create an explosive hazard.

Conditions to Avoid

Moisture. Contact with incompatible materials.

Incompatible Materials

Avoid contact with strong reducing agents, such as metal hydrides, acetic anhydrides, or alkali metals.

Hazardous Decomposition Products

Boranes, Hydrogen, boron oxides.

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: None known

Inhalation: None known

Skin Contact: Not a skin sensitizer

Eye Contact: Serious eye irritation

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Sodium Tetraborate, LD₅₀ (Rat) 2,400 - 2,600 mg/kg

Dermal

Sodium Tetraborate, LD₅₀ (Rabbit) 2,000 mg/kg

Inhalation

No data available

Repeated Dose Toxicity

No data available

Skin Corrosion/Irritation

Low acute dermal toxicity; LD₅₀ in rabbits is greater than 2,000 mg/kg of body weight. Anhydrous borax is poorly absorbed through intact skin. Non-irritant.

Serious Eye Damage/Eye Irritation

Anhydrous borax is a serious eye irritant.

Respiratory/Skin Sensitization

Not a skin sensitizer.

Carcinogenicity

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

US. National Toxicology Program (NTP) Report on Carcinogens

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.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Germ Cell Mutagenicity**In Vitro**

No mutagenic components identified.

In Vivo

No mutagenic components identified.

Reproductive Toxicity

Animal feeding studies in rat, mouse and dog, at high doses, demonstrate effects on fertility and testes. Studies with chemically related boric acid in rat, mouse and rabbit, at high doses, demonstrate developmental effects on the fetus including fetal weight loss and minor skeletal variations. The doses administered were many times in excess of those which humans would normally be exposed too. Human epidemiological studies show no increase in pulmonary disease in occupational populations with chronic exposures to boric acid dust and Sodium Borate Dust. A recent epidemiology study under the conditions of normal occupational exposure to borate dusts indicated no effect on fertility.

Specific Target Organ Toxicity – Single Exposure

None known.

Specific Target Organ Toxicity – Repeated Exposure

None known.

Aspiration Hazard

Low acute Inhalation toxicity; LC50 in rats is greater than 2.0 mg/l (or g/m) ³

Other Effects

None known.

Section 12: Ecological Information**Ecotoxicity****Acute Hazards to the Aquatic Environment****Fish**

(Fish, Fathered minnow, Pimephales promelas) LC50, 79.7 mg B/L or 456 mg boric acid/L or 370 mg Disodium Tetraborate anhydrous:

Aquatic Invertebrates

(Daphnia magna) LC50, 133 mg B/L or 760 mg boric acid/L or 619 mg Disodium Tetraborate Anhydrous:

Toxicity to Aquatic Plants

(Green algae, pseudokirchneriella subcapitata) EC50-Biomass =40 mg B/L or 229 mg boric acid /L

Chronic Hazards to the Aquatic Environment**Fish**

No data available.

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Persistence and Degradability**Biodegradation**

Boron is naturally occurring and ubiquitous in the environment. Borax is a naturally occurring borate.

BOD/COD Ratio

No data available.

Bioaccumulative Potential**Bioconcentration Factor (BCF)**

Not significantly Bioaccumulative

Partition Coefficient n-octanol / water (log Kow)

No data available.

Mobility in Soil

This product is soluble in water and is leachable through normal soil.

Other Adverse Effects

No data available.

Section 13: Disposal Considerations**Disposal Instructions**

Dispose in accordance with all local, state, and federal regulations. Contact a licensed waste disposal service to dispose of this material. Surplus product should, if possible be used for an appropriate application.

Contaminated Packaging

Handle contaminated packages in the same way as the substance itself.

Section 14: Transportation Information

US Department of Transportation (DOT)

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation in accordance with 49 CFR 172.101.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: No
Sudden Release of Pressure: No
Reactive: No
Acute (Immediate) Health Hazard: No
Chronic (Delayed) Health Hazard: Yes

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Section 16: Other Information

Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 1

Chronic Health Hazard: *

Flammability: 0

Physical Hazard: 0

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

National Fire Protection Association (NFPA 704) Rating

Health Hazard: 1

Fire Hazard: 0

Reactivity Hazard: 0

Special: N/A

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

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Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate

BCF - Bioconcentration Factor

EC50 - Effective concentration, 50%

IDHL - Immediately Dangerous to Life and Health

Kg - Kilogram

l - Liter

ACGIH - American Conference of Industrial Hygienists

AIHA - American Industrial Hygiene Association

BEI - Biological Exposure Indices

CAS - Chemical Abstracts Service

DOT - US Department of Transportation

EPA - US Environmental Protection Agency

lb – Pound
LC50 - Lethal Concentration, 50%
LD50 - Lethal Dose, 50%
mg - milligram
ml – milliliter
N/A – Not Applicable
N/D – Not Determined
PEL – Permissible Exposure Limit
REL – Recommended Exposure Limit
STEL – Short-term Exposure Limit
TWA - Time weighted average

GHS - Globally Harmonized System of Classification and Labelling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IBC - Intermediate Bulk Container
IMDG - International Maritime Dangerous Goods
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OSHA – US Occupational Health and Safety Administration
SARA – US EPA Superfund Amendments and Reauthorization Act
TSCA – US EPA Toxic Substances Control Act
UN - United Nations

References

HSDB® - Hazardous Substances Data Bank

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