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

1.1 Product identifier

515 Teak Seal

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

Ramsauer GmbH & Co KG
Alte Bundesstraße 147
5350 Strobl / Wolfgangsee / AUSTRIA
Phone +43 (0)6135 8205 0
Fax +43 (0)6135 8205-250
Homepage www.ramsauer.eu
E-mail office@ramsauer.eu

Address enquiries to

Technical information office@ramsauer.eu

Safety Data Sheet sdb@chemiebuero.de (No dispatch of safety data sheets)

Safety data sheets are available from the supplier.

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]

Eye Irrit. 2: H319 Causes serious eye irritation.
STOT RE 2: H373 May cause damage to the respiratory system through prolonged or repeated exposure through inhalation.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms

Signal word WARNING

Contains: 4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane

Hazard statements

H319 Causes serious eye irritation.
H373 May cause damage to the respiratory system through prolonged or repeated exposure through inhalation.

Precautionary statements

P260 Do not breathe vapours.
P280 Wear eye protection.
P314 Get medical advice / attention if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice / attention.
P501 Dispose of contents/container in accordance with local/national regulation.

Special labelling

Contains: N-[3-(Trimethoxysilyl)propyl]ethylenediamine. EUH208 May produce an allergic reaction.

2.3 Other hazards

Human health dangers Contact with moisture liberates Methanol and Ethanol.
Frequent persistent contact with the skin can cause skin irritation.

Environmental hazards Does not contain any PBT or vPvB substances.
Contains no ingredients with endocrine-disrupting properties.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
20 - <50	Polydimethylsiloxan, (((3-(cyclohexylamino)propyl)dimethoxysilyl)oxy)-terminated
	CAS: 129968-18-9, EINECS/ELINCS: Polymer
	GHS/CLP: Eye Irrit. 2: H319
1 - <5	4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane
	CAS: 16068-37-4, EINECS/ELINCS: 240-212-2, Reg-No.: 01-2120764364-51-XXXX
	GHS/CLP: Acute Tox. 3: H301 - Acute Tox. 4: H312 - Aquatic Chronic 3: H412 - STOT RE 1: H372 - EUH071
0.1 - <1	N-[3-(Trimethoxysilyl)propyl]ethylenediamine
	CAS: 1760-24-3, EINECS/ELINCS: 217-164-6
	GHS/CLP: Skin Sens. 1B: H317 - Eye Dam. 1: H318 - STOT SE 3: H335
0.1 - <1	1,2-Bis(triethoxysilyl)ethylene
	CAS: 87061-56-1, EINECS/ELINCS: 689-758-7
	GHS/CLP: Aquatic Chronic 3: H412 - Acute Tox. 3: H301 - Acute Tox. 4: H312 - EUH071

Comment on component parts 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 In case of contact with skin wash off immediately 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 Seek medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

Headache
Irritant effects
Allergic reactions

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

Carbon dioxide.
Water spray jet.
Dry powder.
Foam.

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

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

Ensure adequate ventilation.
High risk of slipping due to leakage/spillage of product.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

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.
Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, diatomaceous earth).
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

Use only in well-ventilated areas.

Wash hands before breaks and after work.
Use barrier skin cream.
Do not eat, drink, smoke or take drugs at work.
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 food and animal food/diet.

Keep container tightly closed.
Keep in a cool place. Store in a dry place.
Protect from heat/overheating.

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 EU (2004/37/EG)

Substance / EC LIMIT VALUES
Methanol
CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X, Reg-No.: 01-2119433307-44-XXXX
Eight hours: 200 ppm, 260 mg/m³, H

DNEL

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
Industrial, inhalative, Long-term - local effects, 6 µg/m³
general population, inhalative, Long-term - local effects, 1 µg/m³

PNEC

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
soil, 6.2 - 7.2 µg/kg soil dw
sediment (seawater), 7.8 - 19 µg/kg sediment dw
sediment (freshwater), 78 - 190 µg/kg sediment dw
sewage treatment plants (STP), 8 g/L
seawater, 1.6 µg/L
freshwater, 16 µg/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	>0.7 mm Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Protective clothing (EN 340)
Other	Avoid contact with eyes and skin. Do not inhale vapours. 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	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	not applicable
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

Physical state	liquid
Form	pasty
Color	various
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not determined
Boiling point or initial boiling point and boiling range [°C]	not applicable
Flash point [°C]	not applicable
Flammability	not determined
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/cm³]	not determined
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	not determined
Kinematic viscosity	not applicable
Relative vapour density	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Auto-ignition temperature [°C]	not applicable
Decomposition temperature [°C]	not determined
Particle characteristics	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

not determined

10.6 Hazardous decomposition products

Contact with moisture liberates Methanol and Ethanol.
In the case of heating (150-180°C) following modest (decomposition) products may occure:
Formaldehyde.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity Based on available data, the classification criteria are not met.

