SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

S 300 HOCHTEMPERATUR-SILIKON
Article number: 0898313

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant uses

Sealing material

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Kellner & Kunz AG
Boschstr. 37
4600 Wels / AUSTRIA
Phone 0043-7242-484-0
Fax 0043-7242-484-924
Homepage www.reca.co.at
E-mail info@reca.co.at

Address enquiries to

Technical information info@reca.co.at

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +43 (0) 1 406 43 43 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

No classification.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms none

Hazard statements none

Special labelling EUH210 Safety data sheet available on request.

2.3 Other hazards

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards none

SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
1 - <5	Triacetoxy(methyl)silane
	CAS: 4253-34-3, EINECS/ELINCS: 224-221-9, Reg-No.: 01-2119962266-32-XXXX
	GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1C: H314
1 - <5	Propyltriacetoxysilane
	CAS: 17865-07-5, EINECS/ELINCS: 241-816-9, Reg-No.: 01-2119966899-07-XXXX
	GHS/CLP: Skin Corr. 1B: H314

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Get medical advice.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Headache

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Foam, dry powder, water spray jet, carbon dioxide.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NOx).

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.
Forms slippery surfaces with water.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid spilling or spraying in enclosed areas.
Use only in well-ventilated areas.

Keep away from all sources of ignition - Refrain from smoking.

Do not eat or drink when working.
Wash hands before breaks and after work.
Use barrier skin cream.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with oxidizing agents.

Recommended storage temperature: 5 - 25 °C
Keep container in a well-ventilated place.
Keep container tightly closed.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not applicable

DNEL

Substance
Triacetoxy(methyl)silane, CAS: 4253-34-3
Industrial, inhalative, Acute - local effects: 31 mg/m³.
Industrial, inhalative, Long-term - local effects: 31 mg/m³.
general population, inhalative, Long-term - local effects: 5,1 mg/m³.
general population, inhalative, Acute - local effects: 5 mg/m³.
Propyltriacetoxysilane, CAS: 17865-07-5
Industrial, dermal, Long-term - systemic effects: 12,11 mg/kg bw/d.
Industrial, inhalative, Long-term - systemic effects: 85,39 mg/m³.
general population, oral, Long-term - systemic effects: 6,05 mg/kg bw/d.
general population, dermal, Long-term - systemic effects: 6,05 mg/kg bw/d.
general population, inhalative, Long-term - systemic effects: 21,06 mg/m³.

PNEC

Substance
Triacetoxy(methyl)silane, CAS: 4253-34-3
soil, 0,145 mg/l.
seawater, 0,1 mg/l.
freshwater, 1,0 mg/l.
sediment (seawater), 0,34 mg/kg.
sediment (freshwater), 3,4 mg/kg.
sewage treatment plants (STP), 6.9 mg/L.
Propyltriacetoxysilane, CAS: 17865-07-5
sediment (seawater), 1,457 µg/kg.
sediment (freshwater), 14,57 µg/kg.
sediment (seawater), 1.457 µg/kg.
soil, 0,00336 mg/l.
seawater, 0,002441 mg/l.
freshwater, 0,02441 mg/l.
sewage treatment plants (STP), 10,55 mg/l.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. In full contact: 0,7 mm butyl rubber, > 120 min (EN 374)
Skin protection	Light protective clothing.
Other	Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Not required under normal conditions.
Thermal hazards	not determined
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	aerosol
Color	various
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not applicable
Density [g/ml]	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	reacts with water
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	>1
Evaporation speed	not applicable
Melting point [°C]	not applicable
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not applicable

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with alcohols.
Reactions with alkalies (lyes).
Reactions with oxidizing agents.

10.4 Conditions to avoid

See SECTION 7

10.5 Incompatible materials

not determined

10.6 Hazardous decomposition products

Acetic acid.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
inhalative, Based on the available information, the classification criteria are not fulfilled.:
dermal, Based on the available information, the classification criteria are not fulfilled.:
ATE-mix, oral, > 2000 mg/kg.

Substance
Triacetoxy(methyl)silane, CAS: 4253-34-3
LD50, oral, Rat: 1600 mg/kg.
Propyltriacetoxysilane, CAS: 17865-07-5
LD50, oral, Human: 1460 mg/kg (Lit.).

Serious eye damage/irritation
Toxicological data of complete product are not available.
Based on the available information, the classification criteria are fulfilled.
Irritant
Calculation method [RL (EC) No. 1272/2008 Annex I 1.1.3.7]

Skin corrosion/irritation
Toxicological data of complete product are not available.
Based on the available information, the classification criteria are fulfilled.
Irritant
Calculation method [RL (EC) No. 1272/2008 Annex I 1.1.3.7]

Respiratory or skin sensitisation
Toxicological data of complete product are not available.
Based on the available information, the classification criteria are fulfilled.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Calculation method [RL (EC) No. 1272/2008 Annex I 1.1.3.7]

Specific target organ toxicity — single exposure
Toxicological data of complete product are not available.
Based on the available information, the classification criteria are fulfilled.
May cause respiratory irritation.
Calculation method [RL (EC) No. 1272/2008 Annex I 1.1.3.7]

Specific target organ toxicity — repeated exposure
Toxicological data of complete product are not available.
Based on the available information, the classification criteria are fulfilled.
May cause damage to organs through prolonged or repeated exposure through inhalation.
Calculation method [RL (EC) No. 1272/2008 Annex I 1.1.3.7]

Mutagenicity
Does not contain a relevant substance that meets the classification criteria.

Reproduction toxicity
Does not contain a relevant substance that meets the classification criteria.

Carcinogenicity
Toxicological data of complete product are not available.
Based on the available information, the classification criteria are fulfilled.
Suspected of causing cancer.
Calculation method

Aspiration hazard
Does not contain a relevant substance that meets the classification criteria.

General remarks

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1 Toxicity

Product
Based on the available information, the classification criteria are not fulfilled.:

Substance
Triacetoxy(methyl)silane, CAS: 4253-34-3
LC50, (96h), fish: > 500 mg/L.
EC50, (72h), Algae: > 500 mg/L.
EC50, (48h), Invertebrates: > 500 mg/L.
Propyltriacetoxysilane, CAS: 17865-07-5
LC50, (96h), Brachidanio rerio: 251 mg/l (Lit.).
EC50, (48h), Daphnia magna: 62 mg/l (Lit.).
IC50, (72h), Scenedesmus subspicatus: 73 mg/l (Lit.).

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	The product is not readily biodegradable.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

The product contains organically bound halogen in accordance with the formulation.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.
Ecotoxicological data are not available.
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material c It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

For recycling, consult manufacturer.
Coordinate disposal with the authorities if necessary.

Waste no. (recommended) 080410

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150102

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not determined

SECTION 15: Regulatory information

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

EEC-REGULATIONS	1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	not applicable
- VOC (2010/75/CE)	0 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Modified position none