SAFETY DATA SHEET

Product Name: Welding flux
Effective Date: 2019-06-24
Compiler: Liu Linlin
Checker: Dongxuesheng
Approuver: Shanghai Research Institute of Chemical Industry Testing Co., Ltd.
TOKO Technology(Wuxi) Co., Ltd

SAFETY DATA SHEET

Welding flux

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product name: Welding flux
Company: TOKO Technology(Wuxi) Co., Ltd
Address: 2-2103, Zhongwei International Building, No. 589 Wuyun Road, Huishan District, Wuxi, 214174, P.R. China
Email: global@tokoc.com
Fax: 86-510-83597138
Emergency Phone: 86-13400041000
SDS Number: 2619050424
Effective Date: 2019-06-24

SECTION 2 HAZARDS IDENTIFICATION

GHS Classification:

Physical Hazards: Not Classified

Health Hazards:
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 1
Specific target organ toxicity - Single exposure Category 1(Respiratory system)
Specific target organ toxicity - Single exposure Category 3 (Respiratory tract irritation)
Specific target organ toxicity - Repeated exposure Category 1(Respiratory system)

Environmental Hazards: Not Classified

The hazards not mentioned are not applicable or no data available.

Label Elements:

Pictogram:
Signal Word:
Danger

Hazard Statements:
H315 Causes skin irritation.
H318 Causes serious eye damage.
H370 Causes damage to organs (Respiratory system).
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure (Respiratory system).

Prevention Precautionary Statements:
P264 Wash thoroughly after handling.
P280 Wear protective gloves/eye protection/face protection.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

Response Precautionary Statements:
P302+P352 IF ON SKIN: Wash with plenty of water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.

Storage Precautionary Statements:
P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal Precautionary Statements:
P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

SECTION 3 INFORMATION ON INGREDIENTS

Product name: Welding flux

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
<th>CAS No.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum oxide</td>
<td>21.99%</td>
<td>1344-28-1</td>
<td>215-691-6</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>20%</td>
<td>1317-80-2</td>
<td>215-282-2</td>
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<tr>
<td>Silica</td>
<td>12.2%</td>
<td>112945-52-5</td>
<td>601-216-3</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>11%</td>
<td>1305-78-8</td>
<td>215-138-9</td>
</tr>
<tr>
<td>Magnesium oxide</td>
<td>11%</td>
<td>1309-48-4</td>
<td>215-171-9</td>
</tr>
<tr>
<td>Manganese oxide</td>
<td>10%</td>
<td>1344-43-0</td>
<td>215-695-8</td>
</tr>
<tr>
<td>Calcium fluoride</td>
<td>7.6%</td>
<td>7759-75-5</td>
<td>232-188-7</td>
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<tr>
<td>Iron(III) oxide</td>
<td>0.04%</td>
<td>1332-37-2</td>
<td>215-570-8</td>
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<tr>
<td>Water</td>
<td>0.03%</td>
<td>7732-18-5</td>
<td>233-332-1</td>
</tr>
</tbody>
</table>
SECTION 4 FIRST-AID MEASURES

Skin Exposure:
In case of skin contact, wash off with soap and plenty of water. If irritation persists, call a physician.

Eye Exposure:
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician immediately.

Inhalation Exposure:
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Oral Exposure:
Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a physician.

Most important symptoms and effects, both acute and delayed:
No data available.

Indication of any immediate medical attention and special treatment needed:
No data available.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media:
Suitable: Dry chemical, Water spray, Carbon dioxide or appropriate foam.

Special hazards arising from the substance or mixture:
Take care as it may decompose upon combustion or in high temperatures to generate Titanium oxides, aluminum oxides, Silica oxides, Iron oxides, Magnesium oxides, Manganese oxides, Calcium oxides, etc.

Advice for firefighters:
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fire-extinguishing work is done from the windward. Uninvolved persons should evacuate to a safe place.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment. Remove all sources of ignition. Avoid breathing dust. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to noninvolved personnel should be controlled around the leakage area by roping off.

Environmental precautions:
Do not let product enter drains.

