

1 Identification

- **Product identifier**
- **Trade name: SYLOSIV® K 300**
- **Application of the substance / the preparation:**
Intermediate product of varied applicability in industry and trade.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
GRACE
W. R. Grace & Co.-Conn
7500 Grace Drive
Columbia MD 21044
U. S. A.
- **Information department:**
Health and Safety (9 AM to 5 PM-EST) 1-410-531-4000
MSDS.Davison@grace.com
- **Emergency telephone number:**
Chemtrec North America: +1-800-424-9300
Chemtrec International: +1-703-527-3887
Other Emergencies (24hr): +1-410-531-4000

2 Hazard(s) identification

- **Classification of the substance or mixture**
The substance is not classified, according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** None
- **Hazard pictograms** None
- **Signal word** None
- **Hazard statements** None
- **Hazard not otherwise classified**
The product is very adsorbent and may have a drying effect on skin and eyes.
In contact with water heat development and therefore burning of the skin and mucous membrane is possible.
When exceeding the OEL (Occupational Exposure Limit) a mechanical overburdening of the respiratory system is possible.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **Additional information:**

• CAS No. and description:		
1318-02-1	zeolites	100%

4 First-aid measures

- **Description of first aid measures**
- **General information:** Take note of the following instructions
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Generally the product does not irritate the skin.
Wash with water.

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- **After eye contact:**
Flush opened eye with large quantities of running water for at least 30 minutes. If symptoms occur, consult a doctor.
- **After swallowing:** Seek medical attention. Do not induce vomiting.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Hazardous combustion products** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**
Wear personal protective equipment.
No special measures required.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Vacuuming or wet sweeping may be used to avoid dust dispersal.
- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-1:
Substance is not listed.

· PAC-2:
Substance is not listed.

· PAC-3:
Substance is not listed.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Prevent formation of dust.
Keep receptacles tightly sealed.
Provide suction extractors if dust is formed.

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Any deposit of dust which cannot be avoided must be regularly removed.
Take precautionary measures against static discharges.

· **Information about protection against explosions and fires:**

When transferring this material into flammable solvents, use proper grounding to avoid static electric sparks.

The product is not flammable.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Store away from foodstuffs.

· **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in dry conditions.

This product is hygroscopic.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

1318-02-1 zeolites

PEL	Long-term value: *15 **5 mg/m ³ OSHA, *Total Dust, **Respirable Dust
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· **Additional Occupational Exposure Limit Values for possible hazards during processing:**

Dust inhalable

PEL	Long-term value: 15 mg/m ³ TWA
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REL	Long-term value: 15 mg/m ³ TWA
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Dust respirable

PEL	Long-term value: 5 mg/m ³ TWA
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REL	Long-term value: 5 mg/m ³ TWA
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· **Additional information:** Valid lists at time of creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

· **Protection of hands:**



Protective gloves

Wear gloves for the protection against mechanical hazards.

Check protective gloves prior to each use for their proper condition.

Check the permeability prior to each new use of the glove.

Use gloves of stable material

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm**· For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**

Butyl rubber, BR

Nitrile rubber, NBR

· For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR

Nitrile rubber, NBR

· Not suitable are gloves made of the following materials:

Strong fabric gloves

Leather gloves

· Eye protection:

Safety glasses

· Body protection: Protective work clothing**9 Physical and chemical properties****· Information on basic physical and chemical properties****· General Information****· Appearance:****Form:**

Powder

Color:

White

· Odor:

Odorless

· Odor threshold:

Not applicable.

· pH-value at 20 °C (68 °F):

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· Change in condition**· Melting point/Melting range:**> 400 °C (> 752 °F) (OECD 102)
(zeolite)**· Boiling point/Boiling range:**

Not determined.

· Conditions of flammability**· Flash point:**

Not determined.

· Flammability (solid, gaseous):

Product is not flammable.

· Auto igniting:

Not applicable.

· Decomposition temperature:

Not applicable.

· Auto ignition temperature:

Product is not self-igniting.

· Danger of explosion:

Product does not present an explosion hazard.

· Explosion limits:**Lower:**

Not determined.

Upper:

Not determined.

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· Vapor pressure:	Not applicable.
· Density at 20 °C (68 °F):	2.1 g/cm ³ (17.5245 lbs/gal)
· Bulk density at 20 °C (68 °F):	400 kg/m ³
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Insoluble.
· Coefficient of water/oil distribution:	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Other information	No further relevant information available.
· Particle characteristics	Not determined.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid**
In contact with water heat development and therefore burning of the skin and mucous membrane is possible.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

1318-02-1 zeolites			
Oral	LD50	>5,110 mg/kg (rat) (OECD 401)	
Dermal	LD50	>5,000 mg/kg (rabbit) (OECD 402)	
Inhalative	LC0	>3,350 mg/m ³ /4h (rat)	
		IUCLID Dataset 18-Feb-2000	
	LC50 (6 h)	1.25-1.5 mg/m ³ (General population)	

· Primary irritant effect:

· on the skin:

1318-02-1 zeolites			
Irritation of skin	IS	0 (rabbit) (OECD 404)	

· on the eye:

1318-02-1 zeolites			
Irritation of eyes	IS	0.7-1.3 (rabbit) (OECD 405)	
		Corneal opacity	

- **Respiratory sensitization** No further relevant information available.
- **Skin sensitization** No further relevant information available.

