

Applicant: Zhengzhou Fu Song Technology Co., Ltd.

Address: Room 609, Building 5, No.50, Yingxie Road, Jinshui District, Zhengzhou City, Henan Province

Sample information:

Sample name: Bottle stopper cleaning agent

Model: /

Sample received date: September 13, 2017

Testing period: From September 13, 2017 to September 16, 2017

Test Requested: As specified by the client, to edit Material Safety Data Sheet (MSDS) for the submitted sample.

Shanghai Changyin Testing Technology Co.,Ltd

Approved by:



Shanghai Changyin Testing Technology Co.,Ltd

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Material Safety Data Sheet (MSDS)

In accordance with GHS Rev. 6. and The EU CLP REGULATION (EC) No 1272/2008

Section 1 - Chemical Product and Company Identification

1.1 Product Identification:

Product Name: Bottle stopper cleaning agent
Product Model: /

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Bottle stopper cleaning agent
Use advised against: No data available.

1.3 Details of the Manufacture or supplier

Manufacture: Zhengzhou Fu Song Technology Co., Ltd.
Address: Room 609, Building 5, No.50, Yingxie Road, Jinshui District, Zhengzhou City, Henan Province
Telephone: +86-13903826227
Fax: +86-371-61316375
Email: msf1203@163.com

1.4 Emergency telephone number

Emergency Telephone: +86-13903826227

Section 2 - Hazards Identification

2.1 Classification of the substance or mixture

GHS Classification: Corrosive to metals(Category 1), H290
Skin corrosion (Category 1B),H314
Eye damage(Category 1),H318

2.2 GHS Label elements, including precautionary statements

GHS Labels:

Pictogram(s):



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| | |
|---|--|
| Signal Word: | Danger |
| Hazard Statement: | H290: May be corrosive to metals. H314: Causes severe skin burns and eye damage |
| Precautionary statement(s) | |
| Prevention precautionary statements: | P234: Keep only in original container P260: Do not breathe dust/fume/gas/mist/vapours/spray P264: Wash thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection |
| Response Precautionary Statements: | P310: Immediately call a POISON CENTER or doctor/physician P363: Wash contaminated clothing before reuse P390: Absorb spillage to prevent material damage. P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing |
| Storage Precautionary Statements: | P405: Store locked up P406: Store in a corrosive resistant/container with a resistant inner liner. |
| Disposal Precautionary Statements: | P501: Dispose of contents and container in accordance with local/regional/national /international regulations. |

2.3 Description of any hazards not otherwise classified

None. See section 11 for more detailed information on health effects and symptoms.

Section 3 - Composition/Information on Ingredient

Substance () Preparation (✓) Article ()

Composition:

| Chemical name | CAS No. | Content (%) |
|---------------------------------|-----------|-------------|
| Pure water | 7732-18-5 | 40-60% |
| Food grade orthophosphoric acid | 7664-38-2 | 20-45% |
| Surfactant 1 | - | 1-10% |
| Surfactant 2 | - | 2-8% |
| Addictive | - | 0.1-1% |

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Abbreviation: CAS No. is Chemical Abstract Service Registry Number.

Section 4 - First Aid Measures

4.1 Description of first aid measures:

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Contact a doctor immediately.

Skin Contact: Remove/Take off immediately all contaminated clothing including shoes. Rinse skin with water or shower. In case of reddened skin or burns seek medical advice.

Inhalation: Remove casualty to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist or breathing gets difficult, consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Contact a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. More important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 -Extinguishing media

5.1 Extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: No data available.

5.2 Special hazards arising from the substance or mixture

May cause corrosive acid mist in high temperature. The product reacts with metals with evolution of highly flammable hydrogen.

5.3 Advice for firefighters

Evacuate personnel to safe areas. As in any fire, Wear self-contained breathing apparatus and full protective gear for firefighting. Stand upwind.

5.4 Further information

Collect fire extinguishing water to avoid release to environment.

