

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2016

Version number 6

Revision: 18.04.2016

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

- **1.1 Product identifier**
- **Trade name:** Wabco seal TM
- **Article number:** 830 407 084 4
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Product category PC1** Adhesives, sealants
- **Application of the substance / the mixture** Sealant
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
WABCO Vertriebs GmbH & CO. KG
Am Lindener Hafen 21
30453 Hannover
Germany
Tel.: +49 511 922 0
-
- **Informing department:**
Information available by telephone number for respective country given above.
- **1.4 Emergency telephone number:**
Emergency control center for poisoning cases Berlin +49 (0) 30 30 686 790 (German and English)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
tetramethylene dimethacrylate
Triethylene glycol dimethacrylate
maleic acid
2'-phenylacetohydrazide
N,N'-Ethan-1,2-diylbis(12-hydroxyoctadecan-1-amid)
- **Hazard statements**
H317 May cause an allergic skin reaction.
- **Precautionary statements**
P280 Wear protective gloves / eye protection.

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P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

- **Labelling of packages where the contents do not exceed 125 ml**
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
tetramethylene dimethacrylate
Triethylene glycol dimethacrylate
maleic acid
2'-phenylacetohydrazide
N,N'-Ethan-1,2-diylbis(12-hydroxyoctadecan-1-amid)
- **Hazard statements**
H317 May cause an allergic skin reaction.
- **Precautionary statements**
P280 Wear protective gloves / eye protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 2082-81-7 EINECS: 218-218-1 Reg.nr.: 01-2119967415-30	tetramethylene dimethacrylate ⚠ Skin Sens. 1B, H317	10-<25%
CAS: 109-16-0 EINECS: 203-652-6 Reg.nr.: 01-2119969287-21	Triethylene glycol dimethacrylate ⚠ Skin Sens. 1B, H317	5-<10%
CAS: 114-83-0 EINECS: 204-055-3	2'-phenylacetohydrazide ⚠ Acute Tox. 3, H301; ⚠ Carc. 2, H351; ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2, H319; ⚠ Skin Sens. 1, H317; ⚠ STOT SE 3, H335	< 1%
CAS: 123-26-2 EINECS: 204-613-6 Reg.nr.: 01-211997865-26	N,N'-Ethan-1,2-diylbis(12-hydroxyoctadecan-1-amid) ⚠ Skin Sens. 1B, H317; ⚠ Aquatic Chronic 4, H413	< 1%
CAS: 80-15-9 EINECS: 201-254-7	α,α -dimethylbenzyl hydroperoxide ⚠ Org. Perox. E, H242; ⚠ Acute Tox. 3, H331; ⚠ STOT RE 2, H373; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; ⚠ Acute Tox. 4, H312	< 1%
CAS: 110-16-7 EINECS: 203-742-5 Reg.nr.: 01-2119488705-25	maleic acid ⚠ Acute Tox. 4, H302; ⚠ Acute Tox. 4, H312; ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2, H319; ⚠ Skin Sens. 1, H317; ⚠ STOT SE 3, H335	< 1%

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· **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information** Instantly remove any clothing soiled by the product.
- **After inhalation**
Take affected persons into fresh air and keep quiet.
In case of unconsciousness place patient stably in side position for transportation.
Seek medical treatment in case of complaints.
- **After skin contact**
Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing**
Rinse mouth.
Do not induce vomiting.
Drink copious amounts of water and provide fresh air. Instantly call for doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, Foam, Fire-extinguishing powder.
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**
Nitrogen oxides (NO_x)
Carbon monoxide (CO)
- **5.3 Advice for firefighters** Use water to keep fire exposed containers cool.
- **Protective equipment:**
Wear self-contained breathing apparatus.
Wear full protective suit.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Avoid contact with eyes and skin.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.
 Avoid contact with eyes and skin.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
 Store cool and dry in tightly closed receptacles.
 Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Storage between 8 and 21 °C.
- **Storage class** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

2082-81-7 tetramethylene dimethacrylate

Dermal	Worker - Long term - Systemic effects	4.2 mg/kg bw/day
Inhalative	Worker - Long term - Systemic effects	14.5 mg/m ³

110-16-7 maleic acid

Dermal	Worker - Long term - Local effects	0.04 mg/cm ² skin
	Worker - Acute - Local effects	0.55 mg/cm ² skin
	Worker - Long term - Systemic effects	3.3 mg/kg bw/day
	Workers - acute - systemic effects	58 mg/kg bw/day
Inhalative	Worker - Long term - Local effects	3 mg/m ³
	Worker - Long term - Systemic effects	3 mg/m ³
	Worker - Acute - Local effects	3 mg/m ³
	Worker - Acute - Systemic effects	3 mg/m ³

· PNECs

110-16-7 maleic acid

PNEC aqua (freshwater)	0.1 mg/l
PNEC Water (Marine water)	0.01 mg/l
PNEC sediment (freshwater)	0.334 mg/kg dw
PNEC Sediment (Marine water)	0.0334 mg/kg dw
PNEC Soil	0.0415 mg/kg
PNEC microorganisms (STP)	44.6 mg/l
PNEC aqua (intermittent release)	0.4281 mg/l

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- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Take off immediately all contaminated clothing
Wash hands during breaks and at the end of the work.
- **Breathing equipment:**
Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.
Filter A.
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
- **Protection of hands:**



Protective gloves

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** Impervious gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **For the permanent contact gloves made of the following materials are suitable:**
Nitrile rubber, NBR
Thickness ≥ 0.4 mm.
- **As protection from splashes gloves made of the following materials are suitable:**
Nitrile rubber, NBR
Thickness ≥ 0.4 mm.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Pasty
Colour:	Yellow
Odour:	Mild

· **pH-value:** Not determined.

