



SAFETY DATA SHEET

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 PRODUCT RELATED HEALTH DATA SHEET

1. IDENTIFICATION

1.1 Product identifier

Product Name : Premium Desiccant
Product Code : Part No. 130504 &DAD-1
Product Description : Desiccant – Air Dryer
SDS # : SDS-1 REVISION #: 3.0.4
CHEMICAL FORMULA: Silica Gel Beads (SiO₂ . nH₂O)
CAS NUMBER : 7631-86-9.
Article Code : Not Applicable.
GENERAL USE : Premium Silica Gel Bead Desiccant for water removal from compressed air.
DATE REVISED: 12/12/2021 **DATE PREPARED**: 05/04/2018

1.2 Relevant identified uses of the substance or mixture and uses advised against
 Not applicable.

1.3 Details of the supplier of the safety data sheet

Carlisle Fluid Technologies, Inc.
16430 North Scottsdale Road
Scottsdale, AZ 85254

Technical service number 1-888-992-4657

Technical service EuropeTel: +44 (0)1202 571 111

Emergency telephone number

Emergency Number - INFOTRAC
EMERGENCY PHONE (24 HOURS):
 1-800-535-5053

The National Chemical Emergency Centre (NCEC)
 Deutsche hotline - 0800 7238996 (Kostenfrei innerhalb Deutschlands)
 oder +44 (0)1235 753 148

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product definition : Silica Gel Beads.

The product is not classified as dangerous according to OSHA 29 CFR 1910.1200 - GHS

Classification : Not a hazardous substance or mixture.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms : No pictogram.
Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Hazardous ingredients : None known.
Supplemental label elements : Silica Gel.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.
Tactile warning of danger : Not applicable.



2.3 Other hazards

Other hazards which do not result in classification

Properties affecting health

Principle routes of exposure

- : Skin, eye, inhalation, ingestion.
- Skin contact** : Dust may cause a mechanical irritation. No adverse effects expected.
- Eye contact** : Route of exposure unlikely. Dust may cause a mechanical irritation which can scratch the eye.
- Inhalation** : No health effects expected with normal use of product.
- Ingestion** : Non-toxic by ingestion. Keep away from children and pets.

Chronic Effects: not applicable

Medical Conditions Aggravated by Long-Term Exposure: asthma, allergies

Target Organs: skin and eyes

Signs and Symptoms: Adverse allergic reactions to dust may result in, but are not limited to, redness and irritation of the eyes and skin. If such a reaction occurs, seek medical attention.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	% BY WT.	CAS-No
Silica Gel (SiO ₂)	25 - 99	7631-86-9

4. FIRST AID MEASURES

4.1 Description of first aid measures

- EYE CONTACT** : Do not rub eyes. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
- INHALATION** : Move individual to fresh air. If breathing is difficult, get medical attention.
- SKIN CONTACT** : Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
- INGESTION** : Give several glasses of water to drink to dilute. Do not induce vomiting. If large amounts are ingested, get medical advice.

Protection of first-aiders : No known significant effects or critical hazards.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact** : Route of exposure unlikely. Dust may cause a mechanical irritation which can scratch the eye.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Non-toxic by ingestion.

Over-exposure signs/symptoms

- Eye contact** : Dust may cause mechanical irritation.
- Inhalation** : Dust is irritating to the respiratory tract.
- Skin contact** : Prolonged or repeated skin contact may cause irritation.
- Ingestion** : May cause irritation of the digestive tract.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat Symptomatically.
- Specific treatments** : No specific treatment.

5. FIRE FIGHTING MEASURES

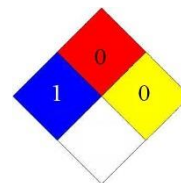
5.1 Extinguishing media

- Suitable extinguishing media** : This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

PRODUCT NAME: Premium Desiccant SDS#: SDS-1

- Flammability class** : Not Applicable.
- Fire retardant method** : Use fire-extinguishing media appropriate for surrounding materials.
- Flash Point** : Not Applicable.
- Autoignition Temperature** : Not Applicable.
- Sensitivity to Static Discharge** : None.
- Hazards from the substance or mixture** : None.
- Unusual Fire and Explosion Hazards** : Not Determined.
- Hazardous combustion products** : None under normal conditions.
- Note** : None.



- 5.3 Advice for firefighters**
- Special precautions for fire-fighters** : None.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

HMIS RATING: See Section 15.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information regarding personal protective equipment in Section 8.

