SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product identifier : Mixed bed resin

1 .2. Details of the supplier of the safety data sheet

Sanford Chemical Co.,LTD

3/F,Guzhen E-commerce Industrial Park,Bengbu,Anhui,China lisue@sanford-chem.com

1 .3 . Emergency telephone number

Emergency number +86-552-2132858

8:30 AM to 5:30 PM

Monday through Friday

SECTION 2: Hazards identification

2 .1. Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Health Rating: 0 - None

Flammability Rating: 1 - Slight

Reactivity Rating: 1 - Slight

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES ; LAB COAT; PROPER GLOVES

2 . 2 . Storage Color Code: Orange (General Storage)

Potential Health Effects

Inhalation: Not expected to be a health hazard. Vapors are unlikely due to physical properties.

Ingestion: No adverse effects expected. Extremely large oral dosages may produce gastrointestinal disturbances.

Skin Contact: Not expected to be a health hazard from skin exposure. Skin absorption is unlikely due to physical properties. Eye Contact : Solid or dust may cause irritation or corneal injury due to mechanical action.

Chronic Exposure: No adverse health effects expected.

Aggravation of Pre- existing Conditions: No information found.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixture

Name	CAS No.	%
Polyvinyl benzyl trimethyl Ammonium chloride	60177-39-1	20-30
polystyrene sulphonic acid	69011-20-7	35-50
Water	7732-18-5	20-45

SECTION 4: First aid measures

4.1. Description of first aid measures

First- aid measures after inhalation : No adverse effects anticipated by this route of exposure.

First- aid measures after skin contact : No adverse effects anticipated by this route of exposure

First-aid measures after eye contact : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

4 . 2 . Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : No additional information available

Symptoms/ injuries after skin contact : No additional information available Symptoms/ injuries after eye contact : No additional information available

Symptoms/injuries after ingestion : No additional information available

4 . 3 . Indication of any immediate medical attention and special treatment needed No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water, Talc, Dry Chemical Unsuitable extinguishing media : None

5 . 2 . Special hazards arising from the substance or mixture

Fire hazard : None known

Explosion hazard : None known

Special Hazards : By heating and fire, harmful vapors/gases may be formed **5.3.**

Advice for firefighters

Protection during firefighting : self-contained breathing gear. Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6 .1 . Personal precautions, protective equipment and emergency procedures

General measures : Sweep up material and transfer to containers. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Hazard of slipping on a spilled product.

6.1 .1. For non-emergency personnel

No additional information available

6.1 .2 For emergency responders

No additional information available

6.2. Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). This product is insoluble in water.

6 . 3 . Methods and material for containment and cleaning up

For containment : If possible, stop flow of product, move containers from spilled area.

Methods for cleaning up : Vacuum or sweep up material and place in designated, labeled waste container. Dispose of via a licensed water disposal contractor.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Put on appropriated personal protection equipment.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

7 . 2 . Conditions for safe storage, including any incompatibilities

Storage conditions : Store between: -20 to be low 40℃ (-4 to below 104℉). Store in accordance with local regulations.Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible meterials (see section 10) along with food and drink.Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Empty containers or liners may retain some product residues. It is recommended to store ion exchange resins at temperatures above the freezing point of water.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering control : Good general ventilation should be sufficient to control worker exposure to airborne contaminants .
Personal protective equipment : Eye Protection (if contact is possible)

Hand protection	:	None required under normal product handling conditions
Eye protection	:	Safety glasses with side shields
Skin protection	:	Wear suitable working clothes
Respiratory protection	:	Not required for normal uses if irritation occurs from breathing-get fresh air.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Spherical Beads
Color	:	Light yellow
Odor	:	Odorless; may have amine odor
Odor threshold	:	No data available
		No data available
Relative evaporation rate	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Self-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapor Pressure	:	No data available
Relative Vapor density @ 20 deg C	:	No data available
Relative Density	:	Insoluble in water
Solubility	:	No data available
kinematic	:	
dynamic		
properties		

Log Pow	properties	: No data available
	limits	: No data available
Log Kow		: No data available
Viscosity,		: No data available
Viscosity,		: No data available
Explosive		: No data available
Oxidizing		
Explosive		

SECTION 10: Stability and reactivity

10.1. Reactivity

Exposure to > 0 . 1 ppm of free chlorine, " hypochlorite" ions, or other strong oxidizing agents over long periods of time will eventually break down the crosslinking.

10.2. Chemical stability

Stable under normal conditions of storage

1 0 . 3 . Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid None

10.5. Incompatible materials

Temperature over 3 0 ℃ (8 5 ℉) will accelerate the oxidation. This will tend to increase the moisture retention of the resin, decreasing its mechanical strength, as well as generating small amounts of extractable breakdown products.

1 0 . 6 . Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced **10.7. Hazardous combustion products**

It is thermally stable to higher than 150℃ (300℉) in the alkali or a lkaline earth salt forms. The free acid form tends to hydrolyze in water temperatures apprecia bly higher than 120℃ (250℉) thereby losing capacity, as the functional groups are gradually replaced by hydroxyl groups.

10.8. Hazardous by products

CO, CO2, NH3, amines, styrene, divinylbenzene.

SECTION 11: Toxicological information

1 1.1. Information on toxicological effects

Acute toxicity	:	Not classified
LD50 oral rat	:	Single dose oral LD50 has not been determined.
LC50	:	Single dose oral toxicity is believed to be low. Not classified
Acute toxicity estimates Carcinogenicity/	:	Not classified
Mutagenicity	:	No known significant effects or critical hazards
Reproductive effects	:	No known significant effects or critical hazards
Neurotoxicity	:	No known significant effects or critical hazards
Target organs Other	:	No known significant effects or critical hazards
effects	:	No known significant effects or critical hazards

SECTION 12: Ecological information

12.1. Toxicity

No additional information available **12 . 2 .**

Persistence and degradability

No additional information available **1 2.3**

. Bio accumulative potential

No additional informationavailable

12.4. Mobility in soil

No additional information available

SECTION [1]3: Transport information

TDG Classification: It do not belong to hazardous goods according to IMO IMDG CODE