Mabanol Cut 264 BF

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

* **1.1. Product identifier**

Trade name/designation:

Mabanol Cut 264 BF

UFI:
VCWV-GJM8-U552-5XM4

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

Use of the substance/mixture:
Metalworking fluids

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

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

Mabanol GmbH & Co. KG
Am Strandkai 1
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
Skin corrosion/irritation *(Skin Irrit. 2)*	H315: Causes skin irritation.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
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 pictograms:

GHS07
Exclamation mark

Signal word: Warning

Hazard components for labelling:
2-n-Butyl-benzo[d]isothiazol-3-on; dicyclohexylamine

Hazard statements for health hazards	
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements Prevention	
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing and eye protection/face protection.

Precautionary statements Response	
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Additional information:
The mixture does not contain substances >=0.1% of substances that have endocrine disrupting properties according to Regulation (EC) No. 1907/2006, Article 59(1) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

2.3. Other hazards
No data available

SECTION 3: Composition/information on ingredients

*
3.2. Mixtures
Description:
Mixture of base oils and additives.

Additional information:
The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 ‘Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method’, Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 101-83-7 EC No.: 202-980-7 REACH No.: 01-2119493354-33	**dicyclohexylamine** Acute Tox. 3 (H301, H311), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Skin Corr. 1B (H314)  Danger **Acute Toxicity Estimate** ATE (oral) 200 mg/kg ATE (dermal) 200 – 316 mg/kg	1 – < 2.5 weight-%
CAS No.: 4299-07-4 EC No.: 420-590-7	**2-n-Butyl-benzo[d]isothiazol-3-on** Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Skin Corr. 1B (H314), Skin Sens. 1 (H317)  Danger M-factor (acute): 10 M-factor (chronic): 1	0.025 – < 0.1 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:
When in doubt or if symptoms are observed, get medical advice. If unconscious but breathing normally, place in recovery position and seek medical advice.

Following inhalation:
Remove victim out of the danger area. Remove casualty to fresh air and keep warm and at rest. Where appropriate artificial ventilation. In case of respiratory tract irritation, consult a physician.

In case of skin contact:
Change contaminated, saturated clothing. After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

After eye contact:
Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

Following ingestion:
Call a physician immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps.

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

No information available.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Foam. Extinguishing powder. Carbon dioxide (CO2). Water spray jet. Water mist.

Unsuitable extinguishing media:
Full water jet.

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.

Hazardous combustion products:
In case of fire: Gases/vapours, toxic.
In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Phosphorus oxides.

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

Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely. 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. Remove persons to safety. Ventilate affected area. Avoid contact with skin, eyes and clothes. Special danger of slipping by leaking/spilling product. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition.

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. Do not allow to enter into soil/subsoil. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For containment:

Cover drains. Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control. Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up:

Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal. Ventilate affected area. 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). Use only in well-ventilated areas. Handle and open container with care. Always close containers tightly after the removal of product. Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray. Keep away from sources of ignition - No smoking.

Fire prevent measures:

Only use the material in places where open light, fire and other flammable sources can be kept away.

Environmental precautions:

Do not empty into drains. Do not allow to enter into soil/subsoil. Shafts and sewers must be protected from entry of the product.

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:

Do not empty into drains. Do not allow to enter into soil/subsoil. Shafts and sewers must be protected from entry of the product.

Hints on storage assembly:

Do not store together with: Food and feedingstuffs.
Keep away from: Oxidizing agent.

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

Further information on storage conditions:

Recommended storage temperature: 5 - 40°C.
Protect against: Frost. Heat. UV-radiation/sunlight. Water. Humidity.
storage stability: max. 12 month(s).

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

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TRGS 900 (DE)	**dicyclohexylamine** CAS No.: 101-83-7 EC No.: 202-980-7	① 0.7 ppm (5 mg/m³) ② 1.4 ppm (10 mg/m³) ⑤ (Aerosol und Dampf, kann über die Haut aufgenommen werden) AGS, H, Y, 11

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
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.353 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.1 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	PNEC Value	① PNEC type
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.00032 mg/L	① PNEC aquatic, freshwater
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.00003 mg/L	① PNEC aquatic, marine water
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	108 mg/L	① PNEC sewage treatment plant
dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	0.00529 mg/kg	① PNEC sediment, freshwater

* **8.2. Exposure controls**

8.2.1. Appropriate engineering controls

Use only in well-ventilated areas. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection (EN 166).

