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SAFETY DATA SHEET

1. Identification of the Substance/Preparation and the Company Undertaking

Product Name Octalsobutyl POSS®

Product Number MS0825

Synonyms 1,3,5,7,9,11,13,15-Octaisobutylpentacyclo[9.5.1.1^{3,9}.1^{5,15}.1^{7,13}]-

octasiloxane

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2. Hazard Identification

GHS Classification

Physical hazards

None

Health hazards

Acute toxicity, oral Not toxic

Acute toxicity, dermal

Acute toxicity, inhalation

Skin corrosion/irritation

Serious eye damage/irritation

Sensitization, respiratory

Sensitization, skin

Classification not possible

Germ cell mutagenicity

Carcinogenicity

Classification not possible

single exposure

Specific target organ toxicity, Classification not possible

repeated exposure

Aspiration hazard Classification not possible

Environmental hazards

Hazardous to the aquatic environment, Classification not possible

acute hazard

Hazardous to the aquatic environment, Classification not possible

long-term hazard

Hazardous to the ozone layer Classification not possible

GHS Label Elements

None

Signal Word

None

Hazard Statement(s)

None

Precautionary Statement(s)

None

NFPA rating: Health: 1 Flammability: 0 Reactivity: 1

HMIS rating: Health: 1 Flammability: 0 Physical Hazard: 1

3. Composition/Information on Ingredients

Ingredient	CAS#	EC#	Conc
1,3,5,7,9,11,13,15-Octaisobutylpentacyclo[9.5.1.1 ^{3,9} .1 ^{5,15} .1 ^{7,13}]-octasiloxane	221326-46-1	NA	100%

Formula $C_{32}H_{72}O_{12}Si_8$

Molecular Weight 873.60 gm/mol

4. First Aid Measures

If inhaled

Remove to fresh air. If breathing becomes difficult, seek immediate medical attention.

In case of skin contact

Wash off with soap and water.

In case of eye contact

Flush eyes with plenty of water.

If swallowed

Wash out mouth with water if person is conscious.

5. Fire-Fighting Measures

Suitable extinguishing media

Use water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special protective equipment for fire-fighters

Fire fighters exposed to vapors should wear a self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

Personal precautions

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

Environmental precautions

Do not let product enter drains

Methods for cleaning up

Sweep up, place in bag and hold for disposal. Avoid raising dust. Ventilate area and wash spill site after material pick up is complete.

7. Handling and Storage

Handling precaution

Handle in a fume hood or in properly ventilated area. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage precaution

Ambient temperatures in tightly closed containers.

8. Exposure Controls/Personal Protection

Respiratory protection

Where protection from nuisance levels of dusts are desired, uses type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Wear protective gloves. Wash thoroughly after handling.

Eye protection

Wear chemical safety goggles or a face shield

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Use common industrial hygiene practices.

9. Physical and Chemical Properties

Appearance White powder

Odor None

Odor threshold Not applicable pH Not applicable

Melting/freezing point 270 °C

Initial boiling point and range
Flash point
Evaporation rate
Flammability
Upper/lower flammability explosive limits
Vapor pressure
Vapor density

No data available

Relative density 1.3

Solubility(ies) Tetrahydrofuran (s), Water (ns)

Partition coefficient (n-octanol/water)
Autoignition temperature
Decomposition temperature
Viscosity

No data available
No data available
No data available
No data available
Not applicable

10. Stability and Reactivity

Chemical stability

Stable under recommended storage conditions.

Conditions/materials to avoid

Exposure to strong bases

Hazardous decomposition products

Carbon dioxide, Carbon monoxide, Silicon Oxides

11. Toxicological Information

Acute toxicity

Acute oral toxicity, rat: LD₅₀ > 5000 gm/kg

Skin corrosion/irritation

Primary dermal irritation, rabbit: PII = 0.05

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity – single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

To the best of our knowledge the toxicological properties have not been thoroughly investigated.

12. Ecological Information

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. Disposal Considerations

Product

Contact a licensed waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. Transport Information

Classification for road and rail transport (ADR/RID)

Not dangerous goods

Classification for sea transport (IMO-IMDG)

Not dangerous goods

Classification for air transport (IATA/ICAO)

Not dangerous goods

15. Regulatory Information

U.S. Federal Regulations This product is not currently regulated by SARA/EPCRA

TSCA (US)
Listed on inventory
Listed on inventory
REACH (EU)
Not registered

16. Other Information

Date reviewed: 07.30.2024

Reviewed by: Director of Commercial Products

The information and recommendations contained in this Safety Data Sheet are from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. While the above information is believed to be accurate, no warranty, guaranty, or representation is made as to the correctness or sufficiency of the information and the information is intended only as a guide. Hybrid Plastics shall not be held liable for any damage resulting from handling or from contact with this product. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine environmental regulatory compliance obligations under any applicable laws.