

Safety data sheet according to 1907/2006/EC, Article 31

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Printing date 21.12.2021

Version number 2

Revision: 21.12.2021

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

· 1.1 Product identifier

· Trade name: Hengst Nano Engine Protect and Seal

· Article number: 30619,174

· 1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

· Application of the substance / the mixture Additive

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Hengst SE
Nienkamp 55-85
48147 Münster
Germany

T +49 (0)251 20 20 2-0

F +49 (0)251 20 20 2-646

· Further information obtainable from: oil@hengst.com

· 1.4 Emergency telephone number:

Informationszentrale gegen Vergiftungen Uni - Klinikum Bonn; Notfall - Nr.: +49 228 19 240

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS09 environment

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

Lact. H362 May cause harm to breast-fed children.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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· **Hazard pictograms**

GHS08 GHS09

· **Signal word** *Danger*· **Hazard-determining components of labelling:***Distillates (petroleum), solvent-dewaxed light paraffinic alkanes, C14-17, chloro**Paraffins (petroleum), normal C5-20*· **Hazard statements***H362 May cause harm to breast-fed children.**H304 May be fatal if swallowed and enters airways.**H410 Very toxic to aquatic life with long lasting effects.*· **Precautionary statements***P101 If medical advice is needed, have product container or label at hand.**P102 Keep out of reach of children.**P103 Read carefully and follow all instructions.**P260 Do not breathe dusts or mists.**P263 Avoid contact during pregnancy and while nursing.**P273 Avoid release to the environment.**P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.**P331 Do NOT induce vomiting.**P308+P313 IF exposed or concerned: Get medical advice/attention.**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Additional information:***Contains Reaction products of benzenesulfonic acid, mono-C20-24 (even)-sec-alkyl derivs. para-, calcium salts. May produce an allergic reaction.*· **2.3 Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.* **SECTION 3: Composition/information on ingredients**· **3.2 Mixtures**· **Description:** Mixture of substances listed below with nonhazardous additions.

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· Dangerous components:

CAS: 64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic	50-100%
EINECS: 265-159-2	⚠ Asp. Tox. 1, H304	
Index number: 649-469-00-9		
CAS: 85535-85-9	alkanes, C14-17, chloro	25-50%
EINECS: 287-477-0	⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Lact., H362,	
Index number: 602-095-00-X	EUH066	
CAS: 64771-72-8	Paraffins (petroleum), normal C5-20	2.5-10%
EINECS: 265-233-4	⚠ Asp. Tox. 1, H304	
EC number: 947-519-7	Reaction products of benzenesulfonic acid, mono-C20-24 (even)-sec-alkyl derivs. para-, calcium salts	≤1%
	⚠ Skin Sens. 1B, H317	
CAS: 121158-58-5	p-Dodecyl phenol	≤1%
EC number: 310-154-3	⚠ Repr. 1B, H360F; ⚠ Skin Corr. 1C, H314; Eye Dam. 1, H318;	
Index number: 604-092-00-9	⚠ Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10)	

· SVHC

CAS: 85535-85-9 alkanes, C14-17, chloro

· Additional information: For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****· 4.1 Description of first aid measures****· After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Soak up clothes, even underwear, shoes and stockings, take off immediately.

Then rinse with: water and soap.

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

· After eye contact: Remove contact lenses.**· After swallowing:** Rinse mouth thoroughly with water.**· 4.2 Most important symptoms and effects, both acute and delayed**

Frequent and prolonged skin contact may cause skin irritation.

Eye irritation: irritation possible.

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

Warning of aspiration hazard.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Do not inhale explosion or combustion gases.
Emergence of dangerous decomposition products possible.
Carbon monoxide (CO)
Carbon dioxide (CO₂)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Cool endangered receptacles with water spray.
Precipitate gases / vapors / mist with water spray jet.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Particular danger of slipping on leaked/spilled product.
Keep people at a distance and stay on the windward side.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Prevent expansion (eg by damming or oil barrier).
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Avoid contact with eyes and skin.
Avoid the formation of oil haze.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
Protect against electrostatic charges.

