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MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Name: POSS® Resin SC4500 Chemical Name: Polyvinylsilsesquioxane

Chemical Family: Silsesquioxane

SECTION 2 - COMPOSITION/INGREDIENTS

Ingredient Name: Polyvinylsilsesquioxane, Silane Crosslinker

CAS Number: N/A

SECTION 3 – HEALTH AND RELATED DATA

Emergency Overview: Liquid resin, generally considered to be non-toxic.

Relevant Routes of Exposure: Ingestion, skin or eye contact.

Eye Contact: Prolonged exposure or repeated contact could cause irritation. **Skin Contact:** Prolonged exposure or repeated contact could cause irritation.

Inhalation: N/A.

Ingestion: May cause irritation to mouth, throat, esophagus, and stomach.

HMIS Rating:

Health: 1 Flammability: 0 Reactivity: 0

NFPA Rating:

Health: 1 Flammability: 0 Reactivity: 0

SECTION 4 – FIRST AID PROCEDURES

Eyes: In case of contact with eyes, flush with copious amounts of water for at least 15 min. Assure adequate flushing by separating the eyelids with fingers. Seek immediate medical attention.

Skin: In case of contact, immediately wash skin with soap and copious amounts of water. Seek immediate medical attention if exposure is severe.

Inhalation: N/A.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Seek

immediate medical attention.

<u>SECTION 5 – FIRE AND EXPLOSION HAZARD</u> DATA

Autoignition Temperature: N/A

Extinguishing Media: Carbon dioxide, dry chemical powder, or appropriate foam.

Fire Fighting Instructions: Fire fighters exposed to vapors should wear a self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes. **Hazardous Combustion Products:** Carbon monoxide, carbon dioxide, and silicon oxide.

SECTION 6 – SPILL INFORMATION

Personal Precautions: Exercise appropriate precautions to minimize direct contact with skin

or eyes.

Methods for Cleaning Up: Use an inert absorbent. Sweep up, place in bag and hold for

disposal. Ventilate area and wash spill site after material pick up is complete.

SECTION 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 to cool temperatures in tightly closed containers.

Additional Information: Store in a cool place.

SECTION 8- PRECAUTIONARY MEASURES/PPE

Engineering Controls: Exhaust ventilation, safety shower and eye bath.

Ventilation Requirements: Mechanical exhaust required. **Eye/Face Protection:** Chemical safety goggles or face shield.

Skin Protection: Protective gloves. Wash thoroughly after handling

Respiratory Protection: NIOSH approved respirator.

SECTION 9 - PHYSICAL/CHEMICAL APPEARANCE

Appearance: Liquid Melting Point: N/A

Color: Colorless or off white

Molecular/Chemical Formula: $(C_{16}H_{32}O_6Si_6)_n$

Molecular Weight:VariableOdor:SlightReactivity in Water:NoSolubility in Water:No

Density: 1.03 kg/lit

SECTION 10 – REACTIVITY

Stability: Stable

Conditions to Avoid:Strong BasesHazardous Decomposition Products:UnknownHazardous Polymerization:Will not occur.

SECTION 11 - TOXICITY DATA

Route of exposure

Skin Contact: May cause irritation.

Skin Absorption: May be harmful if absorbed through skin.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be irritating to

mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

Additional Information: To the best of our knowledge the toxicological properties have not

been thoroughly investigated.

SECTION 12 – ECOLOGICAL DATA

Ecological Information:No data available.

SECTION 13 – DISPOSAL INFORMATION

Disposal Information: Contact a licensed professional waste disposal service to dispose of this material. Disposal should be made in accordance with Federal, State and Local regulations.

SECTION 14 - TRANSPORTATION DATA

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous

for transport.

IATA

Non-Hazardous for Air Transport: This substance is considered to be non-hazardous

for air transport.

SECTION 15 – REGULATORY DATA

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

TSCA: No. R&D Use Only

<u>SECTION 16 – OTHER INFORMATION</u>

Disclaimer: For R&D use only. Not for drug, household or other uses.

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