

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.01.2023

Version number 11 (replaces version 10)

Revision: 13.01.2023

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

· **1.1 Product identifier**

· **Trade name:** WAKOL MS 246 Starmonti

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

No further relevant information available.

· **Application of the substance / the mixture** Adhesives

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

WAKOL GmbH
Bottenbacher Str. 30
D-66954 Pirmasens
info@wakol.com
+49 6331 8001 0

· **Informing department:**

Product safety department.
msds@wakol.de

· **1.4 Emergency telephone number:**

Emergency CONTACT (24-Hour-Number):
GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



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 GB CLP regulation.

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labelling:**

4-morpholinecarbaldehyde
3-aminopropyltriethoxysilane

· **Hazard statements**

H317 May cause an allergic skin reaction.

· **Precautionary statements**

P261 Avoid breathing vapours.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Adhesive

· **Dangerous components:**

CAS: 4394-85-8	4-morpholinecarbaldehyde	>1–≤2.5%
EINECS: 224-518-3	⚠ Skin Sens. 1, H317	
CAS: 919-30-2	3-aminopropyltriethoxysilane	>0.25–<1%
EINECS: 213-048-4	⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; ⚠ Skin Sens. 1, H317	
Reg.nr.: 01-2119480479-24		
CAS: 52829-07-9	Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	>0.25–<1%
EINECS: 258-207-9	⚠ Repr. 2, H361f; ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1,	
Reg.nr.: 01-2119537297-32	H400; Aquatic Chronic 2, H411	

· **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**

· **After inhalation** Supply fresh air; consult doctor in case of complaints.

· **After skin contact** Clean with water and soap. If possible, also wash with polyethylene glycol 400.

· **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing** Do not induce vomiting; call for medical help immediately.

· **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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· **5.3 Advice for firefighters**

· **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

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Wear protective equipment. Keep unprotected persons away.

· 6.2 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.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

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 disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling *Use only in well ventilated areas.*

· 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: *No special requirements.*

· Information about storage in one common storage facility: *Not required.*

· Further information about storage conditions: *Store in cool, dry conditions in well sealed receptacles.*

· 7.3 Specific end use(s) *No further relevant information available.*

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Components with critical 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

4394-85-8 4-morpholinecarbaldehyde

Oral DNEL 8 mg/kg/day (consumer (long-term))

Dermal DNEL 8 mg/kg (consumer (long-term))

DNEL 0.293 mg/cm² (workwr (long-term))

Inhalative DNEL 29 mg/m³ (consumer (long-term))

98 mg/m³ (workwr (long-term))

919-30-2 3-aminopropyltriethoxysilane

Oral DNEL 5 mg/kg/day (consumer (short-term))

Dermal DNEL 5 mg/kg/day (consumer (short-term))

8.3 mg/kg/day (workers (short-term))

Inhalative DNEL 17.4 mg/m³/day (consumer (short-term))

59 mg/m³/day (workers (short-term))

52829-07-9 Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

Oral DNEL 0.4 mg/kg/day (consumer (long-term))

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Dermal DNEL 2.82 mg/kg/day (workers (short-term))
1.6 mg/kg/day (workwr (long-term))
Inhalative DNEL 0.8 mg/kg/day (conmsumer (long-term))
DNEL 0.69 mg/m³ (conmsumer (long-term))

· PNECs

4394-85-8 4-morpholinecarbaldehyde

PNEC 0.5 mg/l (freshwater)
0.05 mg/l (sea water)
5 mg/l (water - partially release)
2,000 mg/l (purification plant)
PNEC 0.0764 mg/kg (sediment (sea water))
1.85 mg/kg (sediment (freshwater))

919-30-2 3-aminopropyltriethoxysilane

PNEC 0.33 mg/l (freshwater)
0.033 mg/l (sea water)
3.3 mg/l (water - partially release)
13 mg/l (STP)
PNEC 0.26 mg/kg (sediment)
0.04 mg/kg (soil)

52829-07-9 Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

PNEC 0.018 mg/l (freshwater)
0.0018 mg/l (sea water)
0.007 mg/l (water - partially release)
1 mg/l (STP)
PNEC 5.9 mg/kg (soil)
2.9 mg/kg (sediment (sea water))
29 mg/kg (sediment (freshwater))

· Additional information:

The lists valid during the making were used as basis.
See Section 10.

· 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures are to be adhered to when handling chemicals.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Hand protection**



Protective gloves

Preventive skin protection by use of skin-protecting agents is recommended.

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· **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.35 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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.

· **Eye/face protection**



Tightly sealed goggles

· **Body protection: Protective work clothing**

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Physical state**

Fluid

· **Colour:**

White

· **Smell:**

Characteristic

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

Undetermined.