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No special measures required.

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Keep container tightly closed and store in a cool, well-ventilated place.
Do not store at temperatures over: 50 ° C.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**
Keep container tightly sealed.
Storage in a collecting room is required.
- **Storage class:** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
- **Respiratory protection:**
Provide good ventilation when vapors / aerosols are generated.
In case of fire: Use self-contained breathing apparatus.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances,

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the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Not suitable are gloves made of the following materials: Leather gloves**· Eyeface protection** Goggles recommended during refilling*** SECTION 9: Physical and chemical properties****· 9.1 Information on basic physical and chemical properties****· General Information****· Physical state**

Fluid

· Colour:

Brown

· Odour:

Mild

· Odour threshold:

Not determined.

· Melting point/freezing point:

Undetermined.

· Boiling point or initial boiling point and boiling range

Undetermined.

· Flammability

Not applicable.

· Lower and upper explosion limit**· Lower:**

0.3 Vol % (DIN EN 1839)

· Upper:

7 Vol % (DIN EN 1839)

· Flash point:

>100 °C (DIN ISO 2592)

· Auto-ignition temperature:

Not determined.

· Decomposition temperature:

Not determined.

· pH

Not determined.

· Viscosity:**· Kinematic viscosity at 40 °C**17.2 mm²/s**· Dynamic:**

Not determined.

· Solubility**· water:**

Not miscible or difficult to mix.

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure:

Not determined.

· Density and/or relative density**· Density at 20 °C:**0.9-0.95 g/cm³ (DIN 51757)**· Relative density**

Not determined.

· Vapour density

Not determined.

· 9.2 Other information**· Appearance:****· Form:**

Viscous

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- **Important information on protection of health and environment, and on safety.**
- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- **Change in condition**
- **Softening point/range**
- **Pour point** undetermined
- **Evaporation rate** Not determined.
- **Information with regard to physical hazard classes**
- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No decomposition if used as directed.
- **10.5 Incompatible materials:** Oxidant. Acid, concentrated.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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· LD/LC50 values relevant for classification:**CAS: 84605-29-8 Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts**

Oral LD50 (static) 2,000-4,000 mg/kg (rat)

Dermal LD50 (static) >3,200 mg/kg (rabbit)

· Skin corrosion/irritation

After skin contact: Frequent and constant skin contact can cause skin irritation.

Eye irritation: Irritant effect possible.

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** May cause harm to breast-fed children.**· 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** May be fatal if swallowed and enters airways.**· Additional toxicological information:****· Sensitisation** Not sensitizing.**· 11.2 Information on other hazards****· Endocrine disrupting properties**

CAS: 121158-58-5 p-Dodecyl phenol: List I, II

SECTION 12: Ecological information**· 12.1 Toxicity****· Aquatic toxicity:** No further relevant information available.**· 12.2 Persistence and degradability** No further relevant information available.**· Degree of elimination:****CAS: 84605-29-8 Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts**

EC50 (static) 10-100 mg/kg (SwF) (OECD Guide-line 203)

· 12.3 Bioaccumulative potential No further relevant information available.**· 12.4 Mobility in soil** No further relevant information available.**· 12.5 Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**· 12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.**· 12.7 Other adverse effects****· Remark:** Very toxic for fish**· Additional ecological information:****· General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

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Very toxic for aquatic organisms

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Agree exact waste code with the waste disposal company.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Delivery of waste oil to officially authorised collectors only.

