

Safety Data Sheet HQM-105 Date of issue: 12/03/2014 Version: 1.0

| SECTION 1: Identification of the subst  | nce/mixture and of the company/unde  | rtaking     |                         |
|---|--|-------------|-------------------------|
|   | ince/mixture and or the company/unde   | anaking     |                         |
|   | Quite terrer   |             |                         |
| Product form  | Substance  |             |                         |
| Physical state :  |  |             |                         |
| Substance name  | HYDRIDE Q RESIN  |             |                         |
| Product code :  | HQM-105  |             |                         |
|   | HYDRIDE FUNCTIONAL SILOXANE; HYDRIDE F<br>HYDRIDE MODIFIED SILICA Q RESIN  | UNCTION     | IAL SILOXANE Q RESIN;   |
| Chemical family   | HYDRIDOSILOXANE  |             |                         |
| 1.2. Relevant identified uses of the substa   | ce or mixture and uses advised against   |             |                         |
| Use of the substance/mixture  | Chemical intermediate<br>For research and industrial use only  |             |                         |
| 1.3. Details of the supplier of the safety da   | a sheet  |             |                         |
| GELEST, INC.<br>11 East Steel Road<br>Morrisville, PA 19067<br>USA  |  |             |                         |
| T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM<br>info@gelest.com - www.gelest.com<br>1.4. Emergency telephone number | - 5:30 PM EST  |             |                         |
|   | CHEMTREC: 1-800-424-9300 (USA); +1 703-527-  | 3887 (Into  | rnational)              |
| Emergency number  | CHEMIREC. 1-800-424-9300 (USA), +1703-527-   | 5007 (Inter | national)               |
| SECTION 2: Hazards identification   |  |             |                         |
| 2.1. Classification of the substance or mix   | Ire  |             |                         |
| Classification (GHS-US)   |  |             |                         |
| Flam. Liq. 4 H227   |  |             |                         |
| Full text of H-phrases: see section 16  |  |             |                         |
|   |  |             |                         |
|   |  |             |                         |
| 2.2. Label elements   |  |             |                         |
| GHS-US labeling   |  |             |                         |
| Signal word (GHS-US) :  | Warning  |             |                         |
| Hazard statements (GHS-US)  | H227 - Combustible liquid  |             |                         |
| Precautionary statements (GHS-US)   | <ul> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection</li> <li>P210 - Keep away from heat, open flames, sparks No smoking</li> <li>P370+P378 - In case of fire: Use water spray or fog, foam, carbon dioxide, dry chemical to extinguish</li> <li>P403+P235 - Keep in a cool place</li> <li>P501 - Dispose of contents/container to licensed waste disposal facility.</li> </ul> |             |                         |
| 2.3. Other hazards  |  |             | ···· •                  |
| No additional information available   |  |             |                         |
| 2.4. Unknown acute toxicity (GHS-US)  |  |             |                         |
| No data available   |  |             |                         |
| SECTION 3: Composition/information  | on ingredients   |             |                         |
| 3.1. Substance  |  |             |                         |
| Substance type  | Mono-constituent   |             |                         |
| Name  |  |             |                         |
| CAS No  |  |             |                         |
|   |  |             |                         |
|   | 273-531-0  |             |                         |
| Name  | Product identifier   | %           | Classification (GHS-US) |
| Hydride Modified Silica Q Resin   | (CAS No) 68988-57-8  | > 95        | Not classified          |

