

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/25/2023

Reviewed on 10/25/2023

1 Identification

- **Product identifier**
- **Trade name:** *WAKOL MS 246 Starmonti*
- **Application of the substance / the mixture** *Adhesives*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
*Loba-Wakol, LLC
2732 Hwy 74 West
Wadesboro, NC 28170, USA
info@loba-wakol.com
+1 704 527 5919*
- **Information department:** *Product safety department.*
- **Emergency telephone number:**
*Emergency CONTACT (24-Hour-Number)
GBK/Infotrac ID 98229: (USA domestic) 1 800 535 5053 or
International (001) 352 323 3500*

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn child.



GHS07

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07



GHS08

- **Signal word** *Warning*

- **Hazard-determining components of labeling:**

3-aminopropyltriethoxysilane

Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

4-morpholinecarbaldehyde

- **Hazard statements**

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

- **Precautionary statements**

Obtain special instructions before use.

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace.

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

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If on skin: Wash with plenty of water.
 IF exposed or concerned: Get medical advice/attention.
 Specific treatment (see on this label).
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 0
 Fire = 1
 Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *0
 Fire = 1
 Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description: Adhesive**

· **Dangerous components:**

4394-85-8 4-morpholinecarbaldehyde	>1-≤2.5%
⚠ Sensitization - Skin 1, H317	
919-30-2 3-aminopropyltriethoxysilane	>0.25-≤1%
⚠ Skin Corrosion 1B, H314; ⚠ Acute Toxicity - Oral 4, H302; Sensitization - Skin 1, H317; Flammable Liquids 4, H227	
52829-07-9 Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	>0.25-≤1%
⚠ Toxic to Reproduction 2, H361; ⚠ Eye Damage 1, H318	
13822-56-5 3-(trimethoxysilyl)propylamine	>0.25-≤1%
⚠ Eye Damage 1, H318; ⚠ Skin Irritation 2, H315; Flammable Liquids 4, H227	

4 First-aid measures

· **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; immediately call for medical help.

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- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
- **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.
- **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 section 13.
Ensure adequate ventilation.
- **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.
- **PAC-1:**
471-34-1 calcium carbonate: 45 mg/m³
25322-69-4 Propylene Glycol: 30 mg/m³
919-30-2 3-aminopropyltriethoxysilane: 1.9 mg/m³
13822-56-5 3-(trimethoxysilyl)propylamine: 30 mg/m³
- **PAC-2:**
471-34-1 calcium carbonate: 210 mg/m³
25322-69-4 Propylene Glycol: 330 mg/m³
919-30-2 3-aminopropyltriethoxysilane: 21 mg/m³
13822-56-5 3-(trimethoxysilyl)propylamine: 330 mg/m³
- **PAC-3:**
471-34-1 calcium carbonate: 1,300 mg/m³
25322-69-4 Propylene Glycol: 2,000 mg/m³

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919-30-2 3-aminopropyltriethoxysilane: 350 mg/m³

13822-56-5 3-(trimethoxysilyl)propylamine: 2,000 mg/m³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Use only in well ventilated areas.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** 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.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **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.
- **Additional information:**
The lists that were valid during the creation were used as basis.
See Section 10.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
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.
- **Protection of hands:**



Protective gloves

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

- **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.

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· **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 protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Pasty

Color: White

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value:** Mixture reacts violently with water.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** >200 °C (>392 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Ignition temperature:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 1.52 g/cm³ (12.684 lbs/gal) (EN ISO 2811-1)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic: Not determined.

Kinematic: Not determined.

Organic solvents: 0.1 %

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VOC content: 0.1 %

· **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.
- **Additional information:** Product releases low quantities of methanol during appropriated application.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

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

4394-85-8 4-morpholinecarbaldehyde

Oral LD50 >7,360 mg/kg (rat)

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)

· **Primary irritant effect:**

· **on the eye:** Based on available data, the classification criteria are not met.

· **Sensitization:** Sensitization possible through skin contact.

· **Subacute to chronic toxicity:**

919-30-2 3-aminopropyltriethoxysilane

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

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

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- **NTP (National Toxicology Program)**
None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

12 Ecological information

- **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)
 - EC50/3h >100 mg/l (sludge) (OECD RL 209)
 - EC50/72h 0.705 mg/l (*Scenedesmus subspicatus*) (RL 92/69/EWG, C.3)
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
 - Harmful to aquatic organisms
 - Water hazard class 2 (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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **New Jersey Right-to-Know List:**

None of the ingredients is listed.

· **New Jersey Special Hazardous Substance List:**

None of the ingredients is listed.

· **Pennsylvania Right-to-Know List:**

None of the ingredients is listed.

· **Pennsylvania Special Hazardous Substance List:**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07 GHS08

· **Signal word Warning**

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

3-aminopropyltriethoxysilane

Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

4-morpholinecarbaldehyde

· **Hazard statements**

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

· **Precautionary statements**

Obtain special instructions before use.

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace.

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

If on skin: Wash with plenty of water.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

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

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **National regulations:**
- **VOC:**
- **VOC (EU)** 1.2 g/l
- **VOC (USA):** 1.2 g/l / 0.01 lb/gal
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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**

- H227 Combustible liquid.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H361 Suspected of damaging fertility or the unborn child.

- **Contact:**

- **Date of preparation / last revision** 10/25/2023

- **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
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- 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)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Flammable Liquids 4: Flammable liquids – Category 4
- Acute Toxicity - Oral 4: Acute toxicity – Category 4
- Skin Corrosion 1B: Skin corrosion/irritation – Category 1B
- Skin Irritation 2: Skin corrosion/irritation – Category 2
- Eye Damage 1: Serious eye damage/eye irritation – Category 1
- Sensitization - Skin 1: Skin sensitisation – Category 1
- Toxic to Reproduction 2: Reproductive toxicity – Category 2