Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION Product name: Tetrakis (trimethylsiloxy) silane Product Number:3555-47-3 Brand Company:DALIAN HEFU TRADING CO., LTD. Telephone:+86-0411-39552835 Fax:+86-395266880 Emergency Phone #:86-0411-39552835 2. HAZARDS IDENTIFICATION **Emergency Overview** OSHA Hazard. Combustible Liquid Tetrakis(trimethylsilyloxy)silane 454516 GHS Label elemente, including precautionary .tatemants Pictogram Signal word Warning Hazard statement(s) H227 Combustible liquid H315 Causes skin initation. H319 Causes serious eye irritation. Haa5 May cause respiratory irritation. Precautionary statement(s) P261 Avoid breathing dust! fumel gas! mist! vapoursJ spray. Version 4.0 Revision Date 0712712010 Pr1nt Date 09103/2010 paDS + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **HMIS Classification** Health hazard: 0 Flammability: 2 Ph)'liical hazant.: 0 NFPA Rating Health hllZ8.rd: 0 Fire: 2 Reactivity Hazard: 0 Potential Health Effects Inhalation Skin Eye. Ingestion May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation. May be harmful If swallowed. 3. COMPOSITION/INFORMATION ON INGREDIENTS Aldrich - 454616 Page 1 of 6 Formula Molecular Weight CAS-No. C12H3604Si5 384.84 g/mol 1 EC-No. 1 Index-No.

1,I,5,5,5-Hexamethyl-3,3-bis[(trimethylsilyl)oxy]trisiloxane 3555-47-3 1222-613-4 1 -4. FIRST AID MEASURES General advice 1 Concentration 1 -Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Consult a physician. In case of eve contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 5. FIRE-FIGHTING MEASURES Suitable extinguishing media For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water. Special protective equipment for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary. Further information Use water spray to cool unopened containers. 6. ACCIDENTAL RELEASE MEASURES Personal precautions Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumUlate in low areas. Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Methods and materials for containment and cleaning up Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. 7. HANDLING AND STORAGE Precautions for safe handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Conditions for safe storage Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Aldrich - 454516 Page2 of 6 8. EXPOSURE CONTROLS/PERSONAL PROTECTION Contains no substances with occupational exposure limit values. Personal protective equipment Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose

combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Hand protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Eye protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin and body protection impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 9. PHYSICAL AND CHEMICAL PROPERTIES Appearance Form liquid Colour colourless Safety data pH no data available Melting point no data available Boiling point 103 - 106°C (217 - 223 OF) at 3 hPa (2 mmHg) - lit. Flash point 76°C (169 OF) - closed cup Ignition temperature no data available Lower explosion limit no data available Upper explosion limit no data available Density 0.87 g/cm3 at 25°C (77 OF) Water solubility no data available **10. STABILITY AND REACTIVITY** Chemical stability Stable under recommended storage conditions. Conditions to avoid Heat, flames and sparks. Materials to avoid Strong oxidizing agentsStrong oxidizing agents Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides, silicon oxides Aldrich - 454516 Page3 of 6 **11. TOXICOLOGICAL INFORMATION** Acute toxicity no data available Skin corrosion/irritation no data available 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 probable. possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1 % is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1 % is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1 % is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity no data available Specific target organ toxicity single exposure (Globally Harmonized System) Inhalation · May cause respiratory irritation. Specific target organ toxicity repeated exposure (Globally Harmonized System) no data available Aspiration hazard no data available Potential health effects Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. Signs and Symptoms of Exposure To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Additional Information **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 A1drich 454516 Page4 of 6 Other adverse effects no data available 13. DISPOSAL CONSIDERATIONS Product This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging Dispose of as unused product. **14. TRANSPORT INFORMATION** DOT (US) Not dangerous goods IMDG Not dangerous goods IATA Not dangerous goods **15. REGULATORY INFORMATION OSHA Hazards** Combustible Liquid

DSLStatus All components of this product are on the Canadian DSL lisl. SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. SARA 311/312 Hazards Fire Hazard Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act. Pennsylvania Right To Know Components I,I,5,5,5-Hexamethyl-3,3-bis[(trimethylsilyl)oxyltrisiloxane New Jersey Right To Know Components I,I,5,5,5-Hexamethyl-3,3-bis[(trimethylsilyl)oxyltrisiloxane California Prop. 65 Components CAS-No. 3555-47-3 CAS-No. 3555-47-3 **Revision Date Revision Date** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. **16. OTHER INFORMATION** Further infonnation Copyright 2010 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. A1drich 454516 Page5 of 6 Aldrich - 454516 Page6 of 6