6.2 Environmental precautions : As with all materials, keep out of drains, sewers, ditches and waterways.

6.3 Methods and materials for containment and cleaning up

- Small spill** : Contain spillage. Scoop or vacuum into a container for reclamation or disposal, avoid breathing dust.
- Large spill** : Vacuuming or wet sweeping may be used to avoid dust. Note: see section 13 for waste disposal.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures : There is little or no health hazards associated with intact packaged desiccant. Do not cut, open or remove desiccant fill from package.
(see Section 8 for additional information)

Advice on general occupational hygiene : Use of proper hygiene practices in the workplace is recommended. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

7.2 Conditions for safe storage, including any incompatibilities : Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients

Silica Gel (SiO₂)

Exposure Limits

OSHA-PEL: 80 mg/m/%SiO₂³ TWA: 20 mppcf

NIOSH REL: TWA- 6 mg/m³ IDLH: 3,000 mg/m³

8.2 Exposure controls

Appropriate engineering controls : Good ventilation should be sufficient to control airborne levels.

Personal Protection Equipment

Eye Protection : Safety glasses should be worn.

Skin Protection : Gloves recommended.

Respiratory Protection : Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Other protective clothing: Wear appropriate clothing to prevent any possibility of skin contact.

Hygienic Practices : Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- Physical state** : Solid.
- Color** : White.
- Odor** : None.
- Appearance** : Semi-transparent beads.
- pH** : 3.0 - 8.0 (in 5% slurry)
- Melting point/freezing point** : 1,710°C (3,110.00°F).
- Initial boiling point and boiling range** : 2,230°C (4,046.00°F).
- Flash point** : Not available.
- Flammability (solid, gas)** : Not available.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Upper/lower flammability or explosive limits** : Not available.
- Vapor pressure** : Not available.
- Density (water=1)** : 2.1.
- Solubility in Water** : Insoluble.
- Partition coefficient:** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Explosive properties** : Not available.
- VOC** : None.
- Oxidizing properties** : Not available.

9.2 Other information

No additional information.

10. STABILITY AND REACTIVITY

- 10.1 Reactivity** : No data available.
- 10.2 Chemical stability** : Stable under normal storage conditions.
- 10.3 Possibility of hazardous reactions** : No dangerous reaction known under conditions of normal use.
- 10.4 Conditions to avoid** : Moisture.
- 10.5 Incompatible materials** : None known.
- 10.6 Hazardous decomposition products** : No data available.

11. TOXICOLOGICAL INFORMATION

11.1 Acutetoxicity

Effects of Acute Exposure (LD50 oral and LC50) : Not available.

11.2 Acute toxicity estimates

Conclusion/Summary : Silica Gels are very low in oral toxicity based on comparison to related forms of silica. No adverse effects have been observed in experimental animals following ingestion of any form of amorphous silica.
Toxic Dose 1 - LD 50 >10,000 mg/kg (oral rat)

11.3 Irritation/Corrosion

Conclusion/Summary : No special risk under normal use. Dusts of particulates may cause minor abrasion. May cause dryness.

11.4 Sensitizer

Conclusion/Summary : Not available.

11.5 Mutagenicity

Conclusion/Summary : Not available.

11.6 Carcinogenicity

Conclusion/Summary : IARC: 3 - Group 3 - Not classifiable as to its carcinogenicity to humans (Silica-Amorphous, precipitated).

11.7 Reproductive toxicity

Conclusion/Summary : Not available.

11.8 Teratogenicity

Conclusion/Summary : Not available.

11.9 Specific target organ toxicity (single exposure)

Not hazardous.

11.10 Specific target organ toxicity (repeated exposure)

Conclusion/Summary : No specific health warnings noted. No specific acute or chronic health impact noted, but this chemical may still have adverse impact on human health, either in general or on certain individuals with pre-existing or latent health problems.

11.11 Aspiration hazard

Conclusion/Summary : Not hazardous.

11.12 Information on the likely routes of exposure : Not hazardous.

11.13 Potential acute health effects

- Inhalation** : No special risk under normal use. Inhalation of airborne particulate may lead to Mechanical irritation of the respiratory tract and mucous membranes.
- Ingestion** : May result in irritation of the digestive tract.
- Skin contact** : Not applicable for product in purchased form. Adverse allergic reactions may result in, but are not limited to, redness and irritation.
- Eye contact** : No special risk under normal use. Dusts of particulates may cause mechanical irritation, possibly including pain, tearing, and redness. Scratching of the cornea can occur if eye is rubbed.

