

Safety Data Sheet

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



Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
Print date : 17.04.2015

Version (Revision) : 3.0.0 (1.0.0)

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

1.1 Product identifier

eni metalCut 22 UNI

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

Relevant identified uses

Metal working fluids

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/downstream user/distributor)

Eni Schmiertechnik GmbH

Street : Paradiesstraße 14

Postal code/city : 97080 Würzburg

Telephone : (+49) 931-90098-0

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Information contact : Technical Department, Tel. (+49) 931 900 98-142

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1.4 Emergency Telephone Number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Category 3 ; Harmful to aquatic life with long lasting effects.

2.2 Label elements

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

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

2.3 Other hazards

None

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Description

Preparation of solvent refined mineral oils with low content of aromatic hydrocarbons and additives.

Hazardous ingredients

2,6-DI-TERT-BUTYL-P-CRESOL ; REACH registration No. : 01-2119565113-46-0000 ; EC No. : 204-881-4; CAS No. : 128-37-0

Weight fraction : 0,25 - 0,5 %

Classification 1272/2008 [CLP] : Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

Further ingredients

The highly refined mineral oil contains less than 3% (w/w) DMSO-extract, according to IP 346 and is not considered to be carcinogenic.

Additional information

Safety Data Sheet

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Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
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Version (Revision) : 3.0.0 (1.0.0)

Full text of R-, 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 place in recovery position and seek medical advice.

In case of inhalation

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.

After ingestion

Do NOT induce vomiting. Call a physician immediately. Rinse mouth thoroughly with water. Where appropriate artificial ventilation.

Self-protection of the first aider

Protect your self against exposure to chemicals or blood-borne diseases by wearing gloves and eye protection. After providing first aid wash your exposed skin with soap and water.

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. Observe risk of aspiration if vomiting occurs.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam, Extinguishing powder, Carbon dioxide (CO₂), Water spray, Water mist

Unsuitable extinguishing media

Strong water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire may be liberated: Carbon dioxide (CO₂), Carbon monoxide, Nitrogen oxides (NO_x), Smoke and other incomplete combustion products.

5.3 Advice for firefighters

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Do not inhale explosion and combustion gases. 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.

SECTION 6: Accidental release measures

Safety Data Sheet

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



Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
Print date : 17.04.2015

Version (Revision) : 3.0.0 (1.0.0)

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/aerosols. Ventilate affected area. Keep away from sources of ignition. - No smoking.

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 entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

For containment

Stop and contain spill/release if it can be done safely. Cover drains. 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 (e.g. sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal. Ventilate affected area. Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4 Reference to other sections

See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas. Put lids on containers immediately after use. Avoid contact with skin, eyes and clothes. Avoid: Inhalation of vapours or spray/mists Keep away from sources of ignition. - No smoking.

Protective measures

Measures to prevent fire

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Environmental precautions

Do not allow to enter into surface water or drains.

Advices on general occupational hygiene

When using do not eat, drink, smoke. Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect containers against damage. Provide earthing of containers, equipment, pumps and ventilation facilities.

Hints on joint storage

Keep away from: Oxidising agent

Storage class : 10

Storage class (TRGS 510) : 10

Do not store together with

Food and feedingstuffs

Further information on storage conditions

Recommended storage temperature : 5 - 40°C / 40 - 105°F.

Protect against : Frost, Heat, UV-radiation/sunlight, Water Humidity.

Storage stability : Product may be stored for up to 24 months under described conditions.

7.3 Specific end use(s)

None

Safety Data Sheet

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



Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
Print date : 17.04.2015

Version (Revision) : 3.0.0 (1.0.0)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

metal working coolant

Limit value type (country of origin) : AGW (D)
Parameter : vapour + aerosol
Limit value : 10 mg/m³
Version :

2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0

Limit value type (country of origin) : TRGS 900 (D)
Parameter : E: inhalable fraction
Limit value : 10 mg/m³
Peak limitation : 4(II)
Remark : Y
Version : 01.09.2012

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type : DNEL/DMEL (Industrial) (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Exposure route : Dermal
Exposure frequency : chronic / systemic effects
Limit value : 8,3 mg/kg
Limit value type : DNEL/DMEL (Industrial) (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Exposure route : Inhalation
Exposure frequency : chronic / systemic effects
Limit value : 5,8 mg/m³

Remark

The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulation.

PNEC

Limit value type : Fresh water : (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Limit value : 0,004 mg/l
Limit value type : Sea water : (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Limit value : 0,0004 mg/l
Limit value type : Sediment (fresh water) : (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Limit value : 1,29 mg/kg
Limit value type : Sewage plant : (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Limit value : 100 mg/l
Limit value type : Soil : (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Limit value : 1,04 mg/kg

8.2 Exposure controls

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.

