Safety Data Sheet dated 14/3/2025, version 3

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

1.1. Product identifier
Mixture identification:
Trade name: MIZAR 46
1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
PC-TEC-11 Lubricants, greases, release agents

1.3. Details of the supplier of the safety data sheet
Company:
NILS S.p.A.
Via Stazione, 30
39014 Postal (BZ)

e-mail: nils@nils.it
www.nils.eu
Tel. +39 0473 29 24 00
Fax +39 0473 29 12 44
Competent person responsible for the safety data sheet:
schedasicurezza@nils.it
1.4. Emergency telephone number
CAV "Ospedale Pediatrico Bambino Gesù" - Roma - Tel. +39 06 6859 37 26

CAV "Azienda Ospedaliera Università di Foggia" - Foggia - Tel. 800 183 459

CAV "Azienda Ospedaliera A. Cardarelli" - Napoli - Tel. +39 081 545 33 33

CAV Policlinico "Umberto I" - Roma - Tel. +39 06 4997 80 00

CAV Policlinico "A. Gemelli" - Roma - Tel. +39 06 305 43 43

CAV Aziedna Ospedaliera "Careggi" U.O. Tossicologia Medica - Firenze - Tel. +39 055 794 78 19

CAV Centro Nazionale di Informazione Tossicologica - Pavia - Tel. +39 0382 24 444

CAV Ospedale Niguarda - Milano - +39 02 66 10 10 29

CAV Azienda Ospedaliera Papa Giovanni XXIII - Bergamo - Tel. 800 88 33 00

CAV Centro Antiveleni Veneto - Verona - Tel. 800 011 858
Tel. +39 0473 29 24 00
Fax +39 0473 29 12 44

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP)
Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.
Adverse physicochemical, human health and environmental effects:
No other hazards
2.2. Label elements

Hazard pictograms:
None
Hazard statements:
H412 Harmful to aquatic life with long lasting effects.
Precautionary statements:
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with applicable regulations.
Special Provisions:
None
Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards
No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.
3.2. Mixtures
Hazardous components within the meaning of the CLP regulation and related classification:

stta	Name	Ident. Number	Classification
>= 0,5% - < 1%	2,6-di-tert-butyl-p-cresol	CAS: 128-37-0 EC: 204-881-4 REACH No.: 01-2119555270-46	4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410

SECTION 4: First aid measures

4.1. Description of first aid measures
In case of skin contact:
Take off contaminated clothing.
Wash with plenty of water and soap.
If skin irritation occurs: Get medical advice/attention.
In case of eyes contact:
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Remove contact lenses, if present and easy to do. Continue rinsing.
Protect uninjured eye.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
In case of Ingestion:
If swallowed, rinse mouth with water (only if the person is conscious).
Do NOT induce vomiting.
If vomiting occurs, beware of the risk of suffocation.

OBTAIN IMMEDIATE MEDICAL ATTENTION.
In case of Inhalation:
Remove casualty to fresh air and keep warm and at rest.
If breathing is irregular or stopped, administer artificial respiration.

If experiencing respiratory symptoms: Call a doctor.

4.2. Most important symptoms and effects, both acute and delayed
Respiratory disorders
Headache
Dizziness
General malaise

If in doubt or if symptoms occur, consult a doctor.

4.3. Indication of any immediate medical attention and special treatment needed
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
In case of fire, use a foam fire extinguisher to extinguish.
In case of fire, use a dry powder fire extinguisher to extinguish.
Carbon dioxide (CO2).
Sand
Adapt fire-fighting measures to specific conditions.

Extinguishing media which must not be used for safety reasons:
Water.

5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
Hazardous combustion products:
Carbon dioxide (CO2)
Nitrogen oxides (NOx)
Carbon monoxide
Phosphoric oxides

5.3. Advice for firefighters
Avoid inhaling the fumes.
Coordinate fire-fighting measures in the surrounding areas.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Keep containers cool with water spray.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non emergency personnel:
Extremely slippery when spilled.
Provide adequate ventilation.
Do not get in eyes, on skin, or on clothing.
Use appropriate respiratory protection.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
See protective measures under point 7 and 8.
For emergency responders:
Suitable material:

NBR (nitrile rubber).
Not suitable material:
Butyl caoutchouc (butyl rubber).
NR (natural rubber, natural latex).
CR (polychloroprene, chloroprene rubber).

6.2. Environmental precautions

Ensure that any leaks can be contained, e.g. by means of drip pans or lowered areas.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment:
Clear spills immediately.
Covering of drainage systems.
Collect with absorbent substances (sand, kieselguhr, diatomite, acid binder, universal binder).

For cleaning up:
Collect mechanically and dispose of in adequate containers.
Treat the displaced material according to indications in Section 13 - "Information for disposal".
Never place spilled product for re-use back into the original container.
Retain contaminated washing water and dispose it.

6.4. Reference to other sections

Hazardous combustion products: see Sect. 5
Precautions for safe handling: see Sect. 7
Individual protection measures: see Sect. 8
Incompatible materials: see Sect. 10
Enviornmental precautions: see Sect. 12
Disposal considerations: see Sect. 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No hazardous reaction if properly handled and used.

