

	SAFETY DATA SHEET S1-2015EN WHITE SILICA GEL	Ed.1-2015 Rev.3
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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: White silica gel Hydrated amorphous silicon dioxide. Chemical formula: SiO₂
Company: Disidry Silicagel by Zest s.r.l.. – Via della Resistenza, 1 50039 Vicchio (Fi) ITALY –
www.silicagel.it info@silica-gel.it phone & fax: +39 055 – 8497548

2. HAZARDS IDENTIFICATIONS

The Silica Gel White is a substance based on white silica gel (silicon dioxide - SiO₂) without the addition of any additives of different chemical nature.

The lethal dose for humans of the synthetic amorphous silica is estimated equal to 15000 mg / Kg.

The product has not harmful effect on the lungs and does not cause significant disease or toxic effects when exposure is below the allowed limit but can aggravate pre-existing diseases such as asthma and bronchitis.

Silica gel dust can cause mild irritation to eyes and mucous membranes. If you exceed the limits for long periods of exposure to dust, can take over the risk of silicosis.

If spilled on the ground, the spheres or granules may be slippery.

Dust can irritate the skin and respiratory system. The material adsorbs odors and gases.

Risk of electrostatic discharge.

3. PRODUCT COMPOSITION

N° Cas/ CE	SUBSTANCE	%	Classification / Phrases R- S. Directive 67/548
7631-86-9	Silica gel SiO ₂	100%	-

4. FIRST-AID MEASURES

General warnings: none, do not breathe dust , hand wash after product handling.

Inhalation: go to one aired place. If symptoms appear, see a doctor.

Skin contact: wash with soap and water.

If symptoms appear, see a doctor.

Eyes contact: wash richly with running water and see a doctor.

Ingesting: rinse the oral cavity and do not induce vomiting, if the quantity is high see a doctor.

5. FIRE-FIGHTING MEASURES

Non-flammable material. No risk of ignition and explosion.

Extinguishing appropriate material: Silica gel is non-flammable, therefore you must use appropriate means to the surrounding fire. During the mechanical manipulation can accumulate electrostatic charges that may be dangerous in the presence of flammable vapors.

Unsuitable material for safety reasons: None.

Hazards due to combustion products of material: None.

Protective equipment to be used during fire fighting operations: dust mask with P2 particle filter.

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6. ACCIDENTAL RELEASE MEASURES

Person-related precautionary measures: Do not inhale the dust and use the appropriate protective clothing.

Environmental protective measures: None.

Procedure for cleaning / collection: mechanical harvesting of the material, avoiding dust formation.

7. HANDLING AND STORAGE

Handling : Silica Gel is a desiccant material, the product need to be stocked in dry place, hermetically closed.

During the use, it is necessary to minimize the time of exposition of the silica gel to the air before the use.

Warning for usage: Avoid dusting, dust suction.

When in spherical form, the material is slippery.

During mechanical handling electrostatic charges can accumulate.

The use of some kgs of product does not cause electrostatic charges accumulation. Warning for fire/explosion: none.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

The use of the Silica Gel inside a desiccant bag it minimizes the contact between the Silica Gel and the workers.

The use of the silica gel in industrial plants where it can be possible the presence of breathable dust, it requires the check of the limit values for the following components:

SUBSTANCE	EXPOSURE LIMITS	NORMATIVE REF.
Silica gel dust	6 mg/m ³ in 8 hours	UK EH40/95

Work environment protection:

Mechanical methods to reduce and control exposure are preferred, as suction systems and process enclosure ; in accordance with good industrial hygiene practices.

General measures for protection and hygiene:

wash carefully the exposed parts before breaks and at the end of the work, do not eat, drink or smoke. Breathing protection: use anti-dust mask in case of dusting (P2 Protection).

Hand protection: In case of manipulation for long time, use protective gloves to protect the skin against the dry.

Eyes protection: use protective glasses only to protect against the grains of silica gel or the dust.