Personal protection equipment

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this

Safety Data Sheet

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



Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
Print date : 17.04.2015

Version (Revision) : 3.0.0 (1.0.0)

material, as provided below, is based upon intended, normal usage.

Eye/face protection

Eye glasses with side protection (DIN EN 166)

Skin protection

Hand protection

Tested protective gloves must be worn: DIN EN 374

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. Do not wear gloves near rotary machines and tools.

Suitable material :

Wearing time with permanent contact:

Material: NBR (Nitrile rubber), CR (polychloroprene, chloroprene rubber), PVA (Polyvinyl alcohol),

Thickness of the glove material: 0,70 mm

Breakthrough time (maximum wearing time): > 480 min

Wearing time with occasional contact (splashes):

Material: NBR (Nitrile rubber), CR (polychloroprene, chloroprene rubber), PVA (Polyvinyl alcohol),

Thickness of the glove material: 0,40 mm

Breakthrough time (maximum wearing time): > 30 min

Breakthrough time (maximum wearing time): : 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.

Body protection

Body protection: not required. If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

Additional body protection measures : When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

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.

General health and safety measures

When using do not eat, drink, smoke. Wash hands before breaks and after work. Wash contaminated clothing prior to re-use. Do not put any product-impregnated cleaning rags into your trouser pockets. Apply skin care products after work.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : light yellow

Odour : characteristic

Safety relevant basis data

| | | | | |
|--------------------------------------|--------------|---|-------------------|------------------------------------|
| pH value : | | | not applicable | |
| Melting point/melting range : | | < | -10 °C | |
| Boiling temperature : | (1013 hPa) | > | 250 °C | |
| Flash point : | | > | 170 °C | DIN EN ISO 2592 |
| Flammability (Solid, Gas): | | | not applicable | |
| Lower explosion limit : | | | 0,6 | Vol-% |
| Upper explosion limit : | | | 6,5 | Vol-% |
| Vapour pressure : | (20 °C) | | No data available | |
| Vapour Density (Air = 1): | | | no data available | |
| Evaporation Rate : | | | no data available | |
| Density : | (15 °C) | | 0,86 | g/cm ³ DIN EN ISO 12185 |

Safety Data Sheet

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



Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
Print date : 17.04.2015

Version (Revision) : 3.0.0 (1.0.0)

| | | | |
|---|-------------|-----|-----------------------|
| Water solubility : | (20 °C) | | non miscible |
| Partition Coefficient (n-octanol/water): | (log Pow) | | not applicable |
| Viscosity : | (40 °C) | ca. | 22 mm ² /s |
| Ignition temperature : | | > | 200 °C |
| Decomposition temperature : | | | No data available |
| Odour threshold : | | | No data available |
| Oxidizing Properties: | | | not oxidising |
| Explosive Properties: | | | not explosive |

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Oxidising agent, strong.

10.6 Hazardous decomposition products

Hazardous decomposition products are not expected to form during normal storage.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological data are not available. The statement is derived from the properties of the single components. Data apply to the main component.

Acute effects

No data available to indicate product may be an acute toxic oral, dermal or inhalation hazard.

Acute oral toxicity

| | |
|------------------|------------------|
| Parameter : | LD50 (BASEOIL) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | > 5000 mg/kg |

Acute dermal toxicity

| | |
|------------------|------------------|
| Parameter : | LD50 (BASEOIL) |
| Exposure route : | Dermal |
| Species : | Rabbit |
| Effective dose : | > 2000 mg/kg |

Acute inhalation toxicity

| | |
|------------------|------------------|
| Parameter : | LC50 (BASEOIL) |
| Exposure route : | Inhalation |
| Species : | Rat |
| Effective dose : | > 5,53 mg/l |
| Exposure time : | 4 h |

Irritant and corrosive effects

Safety Data Sheet

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



Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
Print date : 17.04.2015

Version (Revision) : 3.0.0 (1.0.0)

Not an irritant.

Primary irritation to the skin

Parameter : Primary irritation to the skin (BASEOIL)
Species : Rabbit
Result : Mild effects but not relevant for classification.

Irritation to eyes

Parameter : Irritation to eyes (BASEOIL)
Species : Rabbit
Result : Mild effects but not relevant for classification.

Sensitisation

not sensitising.

In case of skin contact

Parameter : Skin sensitisation (BASEOIL)
Species : Guinea pig
Result : not sensitizing

Repeated dose toxicity (subacute, subchronic, chronic)

Subacute dermal toxicity

Has degreasing effect on the skin.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

no known significant effects or critical hazards.

Germ cell mutagenicity/Genotoxicity

no known significant effects or critical hazards.

Reproductive toxicity

no known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

STOT SE 1 and 2

Not expected to cause organ damage from a single exposure.

