

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 8 Sept 2023

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Version: 2



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Mabanol Gear Syn CLP 100

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

1.1. Product identifier

Trade name/designation:

Mabanol Gear Syn CLP 100

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

Use of the substance/mixture:

Industrial uses

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Mabanol GmbH & Co. KG

Koreastraße 7
20457 Hamburg
Germany

Telephone: 0049 (0) 40 36809988

E-mail: info@mabanol.com

Website: www.mabanol.com

E-mail (competent person): giznord@giz-nord.de

1.4. Emergency telephone number

Giftinformationszentrale Göttingen , 24h: 0049 (0) 551 1 92 40

SECTION 2: Hazards identification

* 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	

* 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard components for labelling:

Amines, C10-C14-tert-alkyl; C16-18-(even numbered, saturated and unsaturated)-alkylamines

Hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.
Precautionary statements Prevention	
P273	Avoid release to the environment.
Precautionary statements Disposal	
P501	Dispose of contents/container to Dispose of waste according to applicable legislation..

Additional information:

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. This mixture contains no substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH.

2.3. Other hazards

No data available

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Hazardous combustion products:

In case of fire: Gases/vapours, toxic. In case of fire may be liberated: Nitrogen oxides (NOx). Carbon monoxide. Carbon dioxide (CO₂). Sulphur dioxide (SO₂).

5.3. Advice for firefighters

Do not inhale explosion and combustion gases. Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Use personal protection equipment. Ventilate affected area. Special danger of slipping by leaking/spilling product.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

For cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

* 7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8). Avoid: Generation/formation of mist. generation/formation of aerosols.

Fire prevent measures:

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin. Wash hands before breaks and after work. Apply skin care products after work. Do not put any product-impregnated cleaning rags into your trouser pockets. Used working clothes should not be worn outside the work area. Wash contaminated clothing before reuse.

* 7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product.

Hints on storage assembly:

Keep away from: Oxidizing agent.

Do not store together with: Food and feedingstuffs.

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Storage class (TRGS 510, Germany): 10 - Combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

Temperature control required. Protect from direct sunlight. Keep container tightly closed.
storage temperature: 0°C - 40°C.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

* 8.1. Control parameters

8.1.1. Occupational exposure limit values

No data available

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
Amines, C10-C14-tert-alkyl EC No.: 701-175-2	2.5 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
Amines, C10-C14-tert-alkyl EC No.: 701-175-2	12.1 mg/m ³	① DNEL worker ② Long-term - inhalation, local effects
Amines, C10-C14-tert-alkyl EC No.: 701-175-2	1.2 mg/m ³	① DNEL Consumer ② Long-term - inhalation, local effects
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	0.38 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	0.035 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	1 mg/m ³	① DNEL worker ② Long-term - inhalation, local effects
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	1 mg/cm ²	① DNEL worker ② Acute - inhalation, local effects
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	0.04 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	0.26 µg/L	① PNEC aquatic, freshwater
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	0.026 µg/L	① PNEC aquatic, marine water

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Substance name	PNEC Value	① PNEC type
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	0.55 mg/L	① PNEC sewage treatment plant
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	3.76 mg/kg	① PNEC sediment, freshwater
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	0.376 mg/kg	① PNEC sediment, marine water
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4	10 mg/kg	① PNEC soil

* 8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate ventilation.

8.2.2. Personal protection equipment



Eye/face protection:

Safety goggles with side protection. In case of increased risk add protective face shield. DIN EN 166.

Skin protection:

Tested protective gloves must be worn (EN ISO 374).

Suitable material: NBR (Nitrile rubber). Thickness of the glove material: > 0,35 mm. Breakthrough time: > 480 min.

Breakthrough times and swelling properties of the material must be taken into consideration. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection:

Usually no personal respiratory protection necessary.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Respiratory protection necessary at: exceeding exposure limit values, insufficient ventilation, aerosol or mist formation. Suitable respiratory protection apparatus: Combination filtering device.

8.2.3. Environmental exposure controls

Avoid release to the environment.

8.3. Additional information

air limit values:

Possibility of exposure to Aerosols

Limit value = 5 mg/m³ (Source ACGIH TLV)

Limit value = 10 mg/m³ (Source ACGIH STEL)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: light brown

Odour: not determined

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Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	not determined		
Melting point	not determined		
Freezing point	not determined		
Initial boiling point and boiling range	not determined		
Decomposition temperature	not determined		
Flash point	207 °C		① ASTM D93 (PM)
Evaporation rate	not determined		
Auto-ignition temperature	not determined		
Upper/lower flammability or explosive limits	not determined		
Vapour pressure	not determined		
Vapour density	not determined		
Density	0.852 g/cm ³	15 °C	① ASTM D4052
Relative density	not determined		
Bulk density	not determined		
Water solubility	Immiscible		
Partition coefficient: n-octanol/water	not determined		
Dynamic viscosity	not determined		
Kinematic viscosity	98.1 mm ² /s	40 °C	① ASTM D7279
Pour point	-51 °C		① ASTM D 5950

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Oxidising agent, strong.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

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

Amines, C10-C14-tert-alkyl EC No.: 701-175-2
LD₅₀ oral: 612 mg/kg (Rat) OECD 401
LD₅₀ dermal: 251 mg/kg (Rabbit) OECD 402
LC₅₀ Acute inhalation toxicity (gas): >157 - <249 ppmV 4 h (Rat)
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4
LD₅₀ oral: >1,200 mg/kg (Rat) OECD 401
LD₅₀ dermal: >2,000 mg/kg (Rat) OECD 402

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Acute oral toxicity:

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

Acute dermal toxicity:

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

Acute inhalation toxicity:

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

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:

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.