Product
ATE-mix, oral, Rat, > 2000 mg/kg

Substance
Polydimethylsiloxan, (((3-(cyclohexylamino)propyl)dimethoxysilyl)oxy)-terminated, CAS: 129968-18-9
LD50, oral, Rat, > 2000 mg/kg
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
LD50, oral, Rat, 161 mg/kg bw
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
LD50, oral, Rat, 2995 mg/kg

Acute dermal toxicity Based on available data, the classification criteria are not met.

Product
ATE-mix, dermal, Rat, > 2000 mg/kg

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
LD50, dermal, Rat, 1971 mg/kg bw
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
LD50, dermal, Rat, > 2000 mg/kg

Acute inhalational toxicity Based on available data, the classification criteria are not met.

Product
ATE-mix, inhalation (vapour), > 20 mg/l (4 h)

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
LC50, inhalative, Rat, 377 mg/m³ (4 h)

Serious eye damage/irritation Irritant

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
Rabbit (eye), OECD 404, non-irritating
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
Rabbit, OECD 405, Causes serious eye damage.

Skin corrosion/irritation Based on the available information, the classification criteria are not fulfilled.

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
Rabbit, OECD 404, non-irritating
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
Rabbit, OECD 404, Slight irritant effect - does not require labelling.

Respiratory or skin sensitisation Based on the available information, the classification criteria are not fulfilled.
May produce an allergic reaction.

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
dermal, Guinea pig, OECD 406, non-sensitizing
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
dermal, mouse, OECD 429, sensitising
dermal, Guinea pig, OECD 406, sensitising

Specific target organ toxicity — single exposure Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity — repeated exposure May cause damage to organs through prolonged or repeated exposure through inhalation.

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
LOAEC, Rat, 0.0027 mg/l (28d; 5d/w; 6h/d), OECD 412
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
NOAEL, oral, Rat, > 500 mg/kg (28d), OECD 422, no adverse effect observed

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

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
in vivo, OECD 474, negativ
in vitro, OECD 473, negativ
in vitro, OECD 476, positive
in vitro, OECD 471, negativ
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
in vitro, OECD 476, negativ
in vitro, OECD 471, negativ

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

- Fertility

Substance
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
NOAEL, oral, Rat, >= 500 mg/kg, OECD 422

- Development

Substance
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
NOAEL, oral, Rat, >= 500 mg/kg, OECD 422

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

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

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties Contains no ingredients with endocrine-disrupting properties.

11.2.2 Other information none

SECTION 12: Ecological information

12.1 Toxicity

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
LC50, (96h), Danio rerio, 16 mg/L
EC50, (16h), Pseudomonas putida, 8 g/L
EC50, (72h), Algae, 53 - 671 mg/L
EC50, (48h), Crustacea, 72.6 - 92.2 mg/L
NOEC, (72h), Algae, 102 mg/L
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
LC50, (96h), Danio rerio, 597 mg/l
EC50, (16h), Pseudomonas putida, 67 mg/l
EC50, (48h), Daphnia magna, 81 mg/l
IC50, (72h), Algae, 8.8 mg/l (OECD 201)
NOEC, (14d), >= 1000 mg/kg (Eisenia fetida; OECD 207)
NOEC, (21d), Daphnia magna, > 1 mg/l
NOEC, (72h), Algae, 3.1 mg/l (OECD 201)

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

not determined

12.4 Mobility in soil

not determined

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Ecological data of complete product are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. 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.
Disposal in an incineration plant in accordance with the regulations of the local authorities.

Waste no. (recommended) 070216*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances
150102

SECTION 14: Transport information

14.1 UN number or ID 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 Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014; (EU) 2019/1148
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex I (REACH)	The product is not subject to Annex I restrictions.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances ≥ 0.1% that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains ≥ 0.1% of substances with the following restrictions. 40, 75 According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is subject to the following restrictions. 3
TRANSPORT-REGULATIONS	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)
NATIONAL REGULATIONS (EU):	
- Observe employment restrictions for people	Observe employment restrictions for young people.
- VOC (2010/75/CE)	0 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H335 May cause respiratory irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
EUH071 Corrosive to the respiratory tract.
H372 Causes damage to lung through prolonged or repeated exposure if inhaled.
H412 Harmful to aquatic life with long lasting effects.
H312 Harmful in contact with skin.
H301 Toxic if swallowed.
H319 Causes serious eye irritation.

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
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
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
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
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

This document does not comply with Regulation (EC) No 1907/2006, article 31 (5) and may be used for internal purposes only.

Classification procedure
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
STOT RE 2: H373 May cause damage to the respiratory system through prolonged or repeated exposure through inhalation. (Calculation method)

Modified position
none