

Synmar Livius 0W-20

Version number: 1.1

Date of compilation: 2022-03-23

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name	Synmar Livius 0W-20
Registration number (REACH)	Not relevant (mixture)
Article number	S100014

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

Relevant identified uses	Lubricants and lubricant additives Professional uses Consumer uses
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1.3 Details of the supplier of the safety data sheet

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1.4 Emergency telephone number

Emergency information service +31 (0) 33 303 3044
This number is only available during the following office hours: Mon-Fri 09:00 - 17:00

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

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

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Code	Supplemental hazard information
EUH208	contains C14-16-18 Alkyl phenol. May produce an allergic reaction
EUH210	safety data sheet available for professional user on request

2.2 Label elements

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

- signal word Not required.
- pictograms Not required.
- supplemental hazard information
 - EUH208 Contains C14-16-18 Alkyl phenol. May produce an allergic reaction.
 - EUH210 Safety data sheet available for professional user on request.

2.3 Other hazards

The base oils contain less than 3% DMSO extract as measured by IP346; it therefore does NOT need to be classified as H350: "May cause cancer" (Nota L)". USED ENGINE OILS: Engine oils are contaminated during use by decomposition products resulting from the operation of combustion engines. The used oil from these engines can cause skin cancer, especially when frequent or prolonged contact is accompanied by poor personal hygiene. Frequent or prolonged contact with all types and brands of used engine oil should therefore be avoided and good personal hygiene should be observed.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

The product does not contain any other ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Dec-1-ene, trimers, hydrogenated	CAS No 157707-86-3 EC No 500-393-3	≥ 50	Asp. Tox. 1 / H304		
Lubricating oils (petroleum), C20-50, hydro-treated neutral oil-based	CAS No 72623-87-1 EC No 276-738-4 Index No 649-483-00-5	5 – 10	Asp. Tox. 1 / H304		GHS-HC L(b)
Lubricating oils (petroleum), C15-30, hydro-treated neutral oil-based	CAS No 72623-86-0 EC No 276-737-9 Index No 649-482-00-X	5 – 10	Asp. Tox. 1 / H304		GHS-HC L(b)
Distillates (petroleum), hydrotreated heavy paraffinic	CAS No 64742-54-7 EC No 265-157-1 Index No 649-467-00-8	5 – 10	Asp. Tox. 1 / H304		GHS-HC L(b)
Bis(nonylphenyl)amine	CAS No 36878-20-3 EC No 253-249-4	1 – 3	Aquatic Chronic 4 / H413		
C14-16-18 Alkyl phenol	CAS No 1190625-94-5 EC No 931-468-2	0.1 – 1	Skin Sens. 1B / H317 STOT RE 2 / H373	 	

Notes

 GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)
 L(b): The classification as a carcinogen is not required. The substance contains less than 3 % DMSO extract

Name of substance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
Dec-1-ene, trimers, hydrogenated	CAS No 157707-86-3 EC No 500-393-3	-	-	<4.8 mg _i /4h	inhalation: dust/ mist

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Remarks

All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

General notes

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell. In case of vomiting keep the head low so that stomach contents cannot enter the lungs.

4.2 Most important symptoms and effects, both acute and delayed

If on skin

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis.

If in eyes

Redness, eye irritation.

If swallowed

Nausea, diarrhoea.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the poison centre.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media

Water mist; foam; dry extinguishing powder; carbon dioxide (CO₂);
Co-ordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

During fire hazardous fumes/smoke could be produced: carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxides (NO_x), phosphorus oxides (P_xO_y), hydrogen sulphide (H₂S), sulphur oxides (SO_x), metal oxides.

5.3 Advice for firefighters

Keep containers cool with water spray. In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

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Special protective equipment for firefighters

Self-contained breathing apparatus (EN 133). Standard protective clothing for firefighters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area. Special danger of slipping by leaking/spilling product.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Bunding. Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.). Pump out large quantities. Remove from the water surface (e.g. skimming, sucking).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Wash contaminated clothing before reuse. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feeding-stuffs. Avoid prolonged and repeated contact with skin.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

- incompatible substances or mixtures

Keep away from oxidising substances, acids.

