

Safety Data Sheet

SHUNFIX HCS

Revision date : 2015/01/16

Version: 2.0

1. Identification

Product identifier used on the label

SHUNFIX HCS

Recommended use of the chemical and restriction on use

Recommended use*: Raw material

Suitable for use in industrial sector: chemical & textile industry

* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

SHUNCHEER ENTERPRISE CORPORATION.

OFFICE : TEL : 886-2-229980707, FAX : 886-2-29978707

FACTORY : TEL : 886-2-26881198, FAX : 886-2-26764469

Other means of identification

Chemical family:

Polycation

Synonyms:

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

| | |
|-----------------|----------|
| Acute Tox. | 4 (oral) |
| Eye Dam./Irrit. | 1 |
| Aquatic Acute | 2 |
| Aquatic Chronic | 3 |

| |
|--|
| Acute toxicity |
| Serious eye damage/eye irritation |
| Hazardous to the aquatic environment - acute |
| Hazardous to the aquatic environment - chronic |

Label elements

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Pictogram:



Signal Word:

Danger

Hazard Statement:

| | |
|------|--|
| H318 | Causes serious eye damage. |
| H302 | Harmful if swallowed. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H401 | Toxic to aquatic life. |

Precautionary Statements (Prevention):

P280Wear eye/face protection.
P273Avoid release to the environment.
P270Do not eat, drink or smoke when using this product.
P264Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P310Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301 + P330IF SWALLOWED: rinse mouth.

Precautionary Statements (Disposal):

P501Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

Labeling of special preparations (GHS): _____

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 100 % dermal

According to Regulation 1994 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

Emergency overview

DANGER:

Causes serious eye damage.
Harmful if swallowed.
Eye wash fountains must be easily accessible.
Wear NIOSH-certified chemical goggles.
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.
Wear chemical resistant protective gloves.
Wear protective clothing.
Avoid contact with the skin, eyes and clothing.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

| | | |
|--------------------------|-----------------------------|-----------------------------|
| <u>CAS Number</u> | <u>Content (W/W)</u> | <u>Chemical name</u> |
| 26062-79-3 | 50.0 - 60.0 % | Polycation |

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According to Regulation 1994 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

CAS Number

26062-79-3

Content (W/W)

60.0 %

Chemical name

Polycation

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

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Protective equipment for fire-fighting:
Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Further accidental release measures:

Forms slippery surfaces with water.

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid inhalation. Use personal protective clothing.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Pick up with suitable appliance and dispose of.

Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

Protect against moisture. Shut containers immediately after taking product because product takes up the humidity of air. No special measures necessary provided product is used correctly.

Protection against fire and explosion:

Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

Store in unopened original containers in a cool and dry place.

The packed product is not damaged by low temperatures or by frost. Bulk must be protected from solidification.

Protect from temperatures above: 70 °C

Properties of the product change irreversibly on exceeding the limit temperature.

8. Exposure Controls/Personal Protection

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed.

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Hand protection:

Chemical resistant protective gloves

Consult with glove manufacturer for testing data.

Eye protection:

Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice. Wash soiled clothing immediately.

9. Physical and Chemical Properties

| | | |
|-----------------------------|---|--|
| Form: | Yellow Visocs Liquid | |
| Odour: | product specific | |
| Colour: | yellowish | |
| pH value: | approx. 5(50 g/l, 23 °C) (DIN EN 1262) | |
| solidification temperature: | approx. 18 °C(DIN ISO 2207) | |
| Boiling point: | | |
| Flash point: | | not applicable |
| Autoignition: | approx. 200 °C | (DIN 51758) |
| Vapour pressure: | approx. 350 °C | (DIN 51794) |
| Density: | < 0.1 hPa | (20 °C) |
| | approx. 0.96 g/cm3 | (60 °C) (DIN 51757) |
| Relative density: | | No data available. |
| Thermal decomposition: | > 300 °C | |
| Viscosity, dynamic: | approx. 30 mPa.s | (60 °C) (DIN EN 12092) |
| Particle size: | | |
| | | The substance / product is marketed or used in a non solid or granular form. |
| Solubility in water: | | soluble |
| Miscibility with water: | | miscible in all proportions |
| Solubility (qualitative): | soluble | |
| | solvent(s): alcohols, | |
| Evaporation rate: | | No data available. |

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

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Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

Conditions to avoid

No conditions known that should be avoided.

Incompatible materials

strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

> 300 °C

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of moderate toxicity after single ingestion.

Oral

Type of value: LD50

Species: rat

Value: 500 - 2,000 mg/kg

Literature data.

Skin

Result: non-irritant

Literature data.

Eye

Result: Risk of serious damage to eyes.

Chronic Toxicity/Effects

Other Information

The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

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12. Ecological Information

Toxicity

Toxicity to fish

LC50 (48 h) > 1 - < 10 mg/l, Oncorhynchus mykiss

Aquatic invertebrates

EC50 (48 h) > 1 - < 10 mg/l, Daphnia magna

Literature data.

Aquatic plants

EC50 (72 h) > 1 - < 10 mg/l, Scenedesmus subspicatus

Literature data.

Chronic toxicity to aquatic invertebrates

No observed effect concentration > 0.1 - < 1 mg/l

Literature data.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DEV-L2 activated sludge/EC10: > 1,000 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Readily biodegradable (according to OECD criteria).

Elimination information

>= 90 % Bismuth-active substance (mod. OECD 303A)

> 60 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) Readily biodegradable (according to OECD criteria).

Analogous: Assessment derived from products with similar chemical character.

Bioaccumulative potential

Bioaccumulation potential

Accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is possible.

Additional information

Sum parameter

Chemical oxygen demand (COD): 2,625 mg/g

Biochemical oxygen demand (BOD): 330 mg/g

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Ratio BOD/COD: 30.2 %

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. Do not release untreated into natural waters. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical/TSCA, US

released / listed

EPCRA 311/312 (Hazard categories):

Acute;

State regulations

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CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:

Health : 3Fire: 1

Reactivity: 0

Special:

HMIS III rating

Health: 3Flammability: 1

Physical hazard: 0

16. Other Information

SDS Prepared by:

SHUNCHEER Product Regulations

SDS Prepared on: 2015/01/16

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

SHUNFIX HCS

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