

## Safety Data Sheet

To the Purchaser: This SDS contains important environmental, health, and toxicology information for your employees who have ordered this product. Please be sure this information is given to them. If you resell this product, a copy of the SDS should be given to the buyer.

### 1. Supplier and product

Jinhua Beiduo Import & Export Co., Ltd.

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**Product:** Copper brazing flux powder

**Model:** CJ301

**Product Use(s):** flux products, for copper / steel brazing with copper alloy brazing material together.

**CAS Number:** N/A

**Chemical Name:** N/A

### 2. Hazards identification

#### 2.1 GHS Classification:

Acute toxicity (oral), Category 4 H302

Skin corrosion/irritation, Category 1B H314

Reproductive toxicity, Category 1B H360

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

May damage fertility or the unborn child. Harmful if swallowed. Causes severe skin burns and eye damage.

#### 2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05



GHS07



GHS08

Signal word (CLP) :

Danger

Hazardous ingredients :

boric acid; potassium bifluoride, potassium hydrogen difluoride; Boron

Hazard statements (CLP) :

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H360 - May damage fertility or the unborn child

Precautionary statements (CLP) :

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe fume, vapours

P264 - Wash hands, forearms and face thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves, eye protection, face protection, protective clothing

P301+P312 - IF SWALLOWED: Call a POISON CENTER if you feel unwell

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
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  
P310 - Immediately call a doctor  
P330 - Rinse mouth  
P405 - Store locked up  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 2.3. Other hazards

Other hazards not contributing to the classification: None under normal conditions.

## 3. Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
boric acid substance listed as REACH Candidate	(CAS No) 10043-35-3 (EC no) 233-139-2 (EC index no) 005-007-00-2	65-75	Repr. 1B, H360FD
Borax	(CAS No) 1303-96-4	25-35	Acute Tox. 4 (Oral), H302

Full text of H-statements: see section 16

## 4. First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Get immediate medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Get immediate medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Get immediate medical advice/attention.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Burns.

Symptoms/injuries after eye contact : Serious damage to eyes.

Symptoms/injuries after ingestion : Burns.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## 5 Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Use extinguishing media appropriate for surrounding fire.

**5.2. Special hazards arising from the substance or mixture**

Fire hazard :	The product is not flammable.
Explosion hazard :	Product is not explosive.
Reactivity in case of fire :	Not known.
Hazardous decomposition products in case of fire:	Toxic fumes may be released.

**5.3. Advice for firefighters**

Precautionary measures fire :	No special measures required.
Firefighting instructions :	Use extinguishing media appropriate for surrounding fire.
Protection during firefighting :	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

**6 Accidental release measures**

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

General measures : Avoid release to the environment.

**6.1.1. For non-emergency personnel**

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection.

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Ventilate spillage area. Do not breathe fume, vapours. Avoid contact with skin and eyes.

**6.1.2. For emergency responders**

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Avoid contact with skin and eyes.

Do not breathe smokes, Vapours. Wear suitable protective clothing, gloves and eye or face protection.

Emergency procedures : Ventilate area.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Place in an appropriate container and dispose of the contaminated material at a licensed site. This material and its container must be disposed of in a safe way, and as per local legislation.

Other information : This material and its container must be disposed of as hazardous waste.

**6.4. Reference to other sections**

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

**7 Handling and storage****7.1. Precautions for safe handling**

Precautions for safe handling : Ensure good ventilation of the work station. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe fume, vapours.

Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Separate working clothes from town clothes. Launder separately.

**7.2. Conditions for safe storage, including any incompatibilities**

Technical measures : Ensure adequate ventilation, especially in confined areas.

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool. Incompatible materials : Heat sources.

Storage area : Store in a well-ventilated place. Store away from heat.

Packaging materials : Keep only in original container.

### 7.3. Specific end use(s)

Fluxing agent.

## 8 Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Gloves. Protective goggles. Face shield. Protective clothing.

Materials for protective clothing : Wear suitable protective clothing

Hand protection : Protective gloves

Eye protection : Wear tight fitting safety glasses or facial screen

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Combined gas/dust mask with filter type P3



Environmental exposure controls : Avoid release to the environment.

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Powder.

Colour : white

Odour : odourless.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 500 °C

Freezing point : Not applicable

Boiling point : No data available

Flash point : Not applicable

Auto-ignition temperature : Not applicable

Decomposition temperature : No data available

Flammability (solid, gas) : Non flammable

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : ≈ 1.6 Not applicable

Solubility : No data available

Log Pow : No data available

Viscosity, kinematic : Not applicable

Viscosity, dynamic : No data available

Explosive properties : Product is not explosive.

Oxidising properties : Oxidising solids Not applicable.

