

**Section 1. Identification**

**Product Name:** ROYALSIL HI-PURITY HMDS

**Product Use:** Industrial or intermediate chemical

**Effective Date:** 18 May 2020

**Replaces:** 21 May 2019

**Supplier Information:**

ROYALSIL, Inc.  
25 Lancelot Lane  
Mount Laurel, NJ 08054-1912

**USA Emergency Phone Number:**

**CHEMTREC (24-hr/7 days): 1-800-424-9300**

**Refer to ROYALSIL, Inc. Contract # CCN674872.**

**Section 2. Hazard(s) Identification**

**Emergency Overview:** Clear flammable liquid. Prolonged contact causes skin burns and eye damage. Ingestion or inhalation will be harmful. Toxic if skin contacts product. Harmful to aquatic life with long lasting effects.

**GHS Classification:**

<b>Serious Eye Damage</b>	<b>Category 2</b>
<b>Skin Corrosion</b>	<b>Category 2</b>
<b>Flammable Liquids</b>	<b>Category 2</b>
<b>Acute Aquatic Toxicity</b>	<b>Category 1</b>
<b>Chronic Aquatic Toxicity</b>	<b>Category 1</b>



**GHS Pictograms:**

**GHS Label:** DANGER

**POTENTIAL HEALTH EFFECTS:**

**CODE OF HAZARD STATEMENTS:**

**Physical Hazards**

H225- Flammable liquid and vapor.

**Health Hazards**

H225- Highly flammable liquid and vapor.

H302- Harmful if swallowed.

H311- Toxic in contact with skin.

H314- Causes severe skin burns and eye damage.

H332- Harmful if swallowed.

H336- May cause drowsiness or dizziness.

**Environmental Hazards**

H410- Very toxic to aquatic life with long lasting effects.

**CODE OF PRECAUTIONARY STATEMENTS:**

**General**

P101- Keep out of reach of children.

P103- Read label before use.

**Prevention Statements**

P202- Do not handle until all safety precautions have been read and understood.

P210- Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233- Keep container tightly closed.

P241- Use explosion proof electrical/ventilating/lighting/equipment.

P242- Use non-sparking tools.

P243- Take action to prevent static discharge.

P261- Avoid breathing dust/fume/gas/mist/vapor/spray.

P262- Do not get in eyes, on skin or on clothing.

P264- Wash thoroughly after handling using this product.

P270- Do not eat, drink, or smoke when using this product.

P271- Use only outdoors or in a well-ventilated area.

P273- Avoid release to the environment.

P280- Wear protective gloves/protective clothing/eye protection/face protection.

**Response Statements**

P301- P330- P331- IF SWALLOWED: Rinse mouth. Do Not induce vomiting.

P303- P353- P361- IF ON SKIN (or hair): take off immediately all contaminated clothing. Rinse skin with water/shower.

P304- P340- IF INHALED. Remove victim to fresh air and keep at rest in apposition comfortable and breathing.

P305- P338- P351- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310- Immediately call a Poison Center or doctor/ physician.

P363- Wash contaminated clothing before reuse.

P370- P378- In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

**Storage**

P235- P403- Keep cool and store in well-ventilated place.

P405-Store locked up.

**Disposal**

P501- Dispose of contents/container to an approved waste disposal plant.

**ROUTES OF ENTRY:** Eye contact, skin adsorption, ingestion and inhalation.

**CARCINOGENICITY:** None listed in IARC, OSHA or NTP.

**Section 3. Composition/Information on Ingredients**

Ingredients	CAS No.	EINECS No.	%
Hexamethyldisiloxane	107-46-0	203-492-7	< 100%

**Section 4. First Aid Measures**

**General Advice:** In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.

**Eye Contact:** Flush eyes with water immediately while holding eyelids open. Remove contacts, if worn, after initial flushing and continue flushing for at least 15 minutes. Seek medical attention if irritation persists.

**Skin Contact:** Use soap and water to remove from the skin, remove contaminated clothing, clean thoroughly before reuse. If irritation persists, contact a physician.

