

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
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Hazard not otherwise classified**
The product is very adsorbent and may have a drying effect on skin and eyes.
When exceeding the OEL (Occupational Exposure Limit) a mechanical overburdening of the respiratory system is possible.

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3 Composition/information on ingredients

- **Chemical characterization: Substances**

- **Description:**

- **CAS No. and description:**

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100%

4 First-aid measures

- **Description of first aid measures**

- **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.

- **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.

- **Protective Action Criteria for Chemicals**

- **PAC-1:**

Substance is not listed.

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· 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.
- 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 item 7.

· Control parameters

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

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| | |
|-----|--|
| 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

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

Dust respirable

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| PEL | Long-term value: 5 mg/m ³ TWA |
| REL | Long-term value: 5 mg/m ³ TWA |

- Additional information:** Valid lists at time of creation were used as basis.

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- **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 (e.g. Nitrile)
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
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 available.
- **pH-value at 20 °C (68 °F):** 7-11

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| · Change in condition | |
| Melting point/Melting range: | > 400 °C (>752 °F) (Zeolite, OECD TG 102) |
| Boiling point/Boiling range: | Not determined. |
| · Conditions of flammability | |
| Flash point: | Not available. |
| · Flammability (solid, gaseous): Product is not flammable. | |
| Ignition temperature: | Not available. |
| Decomposition temperature: | Not available. |
| · Auto igniting: Product is not self-igniting. | |
| · Danger of explosion: Product does not present an explosion hazard. | |
| · Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| · Vapor pressure at 20 °C (68 °F): - hPa | |
| · 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 |
| · Specific Gravity | Not available |
| · Vapor density | Not applicable. |
| · Evaporation rate Not applicable. | |
| · Solubility in / Miscibility with | |
| Water: | Insoluble. |
| · Coefficient of water/oil distribution: Not available. | |
| · Viscosity: | |
| Dynamic at 20 °C (68 °F): | - mPas |
| Kinematic: | Not applicable. |
| · Other information No further relevant information available. | |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on the likely routes of exposure**
- **Delayed and immediate effects and chronic effects from short or long term exposure**
- **Information on toxicological effects**
- **Acute toxicity:**

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|---|------|-------------------------------|
| · LD/LC50 values that are relevant for classification: | | |
| 1318-02-1 zeolites | | |
| Oral | LD50 | >5,110 mg/kg (rat) (OECD 401) |

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| | | |
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| Dermal | LD50 | >5,000 mg/kg (rabbit) (OECD 402) |
| Inhalative | LC0 | >3,350 mg/m ³ /4h (rat) IUCLID Dataset 18-Feb-2000 |

• **Primary irritant effect:**

• **on the skin:**

May cause irritation with dryness and abrasion.

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| Irritation of skin | IS | 0 (rabbit) (OECD 404) |
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• **on the eye:**

No irritating effect.

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| Irritation of eyes | IS | 0.7-1.3 (rabbit) (OECD 405) Corneal opacity |
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• **Skin sensitization** No further relevant information available.

• **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**

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| | | |
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| 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**

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| Oral | NOAEL | ≥1,000 ppm (rat) |
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• **Mutagenicity**

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| 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**

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| | | |
|------|---------------------------|---|
| 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.

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- **Specific target organ toxicity (repeated exposure)** No further relevant information available.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

- **Fish toxicity**

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LC50 (96 h) >680 mg/l (Pimephales promelas) (EPA 660/3-75/009)

- **Water flea toxicity**

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EC50 (24 h) 2,808 mg/l (Daphnia magna) (OECD 202)

- **Algae toxicity**

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

- **Bacterial toxicity**

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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.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **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**

None

- **UN proper shipping name**

- **DOT, ADR, ADN, IMDG, IATA**

None

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| | |
|---|--|
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class | None |
| <ul style="list-style-type: none"> · Packing group · DOT, ADR, IMDG, IATA | None |
| <ul style="list-style-type: none"> · Environmental hazards: | Not applicable. |
| <ul style="list-style-type: none"> · Special precautions for user | Not applicable. |
| <ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| <ul style="list-style-type: none"> · Transport/Additional information: | Not dangerous according to the above specifications. GRACE recommendation for air transport: Cargo aircraft only. |

15 Regulatory information

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

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| <ul style="list-style-type: none"> · SARA 302/304 | Substance is not listed. |
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| <ul style="list-style-type: none"> · SARA 313 | Substance is not listed. |
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- **TSCA (Toxic Substances Control Act):**
EPA has defined zeolites as complex chemical products consisting of silica (SiO₂) and alumina (Al₂O₃), in various proportions, plus metallic oxides and certain cations. Zeolites are considered for TSCA purposes to be statutory mixtures of the substances used to manufacture them.

- **Proposition 65**

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|---|--------------------------|
| <ul style="list-style-type: none"> · Chemicals known to cause cancer: | Substance is not listed. |
|---|--------------------------|

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| <ul style="list-style-type: none"> · Chemicals known to cause reproductive toxicity for females: | Substance is not listed. |
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| <ul style="list-style-type: none"> · Chemicals known to cause reproductive toxicity for males: | Substance is not listed. |
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|---|--------------------------|
| <ul style="list-style-type: none"> · Chemicals known to cause developmental toxicity: | Substance is not listed. |
|---|--------------------------|

- **Carcinogenic categories**

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| <ul style="list-style-type: none"> · EPA (Environmental Protection Agency) | Substance is not listed. |
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| <ul style="list-style-type: none"> · TLV (Threshold Limit Value established by ACGIH) | Substance is not listed. |
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| <ul style="list-style-type: none"> · NIOSH-Ca (National Institute for Occupational Safety and Health) | Substance is not listed. |
|---|--------------------------|

- **Canadian DSL**
Zeolites are considered for DSL purposes to be mixtures of the substances used to manufacture them.

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· **Canadian NDSL**

Substance is not listed.

· **European EINECS**

Substance is listed.

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

Substance is listed.

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

Substance is listed.

· **Australian Inventory of Chemical Substances AICS**

Substance is listed.

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

1-26

· **Korean Existing Chemical Inventory KECI**

KE-35511

· **TCSCA (Taiwan)**

EPEP4A01713969

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

Substance is listed.

· **GHS label elements** None· **Hazard pictograms** None· **Signal word** None· **Hazard statements** None**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· **Tarif number** 2842 1000· **Contact:**

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USA

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Trade name: SYLOSIV® K 300

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- **Date of preparation / last revision** 02/08/2019 / 25.2
- **The first date of preparation** 04/08/2001
- **Number of revision times and the latest revision date** 25.3 / 02/08/2019

• **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 européen sur le transport 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
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
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.**

USA