· Uncleaned packaging:

· Recommendation: Completely empty the container.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR, IMDG, IATA

UN3082

· 14.2 UN proper shipping name

· ADR

3082 UMWELTGEFÄHRDENDER STOFF, FLÜSSIG, N.A.G. (Alkane, C14-17-, Chlor-, Zink O,O-bis(1,3-dimethylbutyl und isopropyl) dithiophosphate)

· IMDG

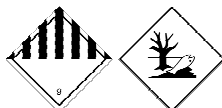
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alkanes, C14-17, chloro, Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts), MARINE POLLUTANT

· IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alkanes, C14-17, chloro, Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts)

· 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class

9 Miscellaneous dangerous substances and articles.

· Label

9

· 14.4 Packing group

· ADR, IMDG, IATA

III

· 14.5 Environmental hazards:

· Marine pollutant:

Yes

Symbol (fish and tree)

· Special marking (ADR):

Symbol (fish and tree)

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- **Special marking (IATA):** Symbol (fish and tree)
- **14.6 Special precautions for user** Warning: Miscellaneous dangerous substances and articles.
- **Hazard identification number (Kemler code):** 90
- **EMS Number:** F-A,S-F
- **Stowage Category** A
- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.
- **Transport/Additional information:**
- **ADR**
- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
- **Transport category** 3
- **Tunnel restriction code** (-)
- **IMDG**
- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
- **UN "Model Regulation":** UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKANES, C14-17, CHLORO, PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS), 9, III

* **SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS08 GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
Distillates (petroleum), solvent-dewaxed light paraffinic

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*alkanes, C14-17, chloro**Paraffins (petroleum), normal C5-20***· Hazard statements***H362 May cause harm to breast-fed children.**H304 May be fatal if swallowed and enters airways.**H410 Very toxic to aquatic life with long lasting effects.***· Precautionary statements***P101 If medical advice is needed, have product container or label at hand.**P102 Keep out of reach of children.**P103 Read carefully and follow all instructions.**P260 Do not breathe dusts or mists.**P263 Avoid contact during pregnancy and while nursing.**P273 Avoid release to the environment.**P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.**P331 Do NOT induce vomiting.**P308+P313 IF exposed or concerned: Get medical advice/attention.**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***· Directive 2012/18/EU****· Named dangerous substances - ANNEX I** *None of the ingredients is listed.***· Seveso category E1** *Hazardous to the Aquatic Environment***· Qualifying quantity (tonnes) for the application of lower-tier requirements** *100 t***· Qualifying quantity (tonnes) for the application of upper-tier requirements** *200 t***· REGULATION (EC) No 1907/2006 ANNEX XVII** *Conditions of restriction: 3***· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II***None of the ingredients is listed.***· REGULATION (EU) 2019/1148****· Annex I - RESTRICTED EXPLOSIVES PRECURSORS** *(Upper limit value for the purpose of licensing under Article 5(3))**None of the ingredients is listed.***· Annex II - REPORTABLE EXPLOSIVES PRECURSORS***None of the ingredients is listed.***· Regulation (EC) No 273/2004 on drug precursors***None of the ingredients is listed.***· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors***None of the ingredients is listed.*

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- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**
CAS: 85535-85-9 alkanes, C14-17, chloro
- **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

*** SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H304 May be fatal if swallowed and enters airways.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H360F May damage fertility.
- H362 May cause harm to breast-fed children.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- EUH066 Repeated exposure may cause skin dryness or cracking.

· Department issuing SDS: Product safety**· Version number of previous version: 1****· Abbreviations and acronyms:**

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - SVHC: Substances of Very High Concern
 - vPvB: very Persistent and very Bioaccumulative
 - Skin Corr. 1C: Skin corrosion/irritation – Category 1C
 - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 - Skin Sens. 1B: Skin sensitisation – Category 1B
 - Lact.: Reproductive toxicity – effects on or via lactation
 - Repr. 1B: Reproductive toxicity – Category 1B
 - Asp. Tox. 1: Aspiration hazard – Category 1
 - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 - Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
- **Sources Concawe Product Dossier No.97/108. Concawe Product Dossier Nn. 01/54.**
 - *** Data compared to the previous version altered.**

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