SORBTECH
SORBENT TECHNOLOGIES

5955 Peachtree Corners E Suite A Norcross, GA 30071
USA
1.866 SORBTECH | T 770.936.0323 | F 770.936.0326
www.sorbtech.com | info@sorbtech.com

SDS
Safety Data Sheet

Form #: STI-049 Date: revision 005 08/04/2020

Section 1. PRODUCT IDENTIFICATION

Product Identifiers
Product Name: Silica gel on TLC plates
CAS number: 63231-67-4
Product Part Numbers: 0234026,1615026, 1615037, 1615048, 1615067, 1615069, 1615126, 1615137, 1615137PS, 1615148, 1615156, 1615167, 1615169, 1615190, 1615198, 16151A8, 1615226, 1615237, 1615248, 1616025, 1616125, 1617024,1618023, 1618123, 1624016, 1624026, 1624047, 1624087, 1624099, 16240B8, 16240BA, 1624116,1624126, 1624147, 1624187, 1624199, 16241AR, 1634026, 1634035, 1634047, 1634067, 1634099, 16340C5, 1634126,1634135, 1634147, 1634167, 1634187, 1634199, 1715026, 1715126, 1824026, 1824047, 1824126, 1824147, 1824199, 1904037, 1914056, 1914078, 1914137, 1914156, 1914178, 2011132, 2012136, 2115026, 2115037, 2115048, 2115067, 2115126, 2115137, 2115148, 2115167, 2115169, 2214037, 2214056, 2214058, 2214137, 2214156, 2214158, 2315026, 2315037, 2315126, 2315137, 2414056, 2414156, 2514056, 2514126, 2514156, 2514197C, 2612126, 2612156, 2614056, 2614156, 2633156, 2715126, 2715137, 2715147, 2715156, 2717124, 2733126, 2733147, 2733156, 2733167, 2733187, 2815126, 2815137, 2815156, 2835126, 2835187, 2914136, 2914156, 2933126, 2933187, 3014036, 3014056, 3014136, 3014156, 3014197, 3033126, 3033187, 3114126, 3114136, 3114156, 3133126, 3133187, 3215026, 3314037, 3314056, 3415126, 3415131, 3415136, 3415147, 3415156, 3715126, 3815126, 3815137, 4034026, 4034047, 4034126, 4034147, 4115026, 4115037, 4115056, 4115067, 4115126, 4115126PS, 4115137, 4115137PS, 4115148, 4115156, 4115167, 4115169, 4115190, 4115198, 4214037, 4214056, 4214078, 4214137, 4214156, 4214178, 4434026, 4434047, 4434067, 44340C5, 4434126, 4434135, 4434147, 4434167, 4434187, 44341C5, 4434199, 4534056, 4534156, 4634026, 4634035, 4634126, 4634135
Synonyms: Thin Layer Chromatography plate
Recommended use: Chromatography.
Uses advised against: None known.
Details of the Supplier of the Safety Data Sheet:
Company: Sorbent Technologies
5955 Peachtree Corners East
Norcross, GA 30071 USA
Emergency Telephone Number: 1-866-767-2832

Section 2. HAZARD IDENTIFICATION

United States: According OSHA 29 CFR 1910.1200 HCS

GHS Classification of the Substance or Mixture including Precautionary Statements:
Not a hazardous substance or mixture
GHS Label Elements: Not a hazardous substance or mixture.
Hazard symbol: None
Signal Word: None
Precautionary Statement:
Prevention: Wash thoroughly after handling -P264. Wear eye protection/face protection –P280.
Response: IF IN EYES –P305: Rinse cautiously with water for serval for serval minutes –P351. Remove contact lenses if present and easy to do - continue rinsing –P338. If eye irritation persists: Get medical advice/attention –P337.
Storage: Store in a well-ventilated place –P403.
Disposal: Dispose of waste and residues in accordance with local authority requirements.-P501

Other Hazards Not Otherwise Classified (HNOC): None known.
Supplemental information: None
Hazard statement: The mixture does not meet the criteria for classification.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization:

Ingredient	CAS No.	EC No.	%
Silica Gel (SiO_2)	63231-67-4	231-545-4	99.5—100

Synonyms: Silica gel on TLC plate.
Composition comments: Substrates coated with silica, amorphous, with or without Fluorescent indicator.

Section 4. FIRST AID MEASURES

Description of First Aid Measures:
Skin: Wash material off skin with soap and water. Seek medical attention if irritation occurs.
Eyes: Flush with copious amounts of water for 15 minutes. Seek medical attention if irritation occurs.
Ingestion: Give one or two glasses of water to drink. Seek medical attention if gastrointestinal symptoms develop.
Inhalation: Remove to fresh air. Seek medical attention if cough or respiratory symptoms develop.

Most Important Symptoms and Effects, both acute and delayed:
No information available.

Indication of any immediate medical attention and special treatment needed:
Notes to Physician: Treat symptomatically.

General Information:
If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the materials involved, and take precautions to protect themselves.