Specific target organ toxicity (repeated exposure)

STOT RE 1 and 2

Not expected to cause organ damage from prolonged or repeated exposure.

Aspiration hazard

Based on the available data the classification criteria for aspiration toxicity are not met. Based on physico-chemical properties of the material. For viscosity data, see chapter 9.

11.3 Other adverse effects

The inhalation of dust/mist or aerosols causes irritation of the respiratory tract.

SECTION 12: Ecological information

12.1 Toxicity

For the product ecotoxicological data are not available. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see chapter 3).

Aquatic toxicity

Harmful to aquatic life with long lasting effects.

Acute (short-term) fish toxicity

Parameter : LC50 (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Species : Brachydanio rerio (zebra-fish)
Effective dose : > 0,57 mg/l
Exposure time : 96 h
Evaluation : Very toxic to fish.

Safety Data Sheet

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



Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
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Version (Revision) : 3.0.0 (1.0.0)

Parameter : LC50 (BASEOIL)
Effective dose : > 100 mg/l
Exposure time : 96 h
Evaluation : Harmless to fish up to the concentration tested.

Acute (short-term) daphnia toxicity

Parameter : EC50 (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Species : Daphnia magna (Big water flea)
Effective dose : > 0,17 mg/l
Exposure time : 48 h
Evaluation : Very toxic to daphnia.

Acute (short-term) algae toxicity

Parameter : IC50 (2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0)
Species : Desmodesmus subspicatus
Effective dose : > 0,42 mg/l
Exposure time : 72 h
Evaluation : Very toxic to algae.

12.2 Persistence and degradability

Abiotic degradation

Physicochemical elimination

Poorly watersoluble product. Can be mechanically precipitated to a large extent in biological sewage plants.

Biodegradation

Part of the components is biodegradable.

12.3 Bioaccumulative potential

Contains components with the potential to bioaccumulate.

12.4 Mobility in soil

Floats on water.
Adsorbs to soil and has low mobility.

12.5 Results of PBT and vPvB assessment

The substance does not fulfill the screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

12.6 Other adverse effects

Damage can be caused through mechanical influence of the product (eg. sticking).

12.7 Further ecological information

Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste code product

12 01 07*

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Waste name

Mineral-based machining oils free of halogens (except emulsions and solutions).

Waste treatment options

Appropriate disposal / Product

Safety Data Sheet

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



Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
Print date : 17.04.2015

Version (Revision) : 3.0.0 (1.0.0)

Can be incinerated together with household waste in compliance with applicable technical regulations following consultation with approved waste disposal management companies and authorities in charge.

Appropriate disposal / Package

Non-contaminated packages may be recycled. Packing which cannot be properly cleaned must be disposed of. Dispose of waste according to applicable legislation.

Other disposal recommendations

Containers, even those that have been emptied, can contain product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, drill, grind, weld or perform similar operations on or near containers.

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

14.1 UN number

No dangerous goods in sense of this transport regulation.

14.2 UN proper shipping name

No dangerous goods in sense of this transport regulation.

14.3 Transport hazard class(es)

No dangerous goods in sense of this transport regulation.

14.4 Packing group

No dangerous goods in sense of this transport regulation.

14.5 Environmental hazards

No dangerous goods in sense of this transport regulation.

14.6 Special precautions for user

None

SECTION 15: Regulatory information

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

National regulations

Water hazard class (WGK)

Class : nwg (Non-hazardous to water) Classification according to VwVwS

15.2 Chemical Safety Assessment

No information available.

SECTION 16: Other information

16.1 Indication of changes

02. Classification of the substance or mixture · 02. Label elements · 02. Labelling (67/548/EEC or 1999/45/EC) · 07. Hints on joint storage - Storage class · 08. Occupational exposure limit values · 15. Technische Anleitung Luft (TA-Luft) · 15. Water hazard class (WGK)

16.2 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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

Safety Data Sheet

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



Trade name : eni metalCut 22 UNI, Art.-no. 0384
Revision date : 01.04.2015
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Version (Revision) : 3.0.0 (1.0.0)

ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
CAS: Chemical Abstracts Service (division of the American Chemical Society)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CLP: Regulation for Classification, Labelling and Packaging
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
EC50: Effective concentration, 50 percent
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

16.3 Key literature references and sources for data

Sources of information used in preparing this SDS included one or more of the following: Product Dossiers and SDS from suppliers, complemented by public sources, as appropriate (GESTIS, the EU IUCLID Data Base, U.S. NTP publications, e.g.).

16.4 Relevant H- and EUH-phrases (Number and full text)

H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

16.5 Training advice

Provide adequate information, instruction and training for operators.

16.6 Additional information

None

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.