

**TOP GASKET**

Creation date 23. September 2015  
Revision date 07. May 2018 Version 1.1

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

- 1.1. Product identifier**  
Substance / mixture TOP GASKET mixture  
Number 1 05.0002
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
mixture's intended use Barrier (Sealant).  
Disapproved uses of mixture For professional use only.
- 1.3. Details of the supplier of the safety data sheet**  
**Supplier**  
Name or trade name RETECH, s.r.o.  
Address Vackova 1541/4, Praha 5 - Stodůlky, 155 00  
Czech Republic  
Identification number (ID) 25018205  
Phone +420327596428  
E-mail info@retech.cz  
Web address www.retech.com
- Competent person responsible for the safety data sheet**  
Name RETECH, s.r.o.  
E-mail info@retech.cz
- 1.4. Emergency telephone number**  
RETECH, Suchdol 212, 285 02 Suchdol u Kutné Hory, Czech Republic; Telephone number: +420 327 596 128 (7.30-16.00 hour)  
Poisoning information centre, Na Bojišti 1, Praha, Czech Republic, Tel.: non-stop +420 224 919 293 or +420 224 915 402, Information on health risks only - acute poisoning of humans and animals.

**SECTION 2: Hazards identification****2.1. Substance or mixture classification****Classification of the mixture in accordance with Regulation (EC) No 1272/2008**

The mixture is classified as dangerous.

Aerosol 3, H229  
Skin Irrit. 2, H315  
Eye Irrit. 2, H319

Full text of all classifications and hazard statements is given in the section 16.

**Most serious adverse physico-chemical effects**

Pressurised container: May burst if heated.

**Most serious adverse effects on human health and the environment**

Causes serious eye irritation. Causes skin irritation.

**2.2. Label elements****Hazard pictogram****Signal word**

Warning

**Hazard statements**

H229 Pressurised container: May burst if heated.  
H315 Causes skin irritation.

**TOP GASKET**

Creation date	23. September 2015		
Revision date	07. May 2018	Version	1.1

H319 Causes serious eye irritation.

**Precautionary statements**

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents/container to in accordance with national regulations.

**2.3. Other hazards**

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**
**Chemical characterization**

Mixture of substances and additives specified below.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
CAS: 13170-23-5 EC: 236-112-3	diacetoxydi-tert-butoxysilane	2-3	Acute Tox. 4, H302 Skin Corr. 1B, H314	
CAS: 4253-34-3 EC: 224-221-9	methylsilanetriyl-triacetate	1-2	Acute Tox. 4, H302 Skin Corr. 1B, H314	
Index: 607-002-00-6 CAS: 64-19-7 EC: 200-580-7	acetic acid	0,01-0,1	Flam. Liq. 3, H226 Skin Corr. 1A, H314 Specific concentration limit: Skin Corr. 1A, H314: C ≥ 90 % Skin Irrit. 2, H315: 10 % ≤ C < 25 % Skin Corr. 1B, H314: 25 % ≤ C < 90 % Eye Irrit. 2, H319: 10 % ≤ C < 25 %	

Full text of all classifications and hazard statements is given in the section 16.

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

**Inhalation**

Terminate the exposure immediately; move the affected person to fresh air. Respiratory arrest - provide artificial respiration immediately. Provide medical treatment.

**Skin contact**

Remove contaminated clothes. Rinse skin with water/shower. Provide medical treatment.

**Eye contact**

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Provide medical treatment.

**TOP GASKET**

Creation date	23. September 2015		
Revision date	07. May 2018	Version	1.1

**Ingestion**

Rinse mouth immediately and drink large quantities of water. Provide medical treatment. Do not induce vomiting unless directed to do so by medical personnel.

**4.2. Most important symptoms and effects, both acute and delayed****Inhalation**

Possible irritation of airways, cough.

**Skin contact**

Causes skin irritation. Adverse symptoms may include the following: Erythema, oedema, dryness and crackness of skin.

**Eye contact**

Causes serious eye irritation. Adverse symptoms may include the following: Irritation, lacrimation, pain. Redness.

**Ingestion**

Adverse symptoms may include the following: Lower abdominal pain. Burning. Nausea, vomiting.