Section 6 - Accidental Release Measures

For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

6.1 Personal precautions, protective equipment and emergency procedures:

Evacuate area. Ventilate area. Use personal protective equipment: Chemical protection suit including self-contained breathing apparatus. Avoid contact with skin and eyes. Do not breathe vapors or gas. For personal protection see section 8.

6.2 Environmental precautions:

Avoid the undiluted raw solution release into sewers, roads, soil and the environment. Diluted with large amount of water before release into environment.

6.3 Methods and materials for containment and cleaning up:

Isolation leakage contaminated areas, restrict access. Do not touch the broken containers and spills before wearing suitable protective equipment. Cut off the source of leakage if safe.

Small leak: Neutralise small spillages with lime or soda ash. Rinse remnant with plenty of water into drains. Clean contaminated tools with plenty of water.

Large Leak: embank and contain spillage. To prevent leakage into the water, sewers, basements or confined spaces. Clear under the guidance of experts. For disposal see section 13.

Section 7 - Handling and Storage

7.1 Precautions for safe handling:

The usual precautions for handling of chemicals should be observed.

Use only outdoors or in a well-ventilated area. Provide appropriate exhaust ventilation.

Wear suitable personal protective equipment in section 8.

Avoid inhaling vapor. Avoid contact with skin and eyes.

Wash thoroughly after handling.

For precautions see section 2.

7.2 Conditions for safe storage, including any incompatibilities:

Store in original container. Keep in a well-ventilated place. Keep in properly labelled containers. Keep container closed. Keep away from incompatible materials (see Stability and reactivity)

Store in steel tanks lined with hard rubber or other resistant coating or inliner, or in plastic containers made of PE, PP, chloro or fluoro polymers, or in glass bottles.

To be avoided: unprotected metals, glass-fibre reinforced plastic (GRP).

Section 8 - Exposure Controls, Personal Protection

8.1 Exposure Limits:

| Substance | CAS No. | OSHA PEL | NIOSH REL | ACGIH |
|-----------------|-----------|---------------------|---|---|
| Phosphoric acid | 7664-38-2 | 1 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ |

8.2 Exposure controls

Engineering Control: General industrial hygiene practice. Provide appropriate exhaust ventilation. Apply technical measures to comply with the occupational exposure limits. Provide safe shower and eye wash fountain.

Personal protective equipment:

Respiratory Protection: Low concentrations and short term activity (max 15 min): filter masks with filter type E. Be aware of the filter capacity and the use-time limitation! High concentrations or unknown exposure or prolonged activity: self-contained breathing apparatus.

Eyes Protection: Use equipment for eye protection (such as Safety glasses with side-shields) tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body Protection: At the workplace: waterproof suit, Boots. Intervention at incident: Complete chemical protection suit, Boots. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hands Protection: Handle with chemical-resistant gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Suitable material: fluoro rubber, butyl rubber, chloroprene, nitrile rubber, PVC, latex.

Other Protections: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties

| | |
|------------------------------|------------------------------|
| Appearance | Colorless transparent liquid |
| Odor | Odorless |
| pH | Not available. |
| Melting point/freezing point | Not available. |

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| | |
|--|-------------------|
| Initial boiling point and boiling range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability | Incombustible. |
| Explosive limit %(V/V) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | Soluble in water. |
| Partition coefficient: n-octanol/water | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |

Section 10 - Stability and Reactivity

10.1 Stability: Stable under recommended storage conditions.

10.2 Conditions to Avoid: Extremes of temperature, flames and mars. Incompatible materials.

10.3 Incompatible materials: Strong bases, Powdered metals.

10.4 Possibility of hazardous reactions: May be corrosive to metals. Gives off hydrogen by reaction with metals.

10.5 Hazardous Decomposition Products: Gives off hydrogen by reaction with metals.

Section 11 - Toxicological Information

Acute Toxicity:

Orthophosphoric acid:

LD50 Oral - Rat - 1530 mg/kg

LC50 Inhalation - Rat - 1 h - 850 mg/m³

LD50 Skin-Rabbit -2740 mg/kg

Skin Corrosion/Irritation:

Causes severe skin burns and eye damage

Serious Eye Damage/Eye Irritation:

Causes serious eye damage

Respiratory or Skin Sensitization

No sensitizing effects known.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity:

The International Agency for Research on Cancer (IARC) has determined that occupational exposure to strong-inorganic-acid mists containing sulfuric acid is carcinogenic to humans (group 1).

