

Strong Acid Cation (SAC)

General Statement

It is a premium grade strong acid cation exchange resin with gel and macroporous type styrene-DVB copolymer in H form. This GPS safety summary is only applicable to the product mentioned in section 2.

Chemical Identification

► Products Name

TULSION T-40, TULSION T-42, TULSION T-52, TULSION T-50, TULSION T-42 MP, TULSION T-46 MP, TULSION T-56 MP, TULSION T-62 MP, TULSION T-63 MP, TULSION T-66 MP, TULSION T-6812 MP (Dry), TULSION T-4213 MP.

► Chemical Identity

Sulfonated copolymer of Styrene and divinylbenzene in the Hydrogen or sodium form

Uses and Applications

Common industrial uses of the product are industrial water treatment, condensate polishing unit, demineralization, catalytic application, etc.

Physical / chemical properties

Property	Value
Physical State	Spherical beads
Water solubility	Insoluble
pH Range	2-5

Health Effects

Due to its acidic nature, this copolymer is more likely to damage the eye and may cause skin irritation. None of the other health effects were observed by any route of exposure.

Environmental Effects

Copolymer in H-form do not bioaccumulate in the water but due to low biodegradation rate it is expected to remain in soil & sediment. Ecotoxicity is not expected to be acutely toxic.

Exposure

► Human Health

The product is only used for industrial purposes; therefore, consumer exposure is not relevant and does not need to be assessed for this product. For worker, follow appropriate Risk Management Measures to control risk of exposure.

► Environment

According to GHS/CLP regulation this copolymer in H-form does not fulfil the criteria for classification and labelling as "Hazardous to environment".

Risk Management Recommendations

Direct contact with the substance can be practically excluded as the product is handled in close process. All personnel should be adequately trained for general handling of chemicals. Wear appropriate PPEs. Ensure adequate ventilation & observe the usual precautions for handling chemicals. Storage must be in non-metallic vessels. Keep away from oxidizing agents. Store in a cool enclosed place. Wash hands & skin following contact. If the product gets into your eyes, rinse eyes thoroughly for 15 minutes with tap water and seek medical attention, consult the doctor immediately.

Accidental Release Measures

▶ Spill Containment

Avoid spills and prevent material from entering water bodies.

▶ Clean-up Procedure


Use protective equipment during clean-up. Avoid creating dust. Dispose of in accordance with local regulation.

Regulatory Information/Classification and Labelling

▶ Regulatory Compliance

Product is compliant with OSHA (US); TSCA and other domestic regulations. Being polymer, this product is exempted from REACH (EU) registration.

Classification and Labelling

GHS/CLP Classification	Eye Damage Category 1
Hazard Pictogram	
Signal Word	GHS05-Corrosive Danger
Hazard Statement	H318 Causes serious eye damage
Precautionary Statements	Wash hands thoroughly after handling. Do not touch eyes. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing Get emergency medical help.

Conclusion

Styrene-DVB copolymer in H-form is an industrial resin that requires safe handling due to its corrosive nature. Workers handling this product must use protective gear, and facilities must implement safety protocols to avoid accidents and appropriate Risk Management Measures should be selected and applied to control risk of exposure. Exposure to environment is considered negligible as Styrene-DVB copolymer in H-form only has supported industrial uses and the manufacturing process is an enclosed system. Also, this product has no supported uses in direct consumer products

Contact Information Within Company

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