



**Safety Data Sheet dated 5/10/2022, version 1**

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

### 1.1. Product identifier

Mixture identification:

Trade name: GR 7000

### 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](mailto:nils@nils.it)

[www.nils.eu](http://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](mailto: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 Azienda 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

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## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements



The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

EUH208 Contains Naphthenic acids, zinc salts. May produce an allergic reaction.

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  $\geq 0.1\%$

### 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:

Qty	Name	Ident. Number	Classification
$\geq 1\%$ - $< 2,5\%$	Zinc bis[O,O-bis(2-ethylhexyl)]bis(dithiophosphate)	CAS: 4259-15-8 EC: 224-235-5 REACH No.: 01-2119493635-27	⚠ 3.3/1 Eye Dam. 1 H318 ⚠ 4.1/C2 Aquatic Chronic 2 H411 Specific Concentration Limits: C $\geq 50\%$ : Eye Dam. 1 H318
$\geq 0,5\%$ - $< 1\%$	Naphthenic acids, zinc salts	CAS: 12001-85-3 EC: 234-409-2	⚠ 3.4.2/1B Skin Sens. 1B H317 ⚠ 4.1/C2 Aquatic Chronic 2 H411 ⚠ 3.3/2 Eye Irrit. 2 H319 Specific Concentration Limits: C $\geq 10,5\%$ : Aquatic Chronic 2 H411

Other information:

### SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

If skin irritation occurs: Get medical advice/attention.

Oils and fats injected under the skin by high-pressure instruments cause serious damage to health.

**OBTAIN IMMEDIATE MEDICAL ATTENTION.**

Take a copy of this Safety Data Sheet with you to the hospital for reference by medical staff.



**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 ophthalmologist 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.

Aspiration hazard

**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.

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

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

If decomposition products are inhaled the following symptoms can occur:

Respiratory disorders

Headache

Dizziness

Nausea

Symptoms may appear up to several hours after exposure, so medical supervision is necessary.

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

Treatment:

None

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## **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 (CO<sub>2</sub>).

Sand

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.

Hazardous combustion products:

Carbon dioxide (CO<sub>2</sub>)

Nitrogen oxides (NO<sub>x</sub>)

Sulphur oxides (SO<sub>x</sub>)

Carbon monoxide (CO)

Pyrolysis products containing fluorine.

Phosphoric oxides

**5.3. Advice for firefighters**

Coordinate fire-fighting measures in the surrounding areas.

Use suitable breathing apparatus .

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:  
Wear personal protection equipment.  
Remove all sources of ignition.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
Extremely slippery when spilled.  
Provide adequate ventilation.  
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  
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Ensure that any leaks can be contained, e.g. by means of drip pans or lowered areas.
- 6.3. Methods and material for containment and cleaning up  
For containment:  
Covering of drainage systems.  
Clear spills immediately.  
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  
Environmental precautions: see Sect. 12  
Disposal considerations: see Sect. 13

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## **SECTION 7: Handling and storage**

- 7.1. Precautions for safe handling  
Do not breathe in the gases/fumes/vapours/aerosols.  
Use localized ventilation system.  
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.
- 7.2. Conditions for safe storage, including any incompatibilities  
Keep away from food, drink and feed.  
Incompatible materials:  
Oxidizing agents, oxygen-rich materials, combustible materials.  
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.

Protect containers from damage.

Adequately ventilated premises.

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

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No occupational exposure limit available

#### DNEL Exposure Limit Values

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) - CAS: 4259-15-8

Consumer: 0.19 SDS8.1\_8 - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Industry: 9.6 mg/kg bw/day - Consumer: 4.8 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 6.6 mg/m<sup>3</sup> - Consumer: 1.67 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Naphthenic acids, zinc salts - CAS: 12001-85-3

Worker Industry: 1.18 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 3.3 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

#### PNEC Exposure Limit Values

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) - CAS: 4259-15-8

Target: Freshwater - Value: 4 µg/l - Type of hazard: Short term (isolated case)

Target: Marine water - Value: 4.6 µg/l - Type of hazard: Short term (isolated case)

Target: Freshwater sediments - Value: 322 µg/kg sediment dw - Type of hazard: Short term (isolated case)

Target: Marine water sediments - Value: 32.2 µg/kg sediment dw - Type of hazard: Short term (isolated case)

Target: Microorganisms in sewage treatments - Value: 3.8 mg/l - Type of hazard: Short term (isolated case)

Target: Soil (agricultural) - Value: 0.062 mg/kg soil dw - Type of hazard: Short term (isolated case)

### 8.2. Exposure controls

#### Eye protection:

Wear eye/face protection.