**Inhalation:** Move to fresh air. If not breathing, give rescue breathing. If breathing is difficult, give oxygen. Seek medical attention if breathing is still difficult.

**Ingestion:** If swallowed, get medical attention immediately. **DO NOT INDUCE VOMITING.** Never give anything by mouth to an unconscious person.

**Note to Physician:** Treat symptomatically and supportively.

**Section 5. Fire Fighting Measures**

**Flash Point:** 21°F (-6°C) Flammable liquid

**Flammability Limits:** LEL: 0.5% UEL: 21.8%

**Fire Fighting Media:** Do not use water jet. Alcohol-resistant foam, dry chemical or carbon dioxide.

**Special Fire Fighting Procedures:** In case of fire cool endangered containers with water. Hazardous fumes in fires, specific to the product are ammonia, alcohols, amines, nitrogen and silicon oxides. First responders need to wear full-bunker gear with Self Contained Breathing Apparatus (SCBA) never enter a confined space unless fully protected with proper personal protective equipment (PPE).

**Section 6. Accidental Release Measures**

Use personal protective equipment, see section 8.

**Clean-Up Procedures:** Stop the source of the release if you are not put at risk Remove sources of ignition. Vapor may travel to areas away from site, be aware of potential flash back. Use absorbent material (such as earth, diatomaceous earth, vermiculite) to absorb the spill, use non-sparking shovel to pick up absorbent for disposal. Assure sufficient ventilation, this material may accumulate dangerous levels of static electricity. The user must be sure to dissipate static charge by careful bonding or grounding of all equipment.

**Spills and Leaks:** Dispose in accordance to local, state or Federal regulations.

**Section 7. Handling and Storage**

**Handling:** Provide good ventilation. Wear personal protective equipment, see section 8. Keep away from heat, sparks, flames and other ignition sources. Do not get into eyes, on skin and on clothing. Do not breathe vapors or mists. Wash thoroughly after handling.

**Storage:** Store in original labeled container. Keep in cool and dry areas.

**Section 8. Exposure Controls/Personal Protection**

**Introductory Remarks:** Use a local exhaust ventilation or other engineering controls to minimize airborne exposure. A safety shower and eye wash should be readily available. Hexamethyldisiloxane permissible exposure limit (PEL) is 200 ppm.

**Personal Protection:**

**Eyes:** Wear safety goggles or face shield to prevent eye contact.

**Body:** Long sleeve shirts, long pants, socks, and rubber boots.

**Hands:** Antistatic Nitrile rubber gloves with 0.14 inches (0.35 mm) of thickness and break through time of > 480 minutes.

**Respiratory:** Wear an approved respirator that provides protection from this product if the airborne concentrations exceed the recommended exposure limits.

**Section 9. Physical and Chemical Properties**

<b>Physical State, Color, Odor</b>	Clear liquid with mild odor	<b>Vapor Pressure</b>	44 hPa @ 68°F (20°C)
<b>Auto Ignition Temperature</b>	644°F (340°C)	<b>Density(water=1)</b>	> 0.764 @ 68°F (20°C)
<b>Relative Density (Air=1)</b>	5.61	<b>Solubility</b>	Not soluble in water
<b>Freezing Point</b>	-24°F (-59°C)	<b>Boiling Point</b>	214°F (101°C)
<b>Flash Point</b>	21°F (-6°C)	<b>Viscosity, Dynamic</b>	0.65 cSt

**Section 10. Stability and Reactivity**

**Chemical Stability:** Considered stable under normal ambient temperatures.

**Hazardous Decomposition:** If complete combustion, on contact with water; alcohols, amines and ammonia., oxides of carbon and silicate are formed.

