MSDS OF PHMB

Safety Specification for Metformin hydrochloride (PHMB)

Part I Chemicals and Corporate Identification

Use: Polymetformin hydrochloride (PHMB) is a cationic sterilization disinfectant that can be used in sterilization agents

In, and widely used in the food industry, leather industry, hospitals and other places, but also can also be used as cosmetics preservatives.in a word,

Pexamethylmetformin hydrochloride (PHMB) can be used in the formulation of any product that requires sterilization.

Manufacturers / Suppliers:

Hunan Xueyan Fine Chemical Co., Ltd

Address: No.253, Health Avenue, Liuyang Economic and Technological Development Zone,

Liuyang City

Tel.: 0731-85141812 Fax: 0731-85141812 Version: XT-PH-002-2018 Part II Risk Overview

Eye contact: stimulate the eyes, which may seriously harm the eyes.

Skin contact: If too much contact can stimulate the skin.

Symptoms: Contact areas are red with irritation.

Inhalation: The inhalation is harmful.Improper inhalation of the product can cause a cough and a

bitter throat.

Physical ochemical hazard: No spontaneous or incompatible reactions cause violent reactions.

Part III: Composition / Composition Information

name:P.H.M.B (polymethyl metformin hydrochloride) Ingredients: 20% PHMB (w / w) 80% water (w / w)

Main active substances: polyhexamethylmetformin hydrochloride

CAS Number: 32289-58-0 (USA) or 27083-27-8 (Europe) or 91403-50-8 (INCI)

Secondary active substance: hydrogen chloride (0.10-0.15%)

Part 4, First aid measures

Inhalation: inhalation is harmful, rinse the throat with water, and seek medical attention.

Eye contact: Wash it with large amounts of water for 5-10 minutes and seek medical attention.

Skin contact: Wash it with large amounts of water for 5-10 minutes and seek medical treatment.

Intake: Drink 250-500 ml of neutral liquid, such as water or milk. If too much intake causes vomiting, please seek medical advice as soon as possible.

Part 5, Fire protection measures

Specific risks: No, this product is not flammable and explosive.

Note: Fire-fighting water (including PHMB) cannot be drained into the environment.

Fire extinguishing medium: all recognized fire extinguishing medium.

Protection of firefighters: commonly used fire extinguisher equipment.

Part VI leakage emergency treatment

Personal note: Stay away from possible leaks or wear the appropriate equipment.

Environmental considerations: harmless to the environment.

Limited leakage area: clean with large amounts of water

Important leakage area: absorb liquid such as sand with neutral cover, then rinse with clean water.

The ground will slip when the product drops, and if not cleaned, the ground will be very sticky.

Part VII Usage and Storage

Use: Avoid spilling during transportation.

lay in:

Temperature: Keep the temperature above 10 $^{\circ}$ C to avoid precipitation (white solid under the container).If less than 10 0 $^{\circ}$ C, when used

Being placed at a high temperature for a long time and stirring effectively makes the liquid clear again and remains active.

material:

Polyethylene, polypropylene, PVC, stainless steel materials are recommended for storage.

Metal materials, such as copper, iron, zinc, ordinary steel, and other rubber materials are not suitable for storage.

Part VIII: Contact Control and Personal Protection

Eye protection: wear a full mask face mirror or face mask.

Hand protection: wear gloves.

Body protection: Put on the appropriate work clothes.

Respiratory tract protection: spray used only the protection products.

Part IX Physical and Chemical properties

Physical status: clear to slightly milky white liquid

Color: colorless to pale yellow

Smell: tasteless PH value: 4. 0-5. 0

Setting point: minus 2°C -minus 4°C

Boiling point: 102-105 ℃

Decomposition temperature: 230 ℃ (effective for active ingredients)

Flash point: not applicable

Spontaneous combustion: not applicable

Flammable: not applicable Explosive: not applicable Density (20°C): 1. 030-1. 050 Viscosity: 1.2.10-3 Pa per second

solubility:

Water: dissolved in hot and cold water in any proportion.

Other solvents: soluble in fatty alcohols (containing short carbon chains) and ethylene glycol.

It is not soluble in hydrocarbons.

Other features:

Most mixtures of metal cations, such as iron, copper, nickel, and zinc

The cationic product is not soluble with the anionic mixture.

Part X: Stability and Reactivity

Stability: This product is stable between 6-75 $^{\circ}\mathrm{C}$

Reactivity: Any spontaneous or incompatible reactions will not cause a violent reaction.

Part X, Toxicology Information

Acute oral toxicity (rat): LD 50> 2000mg / kg, indicating non-toxicity in humans

Acute transcutaneous toxicity (rat): LD 50> 2000mg / kg, indicating non-toxicity in humans

Skin irritation (rabbit): Psi=2. 0, indicating a slight irritation to the skin

Eye irritation (rabbit): maximum O.I= 35

Skin sensitivity: it will not appear as a sensitive phenomenon

Subchronic toxicity: none Cell mutagenesis: none

genotoxicity (C.H.O cells): no chromosome variation Mutagenesis: no mutagen or proline mutagen reaction

Carcinogenic substances: no

Mutagenic agent: no teratogenic agent: no Part XII, Ecological data

Acute toxicity (fish): LC 50 =1-10 mg/L (96 h)

Acute toxicity (Mollusc): EC 50 =1-10 mg/L (48 hours)

Acute toxicity (algal): EC 50> 0.1 mg / L (72 h) NOEC 50> 0.1 mg / L (72 h) Respiratory tract infection: EC 50 =161 mg / L (3 h) (activated sludge) Wastewater treatment: consistent with the total organic carbon

Part 1 III Waste Disposal

Neutralizing this product needs to use strong oxidants, such as chlorine, bromine derivatives, ozone, etc., with its oxidation reaction.

Note: Do not try to destroy the product by using bacteriology.

Part XIV Transport Information

sea transportation:

Dangerous goods grade: Class 9

UN no#: 3082

Packaging grade: oneself Correct shipping name:

Liquid substance harmful to the environment.

transport by car or train:

Can be transported by common chemicals.

Part 15: Regulation Information

It is not listed as a hazardous mixture in the EEC list.

Part 16, Other information is required

All of the above information is provided in good faith, but there is no guarantee. Customers shall ensure that the item is used in accordance with the relevant city

Field-specific laws and regulations.