#### Protection for skin:

Technical measures and appropriate working procedures take precedence over the use of personal protective equipment.

#### 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).

0.12 mm

Breakthrough time:

4h



Respiratory protection:  
Not needed for normal use.  
Thermal Hazards:  
None  
Environmental exposure controls:  
None  
Appropriate engineering controls:  
None

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid	--	Paste
Colour:	Beige	--	--
Odour:	Characteristic	--	--
Melting point/freezing point:	N.A.	--	--
Pour point	N.A.	--	--
Drop point	> 230 °C	--	--
Boiling point or initial boiling point and boiling range:	> 250 ° C	--	--
Flammability:	> 200 °C	--	--
Lower and upper explosion limit:	N.A.	--	Combustible material, but does not catch fire easily.
Flash point:	> 200 ° C	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	N.A.	--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:		--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/ water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	0.95 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  
In the event of fire, irritating, corrosive and/or toxic gases may be formed.
- Hazardous combustion products:  
See subsection 5.2

## SECTION 11: Toxicological information

- 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008  
Toxicological information of the product:  
GR 7000
- 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:  
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) - CAS: 4259-15-8  
a) acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat 5000 mg/kg  
Test: NOAEL (subac) - Route: Oral - Species: Rat 1000 mg/kg/24h  
Test: LD50 - Route: Skin - Species: Rat 5000 mg/kg  
Test: LC50 - Route: Inhalation - Species: Rat 1.9 mg/l - Duration: 4h  
Test: NOAEL (subac) - Route: Inhalation - Species: Rat 49.5 mg/m3

11.2. Information on other hazards  
Endocrine disrupting properties:  
No endocrine disruptor substances present in concentration  $\geq 0.1\%$

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## SECTION 12: Ecological information

12.1. Toxicity  
Adopt good working practices, so that the product is not released into the environment.  
GR 7000

Not classified for environmental hazards  
Based on available data, the classification criteria are not met  
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) - CAS: 4259-15-8  
a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Fish 46 mg/l - Duration h: 96 h  
Endpoint: LL50 - Species: Fish 4.4 mg/l - Duration h: 96 h  
Endpoint: EL50 - Species: Daphnia 75 mg/l - Duration h: 48 h  
Endpoint: EL50 - Species: Algae 240-410 mg/l - Duration h: 72 h  
Endpoint: NOEC - Species: Daphnia 0.4-0.8 mg/l - Duration h: 21 d  
Endpoint: NOELR - Species: Fish 3.2 mg/l - Duration h: 96 h  
Endpoint: NOELR - Species: Daphnia 32 mg/l - Duration h: 48 h

Naphthenic acids, zinc salts - CAS: 12001-85-3  
a) Aquatic acute toxicity:  
Endpoint: EC50 - Species: Microorganisms = 5.2 mg/l - Duration h: 3 h

12.2. Persistence and degradability  
N.A.

12.3. Bioaccumulative potential  
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) - CAS: 4259-15-8  
Test: Log Kow 3.59 - Notes: pH: 5 (22°C)  
Naphthenic acids, zinc salts - CAS: 12001-85-3  
Test: Log Kow 0.8 - Notes: pH: 7 (20°C)  
Test: BCF - Bioconcentration factor 69.5

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  $\geq 0.1\%$

12.7. Other adverse effects  
None

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## 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.

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**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.

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**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)

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:

No restriction.

Restrictions related to the substances contained:

No restriction.

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

A Chemical Safety Assessment has been carried out for the mixture.

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## SECTION 16: Other information

COV(%): < 3

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

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

**Safety Data Sheet**  
**GR 7000**



EXPERTS IN LUBRICANTS

	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.