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· **Additional toxicological information:**· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

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· **NTP (National Toxicology Program)**

Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

· **Repeated dose toxicity****1318-02-1 zeolites**

Oral	NOAEL (90 d)	250-300 mg/kg bw/day (rat) subchronic oral repeated dose
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· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**· **Carcinogenicity****1318-02-1 zeolites**

Oral	NOAEL	≥1,000 ppm (rat) not carcinogenic
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· **Mutagenicity****1318-02-1 zeolites**

Oral	Micronucleus-Test	5,000 mg/kg bw (mouse) (OECD 474) Genotoxicity: negative (male/female)
	AMES Test	>0.1 mg/plate (Salmonella typhimurium) (OECD 471) negative with and without metabolic activation
	HPRT Test	>0.08 mg/ml (L5178Y) (OECD 476) no genotoxicity; cytotoxicity: >0,02 mg/ml without metabolic activation; >0,08 mg/ml with metabolic activation

· **Reproductive toxicity****1318-02-1 zeolites**

Oral	NOAEL (maternal toxicity)	≥1,600 mg/kg bw/day (rat) (OECD 414) ≥1,600 mg/kg bw/day (rabbit) (OECD 414)
	NOAEL (teratogenicity)	≥1,600 mg/kg bw/day (rat) (OECD 414) ≥1,600 mg/kg bw/day (rabbit) (OECD 414)

· **Specific target organ toxicity (single exposure)** No further relevant information available.· **Specific target organ toxicity (repeated exposure)** No further relevant information available.**12 Ecological information**· **Toxicity**· **Aquatic toxicity:**· **Fish toxicity****1318-02-1 zeolites**

LC50 (96 h)	>680 mg/l (Pimephales promelas) (EPA 660/3-75/009)
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· **Water flea toxicity****1318-02-1 zeolites**

EC50 (24 h)	2,808 mg/l (Daphnia magna) (OECD 202)
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· **Algae toxicity****1318-02-1 zeolites**

EC50 (96h) >328 mg/l (Scenedesmus subspicatus) (OECD 201)

· **Bacterial toxicity****1318-02-1 zeolites**

EC50 (16h) 950 mg/l (Pseudomonas putida) (DIN 38412/8)

· **Persistence and degradability**

Being an inorganic product, it cannot be removed from water by biological cleaning processes.

· **Other information:**

By the insolubility in water there is a separation at every filtration and sedimentation process.

· **Behavior in environmental systems:**· **Bioaccumulative potential** No further relevant information available.· **Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:** Not hazardous for water.· **Results of PBT and vPvB assessment**· **PBT:** Not determined.· **vPvB:** Not determined.· **Other adverse effects** No further relevant information available.**13 Disposal considerations**· **Precautions for disposal:**· **Recommendation:**

Disposal must be made according to official regulations.

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State/provincial and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state/provincial and local requirements.

14 Transport information· **UN-Number**· **DOT, ADR, ADN, IMDG, IATA** Not applicable.· **UN proper shipping name**· **DOT, ADR, ADN, IMDG, IATA** Not applicable.· **Transport hazard class(es)**· **DOT, ADR, ADN, IMDG, IATA**· **Class** Not applicable.· **Packing group**· **DOT, ADR, IMDG, IATA** Not applicable.· **Environmental hazards:**

Not applicable.

· **Special precautions for user**

Not applicable.

· **Segregation groups**

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- | | |
|--|---|
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications.
GRACE recommendation for air transport: Cargo aircraft. |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **SARA**

- **SARA 302/304**

Substance is not listed.

- **SARA 313**

Substance is not listed.

- **SARA 311/312** Not applicable.

- **TSCA (Toxic Substances Control Act):**

EPA recognizes zeolites (CAS: 1318-02-1) as a family of aluminosilicates manufactured from a number of commercial processes and techniques that utilize different proportions of alumina, silica and a variety of sources of different inorganic and organic cations. Zeolites are considered for TSCA purposes to be mixtures of the substances used to manufacture them. The individual reactant materials used to produce zeolites are required to be listed separately on the Inventory.

- **Hazardous Air Pollutants**

Substance is not listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

- **Chemicals known to cause developmental toxicity:**

Substance is not listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

Substance is not listed.

- **TLV (Threshold Limit Value)**

Substance is not listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

- **Canadian DSL**

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- **Canadian NDSL**

Substance is not listed.

- **European EINECS**

Substance is listed.

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· **Philippines Inventory of Chemicals and Chemical Substances PICCS**

Substance is listed.

· **Inventory of the Existing Chemical Substances manufactured or imported in China IECSC**

1318-02-1 zeolites

· **Australian Inventory of Industrial Chemicals (AIIC)**

Substance is listed.

· **Existing and New Chemical Substance List ENCS**

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· **Korean Existing Chemical Inventory KECI**

KE-35511

· **TCSCA (Taiwan)**

EPEP4A01713969

· **Russian Register of Potentially Hazardous Chemical and Biological Substances (RPOHV)**

AT-1251-1252-1253-1254-1628-2354-3712

· **New Zealand Inventory of Chemicals (NZIoC)**

Substance is listed.

· **Existing Chemical Directory of Thailand (DIW)**

Substance is listed.

· **TCSI - Taiwan Chemical Substance Inventory**

Substance is listed.

· **Mexican National Inventory of Chemical Substances (INSQ)**

Substance is not listed.

· **GHS label elements** None· **Hazard pictograms** None· **Signal word** None· **Hazard statements** None· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 1

Fire = 0

Reactivity = 0

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** GRACE Safety & Health Department· **Contact:**

SALES OFFICES

USA:

GRACE

W. R. Grace & Co.-Conn

7500 Grace DR

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• **Other information:**

• **Date of preparation / last revision** 06/06/2023

• **The first date of preparation** 04/08/2001

• **Number of revision times and the latest revision date** 25.9 / 06/06/2023

• **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

• **Others** No further relevant information available.

• *** Data compared to the previous version altered.**