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.

Additional information:

Frequently or prolonged contact with skin may cause dermal irritation.

* 11.2. Information on other hazards

Endocrine disrupting properties:

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

* 12.1. Toxicity

Amines, C10-C14-tert-alkyl EC No.: 701-175-2
LC₅₀ : 1.3 mg/L 4 d (fish, <i>Oncorhynchus mykiss</i> (Rainbow trout))
EC₅₀ : 2.5 mg/L 2 d (crustaceans, <i>Daphnia magna</i> (Big water flea))
EC₅₀ : 0.435 mg/L 3 d (Algae/water plant, <i>Selenastrum capricornutum</i>)
NOEC : 0.078 mg/L 56 d (fish, <i>Oncorhynchus mykiss</i> (Rainbow trout))
NOEC : 0.05 mg/L 3 d (Algae/water plant, <i>Selenastrum capricornutum</i>)
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4
LC₅₀ : 0.06 mg/L 4 d (fish, <i>Pimephales promelas</i> (fathead minnow))
EC₅₀ : 0.98 mg/L 2 d (crustaceans, <i>Daphnia magna</i> (Big water flea)) OECD 202
NOEC : 0.013 mg/L 21 d (crustaceans, <i>Daphnia magna</i> (Big water flea)) OECD 211
ErC₅₀ : 0.38 mg/L 3 d (Algae/water plant, <i>Desmodesmus subspicatus</i>) OECD 201

Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

* 12.2. Persistence and degradability

C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4
Biodegradation: —
Remark: Readily biodegradable (according to OECD criteria).

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Additional information:

The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

* 12.3. Bioaccumulative potential

C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4
Log K_{OW} : 5.16
Bioconcentration factor (BCF): 173

Bioconcentration factor (BCF):

No information available.

12.4. Mobility in soil

No information available.

* 12.5. Results of PBT and vPvB assessment

Amines, C10-C14-tert-alkyl EC No.: 701-175-2
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
C16-18-(even numbered, saturated and unsaturated)-alkylamines CAS No.: 1213789-63-9 EC No.: 627-034-4
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

* 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

* 12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

13 02 06 *	synthetic engine, gear and lubricating oils
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*: Evidence for disposal must be provided.

Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.

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Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.3. Transport hazard class(es)			
not relevant	not relevant	not relevant	not relevant
14.4. Packing group			
not relevant	not relevant	not relevant	not relevant
14.5. Environmental hazards			
not relevant	not relevant	not relevant	not relevant
14.6. Special precautions for user			
not relevant	not relevant	not relevant	not relevant

14.7. Maritime transport in bulk according to IMO instruments

not relevant.

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]: No information available.

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds: No information available.

Observe in addition any national regulations!

15.1.2. National regulations

[DE] National regulations

Störfallverordnung (12. BImSchV)

for substances contained in the product:

This product is not assigned to a hazard category.

Water hazard class

WGK:

1 - slightly hazardous to water

Remark:

Self-classification (mixture; calculation rule).

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

* 15.3. Additional information

Water hazard class (WGK): 1 (slightly hazardous to water).

SECTION 16: Other information

* 16.1. Indication of changes

2.1.	Classification of the substance or mixture
2.2.	Label elements
3.2.	Mixtures
7.1.	Precautions for safe handling
7.2.	Conditions for safe storage, including any incompatibilities
8.1.	Control parameters
8.2.	Exposure controls
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.2.	Information on other hazards
12.1.	Toxicity

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12.2.	Persistence and degradability
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
12.6.	Endocrine disrupting properties
12.7.	Other adverse effects
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
15.3.	Additional information
16.1.	Indication of changes
16.4.	Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
16.5.	Relevant R-, H- and EUH-phrases (Number and full text)

16.2. Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: Accord européen sur le transport des marchandises dangereuses par Route (International Carriage of Dangerous Goods by Road)
AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
CAS Chemical Abstracts Service
DNEL: Derived No Effect Level
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC₅₀: Lethal concentration, 50 percent
LD₅₀: Lethal dose, 50 percent
NIOSH: National Institute of Occupational Safety and Health
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OEL: Occupational Exposure limit (Arbeitsplatzgrenzwert)
OSHA: Occupational Safety and Health Administration
PEL: permissible exposure limit (Zulässiger Expositionsgrenzwert)
PBT: persistent bioaccumulative toxic
PNEC: predicted no effect concentration
REL: Recommended exposure limit (Empfohlene Expositionsgrenze)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit (Kurzzeitgrenzwert) (15 min)
SVHC: substance of very high concern
TLV: Threshold Limit Values (Schwellwert Grenzwerte)
TRGS Technische Regeln für Gefahrstoffe
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average (Zeitlich gewichteter Mittelwert) (8 h)
VOC: Volatile Organic Compounds
vPvB: very persistent and very bioaccumulative
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

16.3. Key literature references and sources for data

No data available

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* 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	

* 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

16.6. Training advice

No data available

16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

* Data changed compared with the previous version.