Avoid contact with skin and eyes, inhalation of vapours and mists.
Use localized ventilation system.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Advice on general occupational hygiene:
Avoid contact with skin and eyes.
Take off immediately all contaminated clothing.
Wash hands before breaks and at the end of work.

Keep away from food, drink and feed.
Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

maximum storage temperature: 40 °C
Protect from external stresses such as UV / sunlight.

Keep away from heat.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Floors should be impermeable, waterproof, and easy to clean.
Ensure that any leaks can be contained, e.g. by means of drip pans or lowered areas.

Keep only in the original container.
Protect containers from damage.

Cool and adequately ventilated.
Protect from direct sunlight.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Protect from frost.
Storage class according to TRGS 510 11

7.3. Specific end use(s)
PC-TEC-11 Lubricants, greases, release agents

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
2,6-di-tert-butyl-p-cresol - CAS: 128-37-0
- OEL Type: TWA - TWA(8h): 2 mg/m3

DNEL Exposure Limit Values
N.A.

PNEC Exposure Limit Values
N.A.

8.2. Exposure controls

Eye protection:
Wear eye/face protection.

Protection for skin:
No special precaution must be adopted for normal use.

Protection for hands:
Only CE-marked protective gloves tested according to EN 374 may be worn when working with chemicals. Protective gloves must be selected for each workplace depending on the concentration and type of harmful substances after consultation with the supplier. Establish a healing period for skin regeneration. Preventive protection of the skin is recommended (protective creams/pomades). Wash hands thoroughly after use.
NBR (nitrile rubber).
Breakthrough time:
4h
Thickness of glove material:

0.12 mm
Not suitable material:
Butyl caoutchouc (butyl rubber).
NR (natural rubber, natural latex).
CR (polychloroprene, chloroprene rubber).

Respiratory protection:
Not needed for normal use.

Thermal Hazards:
None

Environmental exposure controls:
None

Appropriate engineering controls:
No measures other than those contained in Section 7 are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid	--	--
Colour:	Colourless	--	--
Odour:	Characteristic	--	--
Melting point/freezing point:	N.A.	--	--
Pour point	N.A.	--	--
Drop point	N.A.	--	--
Boiling point or initial boiling point and boiling range:	> 250 ° C	--	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	> 160 ° C	--	base oil
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	N.A.	--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	almost insoluble	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/ water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	0.86 kg/dm3	DIN 51757	20 °C
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes
Oxidizing properties:	Non-oxidizing	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
None
10.4. Conditions to avoid

Avoid heating the product, it could explode!

10.5. Incompatible materials

Oxidizing agents
Acids

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological information of the product:

MIZAR 46

a) acute toxicity
Not classified
Based on available data, the classification criteria are not met

b) skin corrosion/irritation
Not classified
Based on available data, the classification criteria are not met

c) serious eye damage/irritation
Not classified
Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met

e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met

f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met

g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met

h) STOT-single exposure
Not classified
Based on available data, the classification criteria are not met

i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met

j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

N.A.

11.2. Information on other hazards

Endocrine disrupting properties:
No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

MIZAR 46

The product is classified: Aquatic Chronic 3 - H412

2,6-di-tert-butyl-p-cresol - CAS: 128-37-0

a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 0.57 mg/l - Duration h: 96 h
Endpoint: EC50 - Species: Daphnia = 0.48 mg/l - Duration h: 48 h
Endpoint: EC50 - Species: Algae > 0.4 mg/l - Duration h: 72 h

12.2. Persistence and degradability
2,6-di-tert-butyl-p-cresol - CAS: 128-37-0
Biodegradability: Non-readily biodegradable

12.3. Bioaccumulative potential
N.A.

12.4. Mobility in soil
N.A.

12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties
No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste Code: 120112*
Packaging waste code: 150110*
Dispose of according to Directive (EC) n. 2008/98 on waste and hazardous waste. Recycle in compliance with official regulations.

SECTION 14: Transport information

14.1. UN number or ID number
Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name
N.A.

14.3. Transport hazard class(es)
N.A.

14.4. Packing group
N.A.

14.5. Environmental hazards
N.A.

14.6. Special precautions for user
N.A.

14.7. Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:
Restriction 3

Restrictions related to the substances contained:
Restriction 28
Restriction 75

Where applicable, refer to the following regulatory provisions :
Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1
None

National legislation

Limitations for workers: Respect the employment limits according to Directive 94/33/EC on the protection of young people at work.

German Water Hazard Class: 1 - Slightly water pollutant.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

COV(%): < 3

Full text of phrases referred to in Section 3:

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

This safety data sheet has been completely updated in compliance to Regulation 2020/878.
Paragraphs modified from the previous revision:

SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 4: First aid measures
SECTION 5: Firefighting measures
SECTION 6: Accidental release measures
SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection
SECTION 9: Physical and chemical properties
SECTION 10: Stability and reactivity
SECTION 11: Toxicological information
SECTION 12: Ecological information
SECTION 13: Disposal considerations
SECTION 15: Regulatory information
SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.