Control of effects

Do not pierce or burn, even after use.

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight.

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Consideration of other advice

Store in a dry place. Store in a well-ventilated place. Keep container tightly closed. Keep only in original container.

- specific designs for storage rooms or vessels
- storage temperature

Recommended storage temperature: At ambient temperature
 Maximum storage temperature: ≤40 °C

- maximum storage period
 - packaging compatibilities
- Keep only in original container.

5 year(s)

7.3 Specific end use(s)

There is no additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

No information available.

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	DNEL	2.73 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	DNEL	5.58 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	DNEL	0.97 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	DNEL	0.74 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	DNEL	1.19 mg/m ³	human, inhalatory	consumer (private households)	chronic - local effects
C14-16-18 Alkyl phenol	1190625-94-5	DNEL	1.17 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
C14-16-18 Alkyl phenol	1190625-94-5	DNEL	0.3 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

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Relevant PNECs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
C14-16-18 Alkyl phenol	1190625-94-5	PNEC	1 mg/l	aquatic organisms	water	intermittent release
C14-16-18 Alkyl phenol	1190625-94-5	PNEC	0.1 mg/l	aquatic organisms	freshwater	short-term (single instance)
C14-16-18 Alkyl phenol	1190625-94-5	PNEC	0.01 mg/l	aquatic organisms	marine water	short-term (single instance)
C14-16-18 Alkyl phenol	1190625-94-5	PNEC	100 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
C14-16-18 Alkyl phenol	1190625-94-5	PNEC	4,266 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
C14-16-18 Alkyl phenol	1190625-94-5	PNEC	426.6 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
C14-16-18 Alkyl phenol	1190625-94-5	PNEC	852.6 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggles with side protection (EN 166).

Skin protection



Protective clothing (EN 340 & EN ISO 13688).

- hand protection



Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. Chemical protection gloves are suitable, which are tested according to EN 374. 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, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- type of material

PVC: polyvinyl chloride, NP: neoprene, nitrile rubber

- breakthrough times of the glove material

Use gloves with a minimum breakthrough times of the glove material: >10 minutes (permeation: level 1).

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. Provide eyewash stations and safety showers at the workplace.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Full face mask/half mask/quarter mask (EN 136/140). Type: A-P2 (combined filters against particles and organic gases and vapours, colour code: Brown/White).

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Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid (oil)
Colour	green
Odour	characteristic
Melting point/freezing point	-54 °C
Boiling point or initial boiling point and boiling range	>280 °C
Evaporation rate	<0.1 (n-butyl acetate = 1)
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	LEL: 0.6 vol% UEL: 7 vol%
Flash point	197 °C
Auto-ignition temperature	>240 °C (auto-ignition temperature (liquids and gases))
Decomposition temperature	no data available
pH (value)	not determined
Kinematic viscosity	20 – 100 mm ² /s

Solubility(ies)

Water solubility	insoluble
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Partition coefficient n-octanol/water (log value)	>3
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Vapour pressure	<0.1 hPa at 20 °C
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Density	not determined
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Relative vapour density	>1 at 20 °C (air = 1)
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Particle characteristics	not relevant (liquid)
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9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, moisture.

10.5 Incompatible materials

Acids, oxidisers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Acute toxicity

Shall not be classified as acutely toxic.

- acute toxicity of components of the mixture

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
Dec-1-ene, trimers, hydrogenated	157707-86-3	inhalation: dust/mist	<4.8 mg/4h

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Dec-1-ene, trimers, hydrogenated	157707-86-3	oral	LD50	>5,000 mg/kg	rat
Dec-1-ene, trimers, hydrogenated	157707-86-3	inhalation: dust/mist	LC50	<4,800 mg/m ³ /4h	rat
Dec-1-ene, trimers, hydrogenated	157707-86-3	dermal	LD50	>2,000 mg/kg	rat