Methods and materials for containment and cleaning up:
Sweep up with spade and transfer to a dry, clean, lidded container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.
SECTION 7 HANDLING AND STORAGE

Precautions for safe handling:
Wear appropriate protective clothing and gloves. Avoid inhalation. Avoid contact with eyes, skin and clothing. Prevent generation of dust. Handling is performed in a well ventilated place. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents, Strong acids, Strong bases, Chlorine trifluoride, Ethylene oxide, Halogenated hydrocarbon, Oxygen difluoride, Vinyl compounds, Oxygen, Nitrates, Halogens. Wash hands and face thoroughly after handling. No smoking at working site.

Conditions for safe storage, including any incompatibilities:
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents, Strong acids, Strong bases, Chlorine trifluoride, Ethylene oxide, Halogenated hydrocarbon, Oxygen difluoride, Vinyl compounds, Oxygen, Nitrates, Halogens. Storage place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

SECTION 8 EXPOSURE CONTROL/PPE

Control parameters:
Not set up.

Appropriate engineering controls:
Mechanical exhaust required. Safety shower and eye bath.

Personal Protective Equipment:
Respiratory: Wear government approved respirator.
Eye: Wear chemical safety glasses.
Clothing: Wear appropriate protective clothing.
Hand: Wear compatible protective gloves.

Other Protect:
No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

Appearance:
Gray granule

Odor:
Weak odor

pH Value:
6.8–6.9 (50g/L Suspension)

Solubility(ies):
Weak soluble in water

Melting Point:
>350°C

Boiling Point,
Initial Boiling Point and Boiling Range:
No data available.

Flash Point
(Closed Cup):
Not applicable.

Density/Relative Density:
No data available.

Viscosity:
No data available.

Upper/Lower Flammability or Explosive Limits:
No data available.

Vapor Pressure:
No data available.
Vapor Density: No data available.
n-Octanol/Water Partition Coefficient: No data available.
Autoignition Temperature: No data available.
Decomposition Temperature: Non-flammable.
Flammability (Solid, Gas):

SECTION 10 STABILITY AND REACTIVITY

Reactivity:
No data available.

Chemical stability:
Stable under normal temperatures and pressures.

Possibility of hazardous reactions:
No data available.

Conditions to avoid:
No data available.

Incompatible materials:
Strong oxidizing agents, Strong acids, Strong bases, Chlorine trifluoride, Ethylene oxide, Halogenated hydrocarbon, Oxygen difluoride, Vinyl compounds, Oxygen, Nitrates, Halogens.

Hazardous Decomposition Products:
Titanium oxides, aluminum oxides, Silica oxides, Iron oxides, Magnesium oxides, Manganese oxides, Calcium oxides, etc.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:
Silica: Rat Oral LD₅₀: 3160 mg/kg

Skin Corrosion/Irritation:
Causes skin irritation.

Serious Eye Damage/Irritation:
Causes serious eye damage.

Respiratory Sensitization:
No data available.

Skin Sensitization:
No data available.

Germ Cell Mutagenicity:
No data available.

Carcinogenicity:
No data available.

Reproductive Toxicity:
No data available.

Specific Target Organ Toxicity -Single Exposure:
Causes damage to organs (Respiratory system).
May cause respiratory irritation.

Specific Target Organ Toxicity -Repeated Exposure:
Causes damage to organs through prolonged or repeated exposure (Respiratory system).

Aspiration Hazard:
No data available.
SECTION12 ECOLOGICAL INFORMATION

Ecotoxicity:
No data available.

Persistence and degradability:
No data available.

Bioaccumulative Potential:
No data available.

Mobility in soil:
No data available.

Other adverse effects:
No data available.

SECTION13 DISPOSAL CONSIDERATION

Appropriate Method of Disposal of Substance:
Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with and afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION14 TRANSPORT INFORMATION

RID/ADR:  Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA:  Non-Hazardous for Air Transport: Non-hazardous for air transport.

IMO:  Non-Hazardous for Air Transport: Non-hazardous for air transport.

SECTION15 REGULATORY INFORMATION

Regulation (EC) No.1272/2008 and the amendments:
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 1
Specific target organ toxicity – Single exposure Category 1 (Respiratory system)
Specific target organ toxicity – Single exposure Category 3 (Respiratory tract irritation)
Specific target organ toxicity – Repeated exposure Category 1 (Respiratory system)

SECTION16 OTHER INFORMATION

Date: 2019-06-24

Department: Shanghai Research Institute of Chemical Industry Testing Co., Ltd.
Tel (Fax): +86-21-52815377/31765555

Revision: 0

Reference Standard: GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), 7th revised edition

Other Information:
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising from using the above information.