Explosive limits : Not applicable

9.2. Other information

No additional information available

## 10. Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizing agents, Strong bases, Strong acids, Aluminum, Tin, Zinc, chlorinated hydrocarbons, Acetone.

Avoid contact with strong reducing

agents such as metal hydrides, acetic anhydride or alkali metals.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

## 11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

ATE CLP (oral) 405.452 mg/kg bodyweight

Boron (7440-42-8)

LD50 oral 650 mg/kg

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Serious eye damage, category 1, implicit

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : May damage fertility or the unborn child.

Specific target organ toxicity (single exposure) : Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity (repeated exposure): Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

## 12. Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Ecology - water : Before neutralisation, the product may represent a danger to aquatic organisms.

12.2. Persistence and degradability

P&I Black, White & L-6040 Fluxes

Persistence and degradability Not established.

12.3. Bioaccumulative potential

P&I Black, White & L-6040 Fluxes

Bioaccumulative potential Not established.

12.4. Mobility in soil

P&I Black, White & L-6040 Fluxes

Ecology - soil Not established.

12.5. Results of PBT and vPvB assessment

Component

boric acid (10043-35-3) This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : None known.

Additional information : Avoid release to the environment

### 13. Disposal considerations

#### Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations : Avoid release to the environment. Discharging into rivers and drains is forbidden. Dispose of contents/container to a hazardous or special waste collection point.

Ecology - waste materials : Avoid release to the environment

### 14. Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : 1759

UN-No. (IMDG) : 1759

UN-No. (IATA) : 1759

UN-No. (ADN) : 1759

UN-No. (RID) : 1759

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : CORROSIVE SOLID, N.O.S. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9))

Proper Shipping Name (IMDG) : CORROSIVE SOLID, N.O.S. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9))

Proper Shipping Name (IATA) : Corrosive solid, n.o.s. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9))

Proper Shipping Name (ADN) : CORROSIVE SOLID, N.O.S. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9))

Proper Shipping Name (RID) : CORROSIVE SOLID, N.O.S. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9))

Transport document description (ADR) :

UN 1759 CORROSIVE SOLID, N.O.S. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9)), 8, II, (E)

Transport document description (IMDG) :

UN 1759 CORROSIVE SOLID, N.O.S. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9)), 8, II

Transport document description (IATA) :

UN 1759 Corrosive solid, n.o.s. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9)), 8, II

Transport document description (ADN) :

UN 1759 CORROSIVE SOLID, N.O.S. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9)), 8, II

Transport document description (RID) :

UN 1759 CORROSIVE SOLID, N.O.S. (potassium bifluoride, potassium hydrogen difluoride(7789-29-9)), 8, II

#### 14.3. Transport hazard class(es)

**ADR**

Transport hazard class(es) (ADR) : 8  
Danger labels (ADR) : 8

**IMDG**

Transport hazard class(es) (IMDG) : 8  
Danger labels (IMDG) : 8

**IATA**

Transport hazard class(es) (IATA) : 8  
Hazard labels (IATA) : 8

**ADN**

Transport hazard class(es) (ADN) : 8  
Danger labels (ADN) : 8

**RID**

Transport hazard class(es) (RID) : 8  
Danger labels (RID) : 8



#### 14.4. Packing group

Packing group (ADR) : II  
Packing group (IMDG) : II  
Packing group (IATA) : II  
Packing group (ADN) : II  
Packing group (RID) : II

#### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

#### 14.6. Special precautions for user

**- Overland transport**

Classification code (ADR) : C10  
Special provisions (ADR) : 274  
Excepted quantities (ADR) : E2  
Packing instructions (ADR) : P002, IBC08  
Special packing provisions (ADR) : B4  
Mixed packing provisions (ADR) : MP10  
Portable tank and bulk container instructions (ADR): T3  
Portable tank and bulk container special provisions (ADR) : TP33  
Tank code (ADR) : SGAN, L4BN  
Vehicle for tank carriage : AT  
Transport category (ADR) : 2  
Special provisions for carriage - Packages(ADR): V11

Hazard identification number (Kemler No.) : 80

## 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration  $\geq$  0.1% or with a lower specific limit: Boric acid (EC 233-139-2, CAS 10043-35-3)

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## 16. Other information including information on preparation and revision of the SDS

Full text of H- and EUH-statements:

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H360	May damage fertility or the unborn child
H360FD	May damage fertility. May damage the unborn child

### Further information:

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. Reasonable care has been taken in the preparation of this material, but there are NO WARRANTIES, NO REPRESENTATIONS AND NO RESPONSIBILITY AS TO THE ACCURACY OR THE SUITABILITY OF THIS INFORMATION FOR ANY PURCHASER'S USE OR FOR ANY CONSEQUENCE TO USE.