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Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	oral	LD50	>5,000 mg/kg	rat
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	inhalation: dust/mist	LC50	2.18 mg/√4h	rat
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	dermal	LD50	>5,000 mg/kg	rabbit
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	oral	LD50	>5,000 mg/kg	rat
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	inhalation: dust/mist	LC50	2.18 mg/√4h	rat
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	dermal	LD50	>5,000 mg/kg	rabbit
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	oral	LD50	>5,000 mg/kg	rat
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	inhalation: dust/mist	LC50	2.18 mg/√4h	rat
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	dermal	LD50	>5,000 mg/kg	rabbit
C14-16-18 Alkyl phenol	1190625-94-5	oral	LD50	>2,000 mg/kg	rat
C14-16-18 Alkyl phenol	1190625-94-5	dermal	LD50	>2,000 mg/kg	rat

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Contains C14-16-18 Alkyl phenol. May produce an allergic reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

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SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Dec-1-ene, trimers, hydrogenated	157707-86-3	LL50	>1,000 mg/l	fish	96 h
Dec-1-ene, trimers, hydrogenated	157707-86-3	EL50	>150 mg/l	aquatic invertebrates	48 h
Dec-1-ene, trimers, hydrogenated	157707-86-3	NOELR	1,000 mg/l	fish	96 h
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	LL50	>100 mg/l	fish	96 h
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	EL50	>10,000 mg/l	aquatic invertebrates	24 h
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	LL50	>100 mg/l	fish	96 h
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	LL50	>10,000 mg/l	aquatic invertebrates	24 h
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	LL50	>10,000 mg/l	aquatic invertebrates	48 h
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	LL50	>10,000 mg/l	aquatic invertebrates	72 h
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	LL50	>10,000 mg/l	aquatic invertebrates	96 h
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	EL50	>10,000 mg/l	aquatic invertebrates	24 h
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	EL50	>10,000 mg/l	aquatic invertebrates	48 h
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	LL50	>100 mg/l	fish	96 h
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	EL50	>10,000 mg/l	aquatic invertebrates	24 h
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	NOEC	>100 mg/l	aquatic plants	72 h
C14-16-18 Alkyl phenol	1190625-94-5	LC50	>100 mg/l	fish	96 h
C14-16-18 Alkyl phenol	1190625-94-5	EC50	>100 mg/l	aquatic invertebrates	24 h
C14-16-18 Alkyl phenol	1190625-94-5	ErC50	>100 mg/l	algae	72 h
C14-16-18 Alkyl phenol	1190625-94-5	NOELR	>100 mg/l	aquatic invertebrates	24 h
C14-16-18 Alkyl phenol	1190625-94-5	NOEC	100 mg/l	algae	72 h

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Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Dec-1-ene, trimers, hydrogenated	157707-86-3	EC50	>10 g/l	microorganisms	16 h
Dec-1-ene, trimers, hydrogenated	157707-86-3	NOELR	1,000 mg/l	aquatic invertebrates	48 d
Dec-1-ene, trimers, hydrogenated	157707-86-3	NOEC	1,000 mg/l	microorganisms	30 min
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	EL50	>10,000 mg/l	aquatic invertebrates	24 h
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	LL50	>10,000 mg/l	aquatic invertebrates	24 h
Distillates (petroleum), hydro-treated heavy paraffinic	64742-54-7	NOELR	≥1,000 mg/l	fish	14 d
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	EL50	>10,000 mg/l	aquatic invertebrates	24 h
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	LL50	>10,000 mg/l	aquatic invertebrates	24 h
C14-16-18 Alkyl phenol	1190625-94-5	EC50	>100 mg/l	aquatic invertebrates	24 h

12.2 Persistence and degradability

Not readily biodegradable.

Degradability of components of the mixture					
Name of substance	CAS No	Process	Degradation rate	Time	Method
Dec-1-ene, trimers, hydrogenated	157707-86-3	carbon dioxide generation	7 %	28 d	
Dec-1-ene, trimers, hydrogenated	157707-86-3	oxygen depletion	15 %	28 d	
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	biotic/abiotic	31 %	28 d	OECD Guideline 301
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	oxygen depletion	31 %	28 d	OECD Guideline 301
Bis(nonylphenyl)amine	36878-20-3	carbon dioxide generation	1 %	28 d	

12.3 Bioaccumulative potential

Not expected to bioaccumulate.