Section 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: This product is not combustible, use extinguish agents for surrounding fire. Water fog. Foam. Dry chemicals. Carbon dioxide (CO2).

Unsuitable Extinguishing Media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific Hazards arising from the chemical: During fire, gases hazardous to health may be formed.
Flammability Limits in Air: LFL and UFL Not Applicable.
Auto-ignition temperature: Not available

Protective Equipment and precautions for firefighters:
Fire Fighting Equipment: Fire fighting personnel should wear full protective equipment, including self-contained breathing apparatus (SCBA) for all inside fires and large outdoor fires.

Protection of fire-fighters:
Fire Fighting Instructions: Cool product exposed to heat with water spray and remove container from the area if you can do so with risk. Isolate large fires and allow to burn out. Extinguish fire using water fog, fine water spray, carbon dioxide or foam.

General fire hazards: This product is not flammable.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Keep unnecessary personnel away. Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental Precautions:

No special environmental precautions required. Do not let product enter drains.

Methods for Containment:

Stop the flow of material, if this is without risk.

Methods for Clean-up:

If a Spill or Leak Occurs: Ventilate the contaminated area. Clean up spills in a manner that does not disperse dust into the air. Handle in accordance with industrial hygiene and safety practices. These practices include avoiding unnecessary exposure, and removal from eyes, skin, and clothing. Prevent product from entering drains.

Disposal Method: Sweep up or vacuum up and shovel into suitable contains for disposal. Dispose in a facility for non-hazardous wastes. Spent should be disposed of in accordance with State and Federal laws.

Container Disposal: Do not reuse empty bags or boxes. Dispose of used bags in facility permitted for non-hazardous wastes.

Section 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Avoid prolonged contact with eyes and skin. Do not breath dust. Use in well ventilated areas. Protect containers from physical damage. Wash hands after handling. Avoid release to the environment.

Conditions for Safe Storage, Including any Incompatibilities

Storage: Store in cool, dry, ventilated area and in closed containers. Store above freezing. Keep away from oxidizers, sunlight, heat or flames.

TRGS 510): Non-combustible Solids

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region regulatory bodies.

Component	OSHA PEL	ACGIH TLV	NIOSHI DLH
Silica gel (63231-67-4)	80 mg/m3	TWA 6 mg/m3 respirable 10 mg/m3 inhalable (silica, amorphous withdrawn in 2006)	

Component	Canada Quebec	Canada Ontario TWAEV	Mexico OEL (TWA)
Silica gel (63231-67-4)	TWA: 6 mg/m3	TWA: 10 mg/m3	TWA: 10 mg/m3

ACGIH is the American Conference of Governmental Industrial Hygienists
OSHA is the Occupational Safety and Health Administration
NIOSH is the National Institute of Occupational Safety and Health
PEL is the Permissible Exposure Limits established by OSHA.
TLV is the Threshold Limit Value a term ACGIH uses to express the maximum airborne concentration of a material to which most workers can be exposed during a normal daily and weekly work schedule without adverse effects.
MSHA is the Mine Safety and Health Administration

Exposure Controls:

Engineering Controls: Use local exhaust to control emissions near the source. Ventilation systems should be configured to prevent exceeding the recommended or regulated exposure limits (i.e. OSHA PELs).
Eye Protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Safety glasses with side shields are recommended for any type of handling. Where eye contact or dusty conditions may likely, dust tight goggles are recommended. Have eye washing equipment available.
Skin 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. Avoid skin contact with this product. Wear appropriate dust resistant clothing. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.
Full contact material: Nitrile rubber of minimum layer thickness 0.11 mm and break through time 480 minutes.
Body protection: Choose protection in relation to its type, to the concentration and the amount of any dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and of the amount of any dangerous substances at the specific workplace.
Respiratory Protection: Follow the OSHA respiratory regulations found in 29 CFR 1910.134 or European Standard EN149. Keep dust exposure to a minimum with engineering and administrative controls.
Use appropriate NIOSH/MSHA approved particulate respirators if necessary. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Use type N95 (US) or type P1 (EN 143) dust masks for nuisance levels of dust.

General Industrial Hygiene Considerations:

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.

Environmental Exposure Controls:

No special environmental precautions required.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties:

Appearance:	Solid
Physical State:	Solid.
Color:	White solid.
Form:	Solid.
Odor:	Odorless.
Odor Threshold:	No available.
pH:	3—9 (in 5% slurry in water)
Melting Point/Range:	Not available.
Boiling Point/Range:	Not available.
Flash Point:	Not available.
Evaporation Rate:	Not available.
Flammability (solid, gas);	Not flammable.
Flammability or Explosive Limits	
Upper:	Not available.
Lower:	Not available.
Vapor Pressure:	Not applicable.
Vapor Density:	Not available.
Relative Density:	2.20 at 25 deg. C (water =1).
Solubility (water):	Insoluble.
Solubility (solvents):	Insoluble .
Partition Coefficient; n-octanol/water: Not data available.	
Autoignition Temperature:	No data available.
Decomposition Temperature:	Not available.
Viscosity:	Not available.
Bulk density:	Not available.
Explosive properties:	Not explosive.
Oxidizing properties:	Not oxidizing.