· Change in condition

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	> 149 °C

· **Flash point:** > 100 °C

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Vapour pressure at 50 °C:** < 300 hPa

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- | | |
|---|--|
| · Density at 20 °C | 1.18 g/cm ³ |
| · Solubility in / Miscibility with Water: | Soluble. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| dynamic at 25 °C: | 70000-130000 mPas |
| kinematic: | Not determined. |
| · Solvent content: | |
| · Organic solvents: | |
| VOC EU | < 3 % (2010/75/EC) |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Reacts with strong acids.
Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

2082-81-7 tetramethylene dimethacrylate

Oral	LD50	10120 mg/kg (Rat)
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123-26-2 N,N'-Ethan-1,2-diylbis(12-hydroxyoctadecan-1-amid)

Oral	LD50	> 2000 mg/kg (Rat)
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80-15-9 α,α -dimethylbenzyl hydroperoxide

Oral	LD50	550 mg/kg (Rat)
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Dermal	LD50	500 mg/kg (Rat)
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Inhalative	LC50/4 h	220 ppm (Rat)
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110-16-7 maleic acid

Oral	LD50	708 mg/kg (Rat)
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Dermal	LD50	1560 mg/kg (Rabbit)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**
More frequent and continuous contact with the skin may result in irritation of the skin.
- **Serious eye damage/irritation** Splashes can cause temporary eye irritation.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.

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- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-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

· Aquatic toxicity:

2082-81-7 tetramethylene dimethacrylate

LC50 (48 h)	32.5 mg/l (fish) (DIN 38412-15)
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123-26-2 N,N'-Ethan-1,2-diylbis(12-hydroxyoctadecan-1-amid)

EC50 (72 h)	>100 mg/l (Pseudokirchneriella subcapitata) (OECD TG 201)
EC50 (48 h)	>10 mg/l (Daphnia magna) (OECD TG 202)
EC50 (96 h)	> 10 mg/l (fish)
NOEC (72 h)	100 mg/l (Pseudokirchneriella subcapitata) (OECD TG 201)

80-15-9 α,α -dimethylbenzyl hydroperoxide

EC50 (48 h)	18 mg/l (Daphnia magna)
LC50 (96 h)	3.9 mg/l (Oncorhynchus mykiss)
ErC50 (72 h)	3.1 mg/l (Pseudokirchneriella subcapitata) (OECD TG 201)

110-16-7 maleic acid

EC50 (48 h)	42.81 mg/l (Daphnia magna) (OECD TG 202)
LC50 (48 h)	> 245 mg/l (orf)

- **12.2 Persistence and degradability** Heavily biodegradable

· 12.3 Bioaccumulative potential

2082-81-7 tetramethylene dimethacrylate

Biological degradability	84 % (OECD 310)
Log Kow	3.1

123-26-2 N,N'-Ethan-1,2-diylbis(12-hydroxyoctadecan-1-amid)

Biological degradability	22 % (OECD 301 D)
Log Kow	5.86 (OECD 117)

80-15-9 α,α -dimethylbenzyl hydroperoxide

Bioconcentration factor (BCF)	9.1
Biological degradability	0 % (OECD 301 B)
Log Kow	2.16 (OECD TG 305)

110-16-7 maleic acid

Biological degradability	97.08 %
Log Kow	-1.3 (OECD TG 107)

- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

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- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
The waste code numbers mentioned are recommendations based on the probable use of the product.

- **European waste catalogue**

08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
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- **Uncleaned packagings:**
- **Recommendation:**
Packagings that may not be cleansed are to be disposed of in the same manner as the product.
Dispose of packaging according to regulations on the disposal of packagings.

SECTION 14: Transport information

- | | |
|---|-----------------|
| <ul style="list-style-type: none"> · 14.1 UN-Number · ADR,RID,ADN, ADN, IMDG, IATA | Void |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR,RID,ADN, ADN, IMDG, IATA | Void |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR,RID,ADN, ADN, IMDG, IATA · Class | Void |
| <ul style="list-style-type: none"> · 14.4 Packing group · ADR,RID,ADN, IMDG, IATA | Void |
| <ul style="list-style-type: none"> · 14.5 Environmental hazards: | Not applicable. |
| <ul style="list-style-type: none"> · 14.6 Special precautions for user | Not applicable. |
| <ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| <ul style="list-style-type: none"> · UN "Model Regulation": | Void |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Because the formulation was not available, the material safety data sheet is based on the information of the material safety data sheet of the supplier.

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H242 Heating may cause a fire.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

- **Department issuing data specification sheet:**

The safety data sheets were drawn up in cooperation with the Umweltkanzlei Dr.Rhein Beratungs- und Prüfgesellschaft mbH, Phone: +49 5066 900990.

- **Abbreviations and acronyms:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

SVHC: Substances of Very High Concern

Org. Perox. E: Organic peroxides – Type E/F

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

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