**4.3. Indication of any immediate medical attention and special treatment needed**

not available

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Carbon dioxide, foam, powder. Water mist.

**Unsuitable extinguishing media**

Not defined.

**5.2. Special hazards arising from the substance or mixture**

Explosion risk in case of fire. Do not inhale gases and vapours.

**5.3. Advice for firefighters**

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment for work. Remove all ignition sources. Keep unprotected persons away.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. Ventilate the room.

**6.4. Reference to other sections**

See the Section 7, 8 and 13.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Take precautionary measures against static discharge. Do not spray on an open flame or other ignition source. Vapours mixed up with air can be explosive. Provide sufficient ventilation. Do not eat, drink or smoke when using this product. Do not inhale aerosols.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in a well-ventilated place.

**The specific requirements or rules relating to the substance/mixture**

Keep away from sources of heating, ignition and direct sunlight.

**7.3. Specific end use(s)**

not available

**TOP GASKET**

Creation date 23. September 2015  
Revision date 07. May 2018 Version 1.1

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

The mixture contains substances for which occupational exposure limits are set.

**United Kingdom of Great Britain and Northern Ireland**

Substance name (component)	Type	Time of exposure	Value	Note	Source
acetic acid (CAS: 64-19-7)	WEL	8 hours	25 mg/m <sup>3</sup>	The UK Advisory Committee on Toxic Substances has expressed concern that, for the OELs shown in parentheses, health may not be adequately protected because of doubts that the limit was not soundly-based. These OELs were included in the published UK 2002 list and its 2003 supplement, but are omitted from the published 2005 list.	Gestis
	WEL	Short-term	37 mg/m <sup>3</sup>	The UK Advisory Committee on Toxic Substances has expressed concern that, for the OELs shown in parentheses, health may not be adequately protected because of doubts that the limit was not soundly-based. These OELs were included in the published UK 2002 list and its 2003 supplement, but are omitted from the published 2005 list.	
	WEL	8 hours	10 ppm	The UK Advisory Committee on Toxic Substances has expressed concern that, for the OELs shown in parentheses, health may not be adequately protected because of doubts that the limit was not soundly-based. These OELs were included in the published UK 2002 list and its 2003 supplement, but are omitted from the published 2005 list.	

**TOP GASKET**

Creation date 23. September 2015  
Revision date 07. May 2018 Version 1.1

**United Kingdom of Great Britain and Northern Ireland**

Substance name (component)	Type	Time of exposure	Value	Note	Source
acetic acid (CAS: 64-19-7)	WEL	Short-term	15 ppm	The UK Advisory Committee on Toxic Substances has expressed concern that, for the OELs shown in parentheses, health may not be adequately protected because of doubts that the limit was not soundly-based. These OELs were included in the published UK 2002 list and its 2003 supplement, but are omitted from the published 2005 list.	Gestis

**8.2. Exposure controls**

Follow the usual measures intended for health protection at work and especially for good ventilation. Take off contaminated clothing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

Tightly sealed goggles.

**Skin protection**

Hand protection: It is not needed.

Other protection: Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344).

**Respiratory protection**

Use a mask with filter when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. Filter of type B in combination with filter of type P.

**Thermal hazard**

Not available.

**Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Appearance	paste
Physical state	no data available at 20°C
color	red
Odour	sharp
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	>150 °C
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available

**TOP GASKET**

Creation date	23. September 2015	Version	1.1
Revision date	07. May 2018		

Relative density	data not available
Solubility(ies)	
solubility in water	insoluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	>400 °C
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available
data not available	

**9.2. Other information**

Density	data not available
ignition temperature	data not available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

When used in the standard way, there is not any dangerous reaction with other substances.

**10.2. Chemical stability**

The product is stable under normal conditions.

**10.3. Possibility of hazardous reactions**

When used in the standard way, there is not any dangerous reaction with other substances.

**10.4. Conditions to avoid**

Protect against overheating.

**10.5. Incompatible materials**

Protect against strong oxidizing agents and reducing agents. Protect against strong acids, bases and oxidizing agents.

**10.6. Hazardous decomposition products**

not available

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

No toxicological data is available for the mixture.