Other Safety Information: No data available.

Section 10. STABILITY AND REACTIVITY

Reactivity:
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability:
This product is stable under normal conditions of storage, shipment and use.

Possibility of Hazardous Reactions:
No dangerous reaction known under conditions of normal use.

Conditions to Avoid:
Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.

Incompatible Materials
Contact with strong acids, hydrogen peroxide.

Hazardous Decomposition Products
Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

Section 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects
Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Silicon dioxide	>5000 mg/kg (rat) IUCLID (2000)	>5000 mg/kg (rabbit)	>0.139 mg/l/4h IUCLID (2000)

Toxicologically Synergistic Products**:** No information available
Delayed and Immediate Effects as well as Chronic Effects from Short and Long Term Exposure
Irritation: Rabbit not irritating. IUCLID (2000)
Sensitization: Over 10 years exposure, worker did not have any skin sensitization.
Carcinogenicity Table below indicates if each agency has listed any ingredient as a Carcinogen.

Component	CAS-No.	IARC	NTP	ACGIH	OSHA	Mexico
Amorphous silica gel	63231-67-4	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects: Animal testing did not show any mutagenic effects.

Reproductive Effects: Animal testing did not show any hazardous effects.

Developmental Effects: No information available.

Teratogenicity: No information available.

Specific Target Organ Toxicity (STOT)-single exposure: None known.
Specific Target Organ Toxicity (STOT)-repeated exposure: None known.

Aspiration: No information available

Symptoms / Effects, Both Acute and Delayed: No information available.

Endocrine Disruptor Information: No information available.

Other Adverse Effects: The toxicological properties have not been fully investigated.

Section 12. ECOLOGICAL INFORMATION

Toxicity
No toxicity limit of solubility. Do not empty into drains.

Ingredient	Test	Result	Species	Exposure
Amorphous silica	LC50/96h/fish	>10000 mg/l	Fish	96h
Amorphous silica	EC50/24h/daphnia	=1000 mg/l	Daphnia magna	24h
Amorphous silica	EC50/72h/algae	>10000 mg/l	Algae	72h

Persistence/ Degradability
No information available.
Bioaccumulation Potential
Does not bioaccumulate. Accumulation in aquatic organisms is unlikely. Accumulation in terrestrial organisms is unlikely.
Mobility in Soil
No information available.
Other Adverse Effects
No information available

Section 13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods
Disposal methods: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Waste from Residues: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated Packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Local regulations may be more stringent than state or federal requirements.

Section 14. TRANSPORTATION INFORMATION

Land:	**DOT (US)**:	Not regulated as dangerous goods
	ADR/RID (EU):	Not regulated as dangerous goods
	TDG (Canada):	Not regulated as dangerous goods
Water:	**IMO/IMDG**:	Not regulated as dangerous goods
Air:	**IACO/IATA**:	Not regulated as dangerous goods

Transportation in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable
Special Precautions for User
No information available

Section 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/ Legislation Specific for the Substance or Mixture
International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Amorphous silica	X	X	-	235-545-4	-		X	X	X	X	X

X indicates listed

U.S. Federal Regulations

TSCA**:** CAS#63231-67-4 is listed on the TSCA inventory
CERCLA Hazardous Substances and Corresponding RQs: None of the chemicals in this material have an RQ.
SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.

SARA Codes: CAS#63231-67-4

SARA 311/312 Hazardous Categorization:

Acute Health Hazard:	No
Chronic Health Hazard:	No
Fire Hazard:	No
Sudden Release of Pressure:	No
Reactive Hazard:	No

SARA Section 313: No chemicals in this product are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants, Class 1 Ozone depletors or Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances, Priority Pollutants or Toxic Pollutants under the CWA.

OSHA: Not applicable

CERCLA: Not applicable

U.S. Department of Transportation (DOT)

Reportable Quantity (RQ):	No
DOT Marine Pollutant:	No
DOT severe Marine Pollutant:	No

U.S. Department of Homeland Security (DHS)

This product does not contain any DHS chemicals.

States Right-to-Know

Amorphous silica CAS#63231-67-4

California Prop 65: Not listed. This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts: Listed.

New Jersey Right to Know: Listed SN 1655

Pennsylvania: Listed.

Florida: Listed

Rhode Island: Not listed

Illinois: Not listed

Connecticut - Hazardous Air pollutants: Not listed

Section 16. OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to these products or handling of these products. Customers/users must comply with all applicable health and safety laws, regulations, and orders

SDS REVISION SUMMARY: revision 005 dated 08/04/2020
replaces revision 004 dated 06/19/2019.

This document has been updated to comply with the U.S. OSHA HazCom 2012 Standard replacing the current Legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)