n-octanol/water (log KOW)	>3
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Bioaccumulative potential of components of the mixture				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Dec-1-ene, trimers, hydrogenated	157707-86-3		>6.5 (pH value: 7, 20 °C)	
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0		>4	
Bis(nonylphenyl)amine	36878-20-3	411		
C14-16-18 Alkyl phenol	1190625-94-5		>7.2 (pH value: 7, 35 °C)	

12.4 Mobility in soil

Not miscible with water. Spillages may penetrate the soil causing ground water contamination. This product floats on water and may affect the oxygen-balance in the water.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

- | | |
|--------------------------------------------------------------|-----------------------------------------------------------------------|
| 14.1 UN number or ID number | not subject to transport regulations |
| 14.2 UN proper shipping name | not relevant |
| 14.3 Transport hazard class(es) | none |
| 14.4 Packing group | not assigned |
| 14.5 Environmental hazards | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 Special precautions for user | There is no additional information. |
| 14.7 Maritime transport in bulk according to IMO instruments | No data available. |

Information for each of the UN Model Regulations

International Maritime Dangerous Goods Code (IMDG) - additional information

Not subject to IMDG.

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International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Name	Name acc. to inventory	Restriction	No
Lubricating oils (petroleum), C20-50, hydro-treated neutral oil-based	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
Lubricating oils (petroleum), C15-30, hydro-treated neutral oil-based	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
Bis(nonylphenyl)amine	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
Distillates (petroleum), hydrotreated heavy paraffinic	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
C14-16-18 Alkyl phenol	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
C14-16-18 Alkyl phenol	substances in tattoo inks and permanent make-up	R75	75
Dec-1-ene, trimers, hydrogenated	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3

Legend

R3

- Shall not be used in:
 - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ash-trays,
 - tricks and jokes,
 - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
- Articles not complying with paragraph 1 shall not be placed on the market.
- Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
 - can be used as fuel in decorative oil lamps for supply to the general public, and
 - present an aspiration hazard and are labelled with H304.
- Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
- Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
 - lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage";
 - grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage';
 - lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.;

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Legend

R75

1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:
- (a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
 - (b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
 - (c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
 - (d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:
 - (i) 0,1 % by weight, if the substance is used solely as a pH regulator;
 - (ii) 0,01 % by weight, in all other cases;
 - (e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
 - (f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:
 - (i) "Rinse-off products";
 - (ii) "Not to be used in products applied on mucous membranes";
 - (iii) "Not to be used in eye products";
 - (g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column;
 - (h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the mixture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.
3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.
4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
- (a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
 - (b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification.
6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made.
7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:
- (a) the statement "Mixture for use in tattoos or permanent make-up";
 - (b) a reference number to uniquely identify the batch;
 - (c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;
 - (d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;
 - (e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;
 - (f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;
 - (g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.
- The information shall be clearly visible, easily legible and marked in a way that is indelible.
- The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.
- Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.
- Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.
8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.
9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).
10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

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List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

Seveso Directive

2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
	not assigned		

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

Water Framework Directive (WFD)

None of the ingredients are listed.

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.3	Details of the supplier of the safety data sheet: Synmar B.V. Hogeweg 210 3815 LZ Amersfoort Netherlands Telephone: +31 (0) 33 303 3044 e-mail: info@synmar.nl Website: www.synmar.nl	Details of the supplier of the safety data sheet: Synmar B.V. Albert Schweitzerstraat 7 7131 PG Lichtenvoorde Netherlands Telephone: +31 (0) 33 303 3044 e-mail: info@synmar.nl Website: www.synmar.nl
3.2	Remarks: For full text of H-phrases: see SECTION 16. All the percentages given are percentages by weight unless stated otherwise.	Remarks: All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.
14.7	Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - additional information: Not subject to ADR, RID and ADN.	
16		Abbreviations and acronyms: change in the listing (table)
16	Key literature references and sources for data: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU. Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).	Key literature references and sources for data: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU. Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
log KOW	n-Octanol/water
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
NOELR	No Observed Effect Loading Rate

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Abbr.	Descriptions of used abbreviations
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Sens.	Skin sensitisation
STOT RE	Specific target organ toxicity - repeated exposure
SVHC	Substance of Very High Concern
UEL	Upper explosion limit (UEL)
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.