Skin protection:

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. Tested protective gloves must be worn (EN ISO 374). Do not wear gloves near rotary machines and tools.
Suitable material:
Wearing time with permanent contact: Suitable material: NBR (Nitrile rubber). CR (polychloroprene, chloroprene rubber).
Thickness of the glove material: 0,70 mm. Breakthrough time:: > 480 min.

Wearing time with occasional contact (splashes): Suitable material: NBR (Nitrile rubber). CR (polychloroprene, chloroprene rubber). Thickness of the glove material: 0,40 mm. Breakthrough time:: > 30 min.
Unsuitable material: PVA (Polyvinyl alcohol).
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. Check leak tightness/impermeability prior to use.
Suitable protective clothing: Not readily flammable.

Respiratory protection:
Usually no personal respirative 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.

8.2.3. Environmental exposure controls
No data available

SECTION 9: Physical and chemical properties

*
9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Colour: yellow
Odour: not determined
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	9.8	20 °C	① DIN 51369 ② 5 weight-%
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	> 100 °C		② 1013 hPa
Flash point	> 100 °C		① EN ISO 2592
Evaporation rate	*No data available*		
Auto-ignition temperature	*No data available*		
Upper/lower flammability or explosive limits	*No data available*		
Vapour pressure	*No data available*		
Vapour density	*No data available*		
Density	0.96 g/cm³	15 °C	① DIN EN ISO 12185
Bulk density	*not applicable*		
Water solubility	miscible	20 °C	
Dynamic viscosity	*No data available*		
Kinematic viscosity	≈ 210 mm²/s	20 °C	

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

dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7
LD_{50} oral: 200 mg/kg (Rat)
LD_{50} dermal: 200 – 316 mg/kg (Rabbit)

Acute oral toxicity:
No data available. The statement is derived from the properties of the single components.
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:
Irritating to skin.

Serious eye damage/irritation:
Irritating to eyes.

Respiratory or skin sensitisation:
May cause sensitization by skin contact.

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.
For viscosity data, see section 9.

Additional information:
Frequently or prolonged contact with skin may cause dermal irritation.

11.2. Information on other hazards
Endocrine disrupting properties:
No information available.

SECTION 12: Ecological information

*
12.1. Toxicity

dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7
LC_{50}: 12 mg/L 4 d (fish, Leuciscus idus (golden orfe)) OECD 203
EC_{50}: 8 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202
EC_{50}: 3.3 mg/L 3 d (Algae/water plant, Scenedesmus subspicatus) OECD 201

Aquatic toxicity:
Harmful to aquatic life.

Additional ecotoxicological information:
There are no data available on the mixture itself. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).
Do not allow uncontrolled discharge of product into the environment.

12.2. Persistence and degradability

Abiotic degradation:
Poorly eliminated from water.

Biodegradation:
Part of the components is biodegradable.

*

12.3. Bioaccumulative potential

Accumulation / Evaluation:
No indication of bioaccumulation potential.

12.4. Mobility in soil

No information available.

*

12.5. Results of PBT and vPvB assessment

dicyclohexylamine CAS No.: 101-83-7 EC No.: 202-980-7	
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.	
2-n-Butyl-benzo[d]isothiazol-3-on CAS No.: 4299-07-4 EC No.: 420-590-7	
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

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation. 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

12 01 07 *	mineral-based machining oils free of halogens (except emulsions and solutions)

**: Evidence for disposal must be provided.*

Remark:
Waste code product (emulsion): 12 01 09* (machining emulsions and solutions free of halogens).

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.
* **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

Restrictions on use:
Use restriction according to REACH annex XVII, no.: 3. 75.

Other regulations (EU):
This product is not assigned to a hazard category.
Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]: 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).

Berufsgenossenschaftliche Vorschriften (DGUV-Vorschriften)
The product complies with the restrictions of the Technical Rule for Hazardous Substances (TRGS 611).

15.2. Chemical Safety Assessment
No information available.

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

SECTION 16: Other information

* **16.1. Indication of changes**

1.1.	Product identifier
1.3.	Details of the supplier of the safety data sheet
1.4.	Emergency telephone number
2.2.	Label elements
3.2.	Mixtures
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
14.3.	Transport hazard class(es)
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.5.	List of relevant hazard statements and/or precautionary statements from sections 2 to 15

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
LC_{50}: Lethal concentration, 50 percent
LD_{50}: 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 imit (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
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

16.3. Key literature references and sources for data

No data available

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
Skin corrosion/irritation *(Skin Irrit. 2)*	H315: Causes skin irritation.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

*

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H301	Toxic if swallowed.
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.
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.