### 3.2. Mixture

Not applicable

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| and the second second                        |  |
|--|--|
| 4.1. Description of first aid measures       |  |
| First-aid measures general                   | : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label. |
| First-aid measures after inhalation          | : Remove to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.   |
| First-aid measures after skin contact        | : Wash with plenty of soap and water.  |
| irst-aid measures after eye contact          | : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, present and easy to do. Continue rinsing. Get medical advice/attention.   |
| First-aid measures after ingestion           | : Never give anything by mouth to an unconscious person. Get medical advice/attention.   |
| I.2. Most important symptoms and eff         | ects, both acute and delayed   |
| Symptoms/injuries after inhalation           | : No information available.  |
| Symptoms/injuries after skin contact         | : May cause skin irritation.   |
| Symptoms/injuries after eye contact          | : May cause eye irritation.  |
| Symptoms/injuries after ingestion            | : No information available.  |
|  | al attention and special treatment needed  |
| No additional information available          | ar attention and special reatment needed   |
|  |  |
| SECTION 5: Firefighting measures             |  |
| 5.1. Extinguishing media                     |  |
| Suitable extinguishing media                 | : Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.  |
| Insuitable extinguishing media               | : None known.  |
| 5.2. Special hazards arising from the s      | ubstance or mixture  |
| ire hazard                                   | : Combustible liquid. Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.  |
| 5.3. Advice for firefighters                 |  |
| Firefighting instructions                    | : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.   |
| Protection during firefighting               | : Do not enter fire area without proper protective equipment, including respiratory protection.<br>Avoid all eye and skin contact and do not breathe vapor and mist.   |
| SECTION 6: Accidental release me             | asures   |
|  | equipment and emergency procedures   |
| General measures                             | : Remove ignition sources. Use special care to avoid static electric charges.  |
|  |  |
| 6.1.1. For non-emergency personnel           |  |
| Emergency procedures                         | : Evacuate unnecessary personnel.  |
| 6.1.2. For emergency responders              |  |
| Protective equipment                         | : Equip cleanup crew with proper protection.   |
|  |  |
| 5.2. Environmental precautions               | if u authorities if liquid actors accurs an public waters  |
| · ·  | ify authorities if liquid enters sewers or public waters.  |
| <b>5.3.</b> Methods and material for contain |  |
| lethods for cleaning up                      | : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal. Use only non-sparking tools.   |
| 6.4. Reference to other sections             |  |
| See Heading 8. Exposure controls and person  | al protection.   |
| SECTION 7: Handling and storage              |  |
| 7.1. Precautions for safe handling           |  |
| Precautions for safe handling                | : Avoid all eye and skin contact and do not breathe vapor and mist. Take precautionary   |
|  | measures against static discharge. Use only non-sparking tools. Vent carefully with appropriat grounding. Self-venting bungs are recommended for 5 gallon and 55 gallon containers.  |
| Hygiene measures                             | : Wash hands and other exposed areas with mild soap and water before eating, drinking or<br>smoking and when leaving work. Wash contaminated clothing before reuse.  |
|  |  |

| 7.2.  | Conditions for safe storage, including any incompatibilities |   |  |
|---|--|---|--|
| Technical measures : Ground/bond container and receiving equipment. |  |   |  |
| Storage   | e conditions   | : Keep container tightly closed. Product may build pressure on prolonged storage. |  |
| Incompatible materials  |  | : Alkalis. Metal salts. Oxidizing agent. Precious metals.                         |  |
|   |  |   |  |

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Storage area

7.3. Specific end use(s)

No additional information available

| <b>SECTION 8: Exposure control</b>  | s/personal protection  |
|-------------------------------------|--|
| 8.1. Control parameters             |  |
| No additional information available |  |
| 8.2. Exposure controls              |  |
| Appropriate engineering controls    | : Provide local exhaust or general room ventilation.   |
| Personal protective equipment       | : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. |
| Hand protection                     | : Neoprene or nitrile rubber gloves.   |
| Eye protection                      | : Chemical goggles. Contact lenses should not be worn.   |
| Skin and body protection            | : Wear suitable protective clothing.   |
| Respiratory protection              | : Where exposure through inhalation may occur from use, respiratory protection equipment is  |

: Store in a well-ventilated place. Store away from heat.

recommended. NIOSH-certified organic vapor (black cartridge) respirator.

### SECTION 9: Physical and chemical properties

| 9.1. Information on basic physical and chemical properties |                               |  |  |
|--|-------------------------------|--|--|
| Physical state   | : Liquid                      |  |  |
| Appearance   | : Clear liqui <mark>d.</mark> |  |  |
| Color  | : No data available           |  |  |
| Odor   | : No data available           |  |  |
| Odor threshold   | : No data available           |  |  |
| Refractive index   | : 1.41                        |  |  |
| рН   | : No data available           |  |  |
| Relative evaporation rate (butyl acetate=1)                | : No data available           |  |  |
| Melting point  | : <-60 °C                     |  |  |
| Freezing point   | : No data available           |  |  |
| Boiling point  | : > 205 °C                    |  |  |
| Flash point  | : 64 °C                       |  |  |
| Auto-ignition temperature                                  | : No data available           |  |  |
| Decomposition temperature                                  | : No data available           |  |  |
| Flammability (solid, gas)                                  | : Combustible liquid          |  |  |
| Vapor pressure   | : No data available           |  |  |
| Relative vapor density at 20 °C                            | : No data available           |  |  |
| Relative density   | : 0.94                        |  |  |
| VOC content  | : <5%                         |  |  |
| Solubility   | : Insoluble in water.         |  |  |
| Log Pow  | : No data available           |  |  |
| Log Kow  | : No data available           |  |  |
| Viscosity, kinematic                                       | : 3 - 5 cSt                   |  |  |
| Viscosity, dynamic   | : No data available           |  |  |
| Explosive properties                                       | : No data available           |  |  |
| Oxidizing properties                                       | : No data available           |  |  |
| Explosive limits   | : No data available           |  |  |
|  |                               |  |  |

9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable in sealed containers stored under a dry inert atmosphere.