**Hazardous Polymerization:** Will not occur.

**Incompatibility- Materials to Avoid:** Acids and strong oxidant can cause exothermic reactions.

**Section 11. Toxicological Information**

**Toxicology: Acute Oral LD<sub>50</sub> (rat) = 5,000 mg/kg**

**Acute Dermal LD<sub>50</sub>(rabbit) = >2,000 mg/kg**

**Acute Inhalation LC<sub>50</sub>(rat) = 16 ml/L**

**Skin irritation:** No skin irritation in rabbits.

**Eye irritation:** No eye irritation in rabbits.

**Reproductive Toxicity:** No evidence of adverse effects on sexual function and fertility or on development, based on animal experiments.

**Carcinogenic Effects:** None listed in IARC, OSHA or NTP.

**Section 12. Ecological Information**

**Ecotoxicity: LC<sub>50</sub>(Rainbow trout) = 0.46 mg/L (96 hour)**

**EC<sub>50</sub>(Green algae) = 0.22 mg/L**

This is to aquatic organisms with long lasting effects.

**Environmental Fate:** This product not readily biodegradable.

**Section 13. Disposal Considerations**

**Waste Disposal Method:** Whatever cannot be saved for recovery or recycling should be managed by the local, state or Federal Regulations. **DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH AN ELECTRIC OR GAS TORCH.**

**Container Handling and Disposal:** All containers should be triple rinsed and disposed of according to local, state and Federal regulations.

**Section 14. Transport Information**

**Shipping Name:** ROYALSIL HI-PURITY HMDS

**Proper Shipping Description (Ground):**

UN1993, Flammable liquid, toxic, N.O.S., (Hexamethyldisiloxane), 3, II Marine Pollutant

**IATA: (Cargo aircraft only)**

UN1993, Flammable liquid, toxic, N.O.S., (Hexamethyldisiloxane), 3, II Marine Pollutant

**IMO (Water):**

UN1993, Flammable liquid, toxic, N.O.S., (Hexamethyldisiloxane), 3, II Marine Pollutant

**Section 15. Regulatory Information**



**EPCRA 311/312 Categories:** Immediate (Acute) Health Effects: Yes  
 Delayed (Chronic) Health Effects: Yes  
 Fire Hazard: Yes  
 Sudden Release of Pressure: No  
 Reactivity: Yes


**Right to Know Classification:** Ingredient is listed in the states of PA.

**TSCA:** Hexamethyldisiloxane is on the active inventory list.

**Reportable Quantity (RQ):** None.

**Prop. 65:** None

**WHMIS:**  Flammable and Combustible Material  Corrosive Materials

 **T** Materials Causing Other Serious Toxic Effects  
 These ingredients are listed in the DSL and NDSL list in Canada.

Product is listed as chemical inventories of Australia, European Economic Commission, Japan, Korea, New Zealand, Philippines, and United States of America.

**Abbreviations:**

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CAS #	Chemical Abstract Service Number		
°C	Celsius Temperature Scale	°F	Fahrenheit Temperature Scale
EINECS #	European Inventory of Existing Chemical Substances Number		
HPa	Hectopascal	LD <sub>50</sub>	Lethal Dose Oral or Dermal
LC <sub>50</sub>	Lethal Concentration	LEL	Lower Explosive Limit
UEL	Upper Explosive Limit	PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment	Prop.	Proprietary
Psi	Pounds Per Square Inch	NA	Not Applicable
ND	Not Determined	STEL	Short Term Exposure Limit
TLV	Threshold Limit Value	TSCA	Toxic Substance Control Act
TWA	Time Weighted Average		

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**Section 16. Other Information**

<b>Hazardous Material Information System</b>		<b>National Fire Protection Association</b>	
<b>HMIS</b>		<b>NFPA</b>	
1	Health	1	Health
4	Fire	4	Fire
1	Reactivity	1	Instability
	Personal Protection		NA

Health	4 Deadly	3 Extreme Danger	2 Dangerous	1 Slight hazard	0 No hazard
Fire	4 < 73 °C	3 < 100 °C	2 < 200 °C	1 >200 °C	0 Will not burn
Reactivity/ Instability	4 – May detonate	3 Explosive	2 Unstable	1 Normally stable	0 Stable

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This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200) this product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all information required by CPR.

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This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws related to the product being used.

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