Body protection: Not necessary.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form: grains or beds
 Color: translucent white
 Smell: none
 Melting point: above 1000 ° C.
 Boiling point: not applicable.
 Flash point: not applicable.
 Ignition temperature: not applicable.
 Spontaneous combustion: not applicable.
 Explosion: Not applicable.
 Limit of explosion: not applicable.
 Vapour pressure: not applicable.
 Solubility in water: insoluble.
 pH: 3.5 - 7.
 Viscosity: Not applicable.
 Apparent density: 0.7-0.8 kg / l.
 Vapour pressure: N.A.
 The product adsorbs water vapor (Max 35% W / W) and in part volatile organic molecules with polar functional groups.

10. STABILITY AND REACTIVITY

Hygroscopic substance
 Conditions to avoid: none if prescribed handling and storage are followed.
 Materials to avoid: contact with hydrofluoric acid and unstable fluoridated compounds.
 Decomposition products: none if prescribed handling and storage are followed.
 The material absorbs gas and odors.

11. TOXICOLOGICAL INFORMATIONS

The product has little noxious consequence on lungs and it does not cause illnesses or toxic effect if exposition is inferior to the prescribed limit, but it can aggravate pre-existent diseases like asthma and bronchitis. The effects may increase in smokers.
 Sensitization: no available data. Practical experiences: in presence of dust, light irritations to eyes and mucous membranes can come out, drying up the skin.

ACUTE TOXICITY	EXPOSURE LIMITS	ANIMAL SPECIES
Oral	LD > 10000 mg/Kg	Rat
Cutaneous	LD > 5000 mg/ Kg	Rabbit
Inhaled	LD > 5000 mg/ Kg	Rat

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12. ECOLOGICAL INFORMATION

White Silica Gel is an inert substance for the environment. Not possible ecological damage are detectable.

13. PRODUCT DISPOSAL

Warning: observe the limits of the current regulations .Code nr. or waste name : The user must choice the CER code. We can suggest the code CER150203.

The exhausted product may show different characteristics compared to the dry material, in fact it can contains the chemical substances absorbed during the use.

Modify CER code if dangerous substances have been absorbed.

This material is not classified as hazardous waste under EEC Decision CEE 2000/532/CE, 2001/118/CE, 2001/119/CE e 2001/573/CE

14. TRANSPORT INFORMATION

The product is not subject to transport regulations.

Not a dangerous good as defined by the following regulations :

RID/ ADR :

ADRN/ADN :

OMI/IMDG:

IATA / OACI:

RTMDR:

Packaging: No special packaging requirements.

15. REGULATORY INFORMATION

EC CLASSIFICATION: Not classified as Dangerous. (Regulation 1272/2008).

Marking: the product does not need any mark.

Marking and danger indication: none.

S-caution suggestions: Avoid inhalation of dust .

Handle in accordance with good industrial hygiene and safety practices.

16. ADDITIONAL INFORMATION

REACH: White silica gel does not meet the criteria for classification as dangerous in accordance Regulation 1272/2008. White Silica Gel does not contain substances in concentration > 1 which cause human health hazard or environmental hazards, or substances assessed to be PBT or vPvB, or substances for which there are Community workplace exposure limits. Moreover White Silica Gel does not contain substances SVHC or substances in the "candidate list " ("candidate list" in the last revision at the moment of the emission of this material safety data sheet)

For the above reasons, no exposure assessment is required for this mixture and the communication of uses and exposures along the supply chain are not required according to the REACH – Regulation.

These data are based on our present knowledge and experiences, they are not considered exhaustive. These information cannot be considered as a specification on the product or as a

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warranty on any of its particular characteristics. No liability can be accepted for losses, accidents or damages resulting from the use of these information.

Direttive di riferimento / Directive reference / Directives appliqués / Richtlinie:

This document is in conformity with the Article 32 of the REACH REGULATION 1907/2006 (Substances and products out of the article 31.1 and 31.3 of the Reg. 1907/2006).

Duty to communicate information down the supply chain for substances on their own or in preparations for which a safety data sheet is not required. Regulation 1272/2008.

END OF THE DOCUMENT

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