· **Boiling point or initial boiling point and boiling range**

Undetermined.

· **Flammability**

Not applicable.

· **Lower and upper explosion limit**

· **Lower:**

Not determined.

· **Upper:**

Not determined.

· **Flash point:**

>200 °C

· **Decomposition temperature:**

Not determined.

· **pH**

Mixture reacts violently with water.

· **Viscosity:**

· **Kinematic viscosity**

Not determined.

· **kinematic (calculated) at 40°C:**

· **dynamic:**

Not determined.

· **Solubility**

· **Water:**

Not miscible or difficult to mix.

· **Partition coefficient n-octanol/water (log value)**

Not determined.

· **Steam pressure:**

Not determined.

· **Density and/or relative density**

· **Density at 20 °C**

1.52 g/cm³ (EN ISO 2811-1)

· **Relative density**

Not determined.

· **Vapour density**

Not determined.

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- **9.2 Other information**
- **Appearance:**
- **Form:** Pasty
- **Important information on protection of health and environment, and on safety.**
- **Self-inflammability:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Organic solvents:** 0.1 %
- **VOC** 0.1 %
- **Change in condition**
- **Evaporation rate** Not determined.
- **Information with regard to physical hazard classes**
- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

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 according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **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.
- **Additional information:** Product releases low quantities of methanol during appropriated application.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
 - **Acute toxicity** Based on available data, the classification criteria are not met.
 - **LD/LC50 values that are relevant for classification:**
-
- 4394-85-8 4-morpholinecarbaldehyde
Oral LD50 >7,360 mg/kg (rat)

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Dermal LD50 >18,400 mg/kg (rabbit)

919-30-2 3-aminopropyltriethoxysilane

Oral LD50 1,490 mg/kg (rat) (EPA)

Dermal LD50 4,076 mg/kg (rabbit) (EPA)

Inhalative LC50/6h >144 mg/l (rat) (OECD TG 403)

52829-07-9 Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

Oral LD50 3,700 mg/kg (rat)

Dermal LD50 3,170 mg/kg (rat)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **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.
- **Subacute to chronic toxicity:**

919-30-2 3-aminopropyltriethoxysilane

Oral NOAEL/90d 200 mg/kg (rat) (OECD RG 408)

- **11.2 Information on other hazards**
- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**

4394-85-8 4-morpholinecarbaldehyde

LC50/96h >500 mg/l (*Leuciscus idus*)

EC50/48h >500 mg/l (*Daphnia magna*)

EC50/72h 23,880 mg/l (*Scenedesmus subspicatus*)

919-30-2 3-aminopropyltriethoxysilane

LC0/96h >934 mg/l (*Brachydanio rerio*) (OECD TG 203)

EC50/48h 331 mg/l (*Daphnia magna*) (OECD TG 202)

EC50/72h >1,000 mg/l (*Scenedesmus subspicatus*) (OECD TG 201)

EC10/5h 13 mg/l (*Pseudomonas putida*)

NOEC/72h 1.3 mg/l (*Scenedesmus subspicatus*) (OECD TG 201)

52829-07-9 Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

NOEC/21d (static) 0.23 mg/l (*Daphnia magna*) (OECD RL 211)

LC50/96h 4.4 mg/l (*Leuciscus macrochirus*) (OECD RL 203)

EC50/48h 8.6 mg/l (*Daphnia magna*) (OECD RL 202 T1)

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EC50/3h >100 mg/l (sludge) (OECD RL 209)

EC50/72h 0.705 mg/l (*Scenedesmus subspicatus*) (RL 92/69/EWG, C.3)

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

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

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Remark:** Harmful to fish

· **Additional ecological information:**

· **General notes:**

Harmful to aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Must be specially treated adhering to official regulations.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA**

Void

· **14.2 UN proper shipping name**

· **ADR, IMDG, IATA**

Void

· **14.3 Transport hazard class(es)**

· **ADR, ADN, IMDG, IATA**

· **Class**

Void

· **14.4 Packing group**

· **ADR, IMDG, IATA**

Void

· **14.5 Environmental hazards:**

Not applicable.

· **14.6 Special precautions for user**

Not applicable.

· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· **Transport/Additional information:**

Not dangerous according to the above specifications.

· **UN "Model Regulation":**

Void

GB

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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.
- **National regulations**
- **VOC (EU)** 1.2 g/l
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.

Relevant phrases

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H361f Suspected of damaging fertility.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

- ADR: Accord relatif au transport international 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)
- VOC: Volatile Organic Compounds (USA, EU)
- DNEL: Derived No-Effect Level (UK REACH)
- PNEC: Predicted No-Effect Concentration (UK REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Skin Sens. 1: Skin sensitisation – Category 1
- Repr. 2: Reproductive toxicity – Category 2
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2