**Acute toxicity**

Based on available data the classification criteria are not met.

acetic acid

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	3310 mg/kg		Rat	
Dermal	LD <sub>50</sub>	1060 mg/kg		Rabbit	
Inhalation	LC <sub>50</sub>	11.4 mg/l	4 hour	Rat	

TOP GASKET

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	>5000 mg/kg		Rat	
Dermal	LD <sub>50</sub>	>2000 mg/kg		Rabbit	

**Skin corrosion/irritation**

Causes skin irritation.

**TOP GASKET**

Creation date	23. September 2015	Version	1.1
Revision date	07. May 2018		

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation**

Based on available data the classification criteria are not met.

**Germ cell mutagenicity**

Based on available data the classification criteria are not met.

**Carcinogenicity**

Based on available data the classification criteria are not met.

**Reproductive toxicity**

Based on available data the classification criteria are not met.

**Toxicity for specific target organ - single exposure**

Based on available data the classification criteria are not met.

**Toxicity for specific target organ - repeated exposure**

Based on available data the classification criteria are not met.

**Aspiration hazard**

Based on available data the classification criteria are not met.

**SECTION 12: Ecological information****12.1. Toxicity****Acute toxicity**

Data for the mixture are not available.

**12.2. Persistence and degradability**

Not available.

**12.3. Bioaccumulative potential**

Not available.

**12.4. Mobility in soil**

Not available.

**12.5. Results of PBT and vPvB assessment**

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

**12.6. Other adverse effects**

Not available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste.

**Legislation of waste**

Council Directive 75/442/EEC on waste, as amended. Decree No. 383/2001 Coll., on details regarding waste handling as amended. Decree No. 93/2016 Coll., (waste catalogue) as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

**TOP GASKET**

Creation date	23. September 2015		
Revision date	07. May 2018	Version	1.1

**Waste type code**

08 04 09 waste adhesives and sealants containing organic solvents or other dangerous substances

**Packaging waste type code**

15 01 11 metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

**SECTION 14: Transport information**

**14.1. UN number**

UN 1950

**14.2. UN proper shipping name**

AEROSOLS

**14.3. Transport hazard class(es)**

2 Gases

**14.4. Packing group**

not available

**14.5. Environmental hazards**

No

**14.6. Special precautions for user**

Reference in the Sections 4 to 8.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not available

**Additional information**

Hazard identification No.

UN number

Classification code

Safety signs



(Kemler Code)

5A

2.2



**Road transport ADR**

Limited amount

1 L

Tunnel restriction code

(E)

**Air transport - ICAO/IATA**

Packaging instructions passenger

203

**Marine transport - IMDG**

EmS (emergency plan)

F-D, S-U

Marine pollution

No



**TOP GASKET**

Creation date	23. September 2015		
Revision date	07. May 2018	Version	1.1

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended (the Chemical Act). Decree No. 80/2014 Coll., amending the Decree No. 194/2001 Coll., laying down technical requirements for aerosol sprays as amended. Decree No. 432/2003 Coll., laying down conditions for assigning categories to individual jobs, limit values of indices from biological exposure tests, conditions for the sampling of biological materials for biological exposure and the particulars of the reports on work with asbestos and biological agents as amended.

**15.2. Chemical safety assessment**

not available

**SECTION 16: Other information****A list of standard risk phrases used in the safety data sheet**

H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

**Guidelines for safe handling used in the safety data sheet**

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container to in accordance with national regulations.

**Other important information about human health protection**

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

**Key to abbreviations and acronyms used in the safety data sheet**

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC <sub>50</sub>	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union

**TOP GASKET**

Creation date	23. September 2015		
Revision date	07. May 2018	Version	1.1

IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC <sub>50</sub>	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC <sub>50</sub>	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD <sub>50</sub>	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log K <sub>ow</sub>	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aerosol	Flammable aerosol
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation

**Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

**Recommended restrictions of use**

not available

**Information about data sources used to compile the Safety Data Sheet**

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

**The changes (which information has been added, deleted or modified)**

2, 3, 8, 11, 12, 15, 16

**TOP GASKET**

Creation date	23. September 2015		
Revision date	07. May 2018	Version	1.1

**Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.