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| | |
|---|--|
| Reproductive Toxicity: | Based on available data, the classification criteria are not met. |
| Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System): | Based on available data, the classification criteria are not met. |
| Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System): | Based on available data, the classification criteria are not met. |
| Aspiration Hazard: | Based on available data, the classification criteria are not met. |
| Potential Health Effects: | |
| Inhalation: | Harmful if inhaled. Cause respiratory irritation. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. |
| Skin Contact: | Causes skin burns. |
| Eye Contact: | Causes severe eye burns. |
| Ingestion: | May be harmful if ingested. May cause burn. |

Section 12 - Ecological Information

12.1 Toxicity

No data available

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Acidic, undiluted and neutralized products are harmful to the aquatic environment and the soil.

Section 13 - Disposal Considerations

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Waste treatment methods

Product

Recycle if possible. Offer surplus and non-recyclable products to a licensed disposal company. Observe according to the national and local related regulations.

Contaminated packaging

Containers may still present chemical hazard when empty. Return to supplier for recycling if possible.

Section 14 - Transport Information

14.1 UN Number:

ADR/RID, IMDG, IATA 1760

14.2 UN proper shipping name:

ADR/RID, IMDG, IATA CORROSIVE LIQUID, N.O.S.

14.3 Transport hazard class(es):

ADR/RID, IMDG, IATA 8

14.4 Packing group:

ADR/RID, IMDG, IATA III

14.5 Environmental hazards: No.

14.6 Special precautions for user: No information available.

Section 15 - Regulatory Information

EU Regulations

Classification according to 67/548/EEC or 1999/45/EC

C - corrosive

R34 - Causes burns

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Corrosive to metals(Category 1), H290

Skin corrosion (Category 1B),H314

Eye damage(Category 1),H318

International Chemical Substances list:

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| CAS No. | EINEC | TSCA | DSL | IECSC | NZIoC | PICCS | KECI | AICS |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 7732-18-5 | listed | listed | listed | listed | listed | listed | listed | listed |
| 7664-38-2 | listed | listed | listed | listed | listed | listed | listed | listed |

Note:

EINECS: European Inventory of Existing Commercial Chemical Substances

TSCA: TSCA Chemical Substance Inventory

DSL: Canada Domestic Substance List

IECSC: Inventory of Existing Chemical Substances in China

NZIoC: New Zealand Inventory of Chemicals

PICCS: Philippines Inventory of Chemicals and Chemical Substances

KECI: Korea Existing Chemicals Inventory

AICS: Australian Inventory of Chemical Substances

Section 16 - Additional Information

Abbreviations:

- pH- Relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline
- OSHA- Occupational Safety and Health Administration
- NTP- National Toxicology Program
- IARC- International Agency for Research on Cancer
- CAS#- Chemical Abstract Service number - used to uniquely identify chemical compounds
- ACGIH- The American Conference of Governmental Industrial Hygienists
- ADR- Agreement on Dangerous Goods by Road
- IATA - International Air Transport Association
- IMDG- International Maritime Dangerous Goods

Further Information:

-This safety data sheet was prepared in accordance with UN GHS Rev.6, The EU CLP REGULATION (EC) No 1272/2008, and ANSI Z400.1.

-The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Department Issuing MSDS: Zhengzhou Fu Song Technology Co., Ltd.

Issue Date: September 16, 2017

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