#### 10.3. Possibility of hazardous reactions

The product can generate small amounts of hydrogen when exposed to alkalis and protic materials such as water and alcohol in combination with metal salts such as aluminum chloride or precious metals such as platinum.

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| 10.4. Conditions to avoid  |  |
|--|--|
| Heat. Open flame. Sparks.  |  |
| 10.5. Incompatible materials   |  |
| Alkalis. Metal salts. Oxidizing agent. Precious m                          | etals.   |
| 10.6. Hazardous decomposition products                                     | 5  |
| Hydrogen. Organic acid vapors. Silicon dioxide.                            |  |
| <b>SECTION 11: Toxicological informat</b>                                  | tion   |
| 11.1. Information on toxicological effects                                 |  |
| Acute toxicity   | : Not classified   |
| Skin corrosion/irritation  | : Not classified   |
| Serious eye damage/irritation  | : Not classified   |
| Respiratory or skin sensitization  | : Not classified   |
| Germ cell mutagenicity   | : Not classified   |
| Carcinogenicity  | : Not classified   |
| Reproductive toxicity  | : Not classified   |
| Specific target organ toxicity (single exposure)                           | : Not classified   |
| Specific target organ toxicity (repeated                                   | : Not classified   |
| exposure)  |  |
| Aspiration hazard  | : Not classified   |
| Symptoms/injuries after inhalation<br>Symptoms/injuries after skin contact | : No information available.<br>: May cause skin irritation.                                      |
| Symptoms/injuries after eye contact  | : May cause eye irritation.  |
| Symptoms/injuries after ingestion  | : No information available.  |
|  |  |
| SECTION 12: Ecological information   |  |
| 12.1. Toxicity   |  |
| No additional information available  |  |
| 12.2. Persistence and degradability  |  |
| No additional information available  |  |
| 12.3. Bioaccumulative potential  |  |
| No additional information available  |  |
| 12.4. Mobility in soil   |  |
| No additional information available  |  |
| 12.5. Other adverse effects  |  |
| Effect on ozone layer  | : No additional information available  |
| Effect on the global warming   | : No known ecological damage caused by this product.   |
| SECTION 12: Disposal consideration   |  |
| SECTION 13: Disposal consideration<br>13.1. Waste treatment methods        |  |
| Waste disposal recommendations   | : Incinerate. Dispose in a safe manner in accordance with local/national regulations. Dispose of |
| waste disposal recommendations   | contents/container to licensed waste disposal facility.  |
| Ecology - waste materials  | : Avoid release to the environment.  |
| SECTION 14: Transport information  |  |
| 14.1. UN number  |  |
| Not regulated for transport.   |  |
| 14.2. UN proper shipping name  |  |
| Not applicable   |  |
| 14.3. Additional information   |  |
| Other information  | : No supplementary information available.  |
|  |  |
| Transport by sea   |  |
| No additional information available  |  |
| Air transport  |  |
| No additional information available  |  |
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### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

#### Hydride Modified Silica Q Resin (68988-57-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

#### Hydride Modified Silica Q Resin (68988-57-8)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian DSL (Domestic Sustances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

- Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

#### 15.3. US State regulations

| HYDRIDE Q RESIN(68988-57-8)   |  |   |   |                                      |  |
|---|--|---|---|--------------------------------------|--|
| U.S California - Proposition 65 - Carcinogens List                  |  | No  |   |                                      |  |
| U.S California - Proposition 65 - Developmental<br>Toxicity         |  | No  |   |                                      |  |
| U.S California - Proposition 65 - Reproductive<br>Toxicity - Female |  | No  |   |                                      |  |
| U.S California - Proposition 65 - Reproductive<br>Toxicity - Male   |  | No  |   |                                      |  |
| Hydride Modified Silica Q Resin (68988-57-8)                        |  |   |   |                                      |  |
| U.S California -<br>Proposition 65 -<br>Carcinogens List            | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Female | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Male | No significance risk level<br>(NSRL) |  |
| No  | No   | No  | No  |                                      |  |
|   |  |   |   |                                      |  |

#### **SECTION 16: Other information**

Abbreviations and acronyms

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

| Full text of H-phrases:: |              |                              |  |
|--------------------------|--------------|------------------------------|--|
|                          | Flam. Liq. 4 | Flammable liquids Category 4 |  |
|                          | H227         | Combustible liquid           |  |

#### **HMIS III Rating**

: 1 Slight Hazard - Irritation or minor reversible injury possible

Health Flammability : 2 Moderate Hazard Physical : 1 Slight Hazard

#### Prepared by safety and environmental affairs.

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SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Safety Data Sheet

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