11.4 Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin contact** : No specific data.
- Eye contact** : No specific data.

11.15 Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not hazardous.
Potential delayed effects : Not hazardous.

11.16 Potential chronic health effects

Effects of Chronic Exposure : Not hazardous.
General : No known significant effects or critical hazards.

PRODUCT NAME: Premium Desiccant SDS#: SDS-1
 Carcinogenicity (IARC, ACGIH, : None
 OSHA)



Mutagenicity : Not hazardous.
 Teratogenicity : Not hazardous.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.
 11.17 Other information : Not available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Aquatic
Conclusion/Summary : Not considered toxic to fish.

12.2 Persistence
Conclusion/Summary : Not available.

12.3 Bioaccumulation/Accumulation
Conclusion/Summary : Not available.

12.4 Mobility/Persistence in soil
Conclusion/Summary : The product is water soluble and may spread in water systems.

12.5 Degradability/Leaching
Conclusion/Summary : There are no data on the degradability of this product.

12.6 Environmental Fate
Conclusion/Summary : Silica Gel is not biodegradable.

12.7 Results of PBT and vPvB assessment : This product does not contain any PBT or vPvB substances.

12.8 Other adverse effects : No known ecological hazards are associated with this product.

13. DISPOSAL CONSIDERATIONS

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods
Methods of disposal : Dispose of according to local, state and federal regulations.
Hazardous waste : Refer to federal, state and local requirements for disposal (OSHA 1910.107, NFPA 33, 40CFR63 parts 260-262, state AQMD and WQMD, local Waste Management Authority).

13.2 Packaging
Methods of disposal : Empty packaging may be discarded as non-hazardous material.

13.3 Special precautions : None known.

14. TRANSPORT INFORMATION

	<u>US DOT</u>	<u>ADR/RID</u>	<u>IMDG</u>	<u>IATA</u>	<u>CAN TDG</u>
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	None.	None.	None.	None.	None.
14.3 Transport hazard class(s)	Not restricted.	Not restricted.	Not restricted.	Not restricted.	Not restricted.
14.4 Packing group	None.	None.	None.	None.	None.
14.5 Environmental hazards	No.	No.	No.	No.	No.
14.6 Special precautions for user	Not available.	Not available.	Not available.	Not available.	Not available.
Additional information	None.	None.	None.	None.	None.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.	Not available.	Not available.	Not available.	Not available.



15. REGULATORY INFORMATION

15.1 Federal Regulations

Global Inventories: All ingredients are on DSL/NDSL and TSCA inventories.

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all information required by the CPR.

WHMIS Classification: exempt

NSNR/NPRI: no reportable substances

United States of America: SDS prepared pursuant to the Hazard Communication Standard (29CFR1910.1200).

EPA Hazardous Waste Number and Classification (40CFR261.22): none required

Toxic Substances Control Act (TSCA): This product is either listed on or compliant with the TSCA Inventory.

EPA SARA Title III/CERCLA: Product is not reportable under Sections 311/312 hazard categories and contains no chemicals reportable under Section 313 (40CFR372). This product does not contain chemicals that are regulated under Section 304/CERCLA (40CFR302.4).

OSHA Hazard Status: Not considered hazardous as defined by the US OSHA Hazard Communication Standard (29CFR1910.1200).

15.2 State Regulations

NEW JERSEY RIGHT-TO-KNOW HAZARDOUS SUBSTANCES LIST: Not on List.

MASSACHUSETTS RIGHT-TO-KNOW SUBSTANCE LIST: On List.

PENNSYLVANIA HAZARDOUS SUBSTANCES LIST: On List.

California Proposition 65: This product does not contain a chemical known to the state of California to cause cancer, birth defect or other reproductive harm.

15.3 HMIS RATING: Health 1, Flammability 0, Reactivity 0

15.4 NFPA RATING: Health 1, Flammability 0, Reactivity 0

16. OTHER INFORMATION

16.1 Full text of abbreviated H statements : None.

16.2 Full text of classifications : None.

16.3 Full text of abbreviated R phrases : None.

16.4 Full text of classifications [DSD/DPD] : None.

16.5 SDS PREPARED BY: Director of Chemical Safety

The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, Carlisle Fluid Technologies, Inc. makes no representations as to its completeness or accuracy.

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16.6 REVISION DATE: 12/12/2021 REVISION #: 3.0.4

*** END OF SDS ***