

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

1.1. Product identifier

Name of product Diesel Anti Freeze
Art-Nr 02.1724.00

1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended intended purpose(s)

Additive for petroleum products

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor Yachticon A. Nagel GmbH
Hans-Böckler-Ring 33, D-22851 Norderstedt
Phone +49 40 511 3780, Fax +49 40 51 74 37
E-Mail yachticon@yachticon.de
Internet www.yachticon.de

Advice

Phone +49 40 511 37 80
Fax +49 40 51 74 37
E-mail (competent person):
yachticon@yachticon.de

1.4. Emergency telephone number

Emergency advice Giftinformationszentrale Berlin
Phone +49 (0)30 192 40

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Skin Irrit. 2	H315	
Eye Irrit. 2	H319	
Skin Sens. 1	H317	
STOT SE 3	H336	
Asp. Tox. 1	H304	
Aquatic Chronic 2	H411	

Hazard statements for health hazards

H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Hazard statements for environmental hazards

H411 Toxic to aquatic life with long lasting effects.

Additional hints

This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].

2.2. Label elements

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



GHS07



GHS08



GHS09

Signal word

Danger

Hazard statements for health hazards

H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Hazard statements for environmental hazards

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

General

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

Prevention

P261 Avoid inhalation of vapors / spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P331 Do NOT induce vomiting.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal

P501 Dispose of contents/container to an approved waste handling.

Hazardous ingredients for labeling

Derivative of EDTA-tetraamide, Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified, Solvent naphtha (petroleum), heavy aromatic

Supplemental Hazard information (EU)

Health properties

Repeated exposure may cause skin dryness or cracking.

Additional information

Special rules on packaging

Touchable warning sign (EN/ISO 11683).
Childproof closures (EN/862/ISO 8317).

2.3. Other hazards

No information available.

SECTION 3: Composition/ information on ingredients

3.2. Mixtures

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
91-20-3	202-049-5	naphthalene	>= 0,25 < 1	Carc. 2, H351 / Acute Tox. 4, H302 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410
95-63-6	202-436-9	1,2,4-trimethylbenzene	>= 2,5	Flam. Liq. 3, H226 / Acute Tox. 4, H332 / Eye Irrit. 2, H319 / STOT SE 3, H335 / Skin Irrit. 2, H315 / Aquatic Chronic 2, H411
108-67-8	203-604-4	mesitylene	>= 1	Flam. Liq. 3, H226 / STOT SE 3, H335 / Aquatic Chronic 2, H411
64742-81-0	265-184-9	Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified	>= 2,5	Asp. Tox. 1, H304 / Skin Irrit. 2, H315 / Aquatic Chronic 2, H411
64742-94-5	918-811-1	Solvent naphtha (petroleum), heavy aromatic	>= 25	Asp. Tox. 1, H304 / STOT SE 3 (CNS), H336 / Aquatic Chronic 2, H411
136920-07-5	406-640-0	Derivative of EDTA-tetraamide	>= 1	Skin Sens. 1, H317
	283-219-6	carboxylic acid amides	>= 1	Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Aquatic Chronic 2, H411

REACH

CAS No	Name	REACH registration number
91-20-3	naphthalene	01-2119561346-37-XXXX
95-63-6	1,2,4-trimethylbenzene	01-2119472135-42-XXXX
108-67-8	mesitylene	01-2119463878-19-XXXX
64742-94-5	Solvent naphtha (petroleum), heavy aromatic	01-2119463583-34-XXXX

Additional advice

Benzene content <0.1%

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove moisted clothing immediately.

In the event of persistent symptoms receive medical treatment.

In case of accident or if you feel unwell seek medical advice immediately (if possible show directions for use or safety data sheet).

In case of inhalation

Ensure of fresh air.

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In case of skin contact

In case of contact with skin wash off with soap and water.

In case of eye contact

In case of contact with eyes rinsing with plenty of lukewarm water carefully and seek for medical treatment.
Remove contact lenses.

In case of ingestion

Refer to medical treatment.
Rinse out mouth and give plenty of water to drink.
Do NOT induce vomiting - risk of aspiration!

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

Physician's information / possible dangers

Risk of serious lung damage in aspiration. This may cause pulmonary edema and pneumonia.

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam

Dry powder

Carbon dioxide

sand

Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Fire gas of organic material has to be classed invariably as respiratory poison.

In the event of fire the following can be released:

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Attention slip hazard, if leaking.

Incomplete combustion may lead to formation of toxic pyrolysis products.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply (isolated).

Wear full protective clothing.

Additional information

Burns down under strong soot production.

Cool endangered containers with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

Collect contaminated firefighting water separately, must not be discharged into the drains.

Remove containers from the danger area, if possible without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.
Keep away from heat and sources of ignition.
Use personal protective clothing.
Do not breathe vapors.
Avoid contact with clothing, skin and eyes.
Use suitable breathing apparatus if exposed to vapors / aerosol.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Suppress gases/vapours/mists with water spray jet
If product enters water course or sewage system, inform the responsible authority.

6.3. Methods and material for containment and cleaning up

Pump off larger quantity.
Send in suitable containers for recovery or disposal.
Take up with absorbent material (e.g. sand, general-purpose binder, kieselguhr).
After taking up the material dispose according to regulation.
Ensure adequate ventilation.

Additional Information

Remove all sources of ignition. Avoid open flames.

6.4. Reference to other sections

Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8
Emergency telephone number: see section 1

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.
Avoid contact with skin and eyes.
Do not breathe aerosols / vapors.

General protective measures

Avoid contact with eyes and skin
Do not inhale gases/vapours/aerosols.

Hygiene measures

Clean skin thoroughly after working.
At work do not eat, drink and smoke.
Remove soiled or soaked clothing immediately.
Work in rooms with good ventilation.
Wash hands before breaks and after work.
Use barrier skin cream.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

The product is combustible.

Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep in closed original container.

Provide solvent-resistant and impermeable floor.

Advice on storage compatibility

Do not store with acids or alkalies.

Do not store together with oxidizing agents.

Further information on storage conditions

Keep container tightly closed and store at cool and aired place.

Exclude sources of ignition - No smoking.

Protect from heat and direct solar radiation.

Do not keep at temperatures above 50 ° C.

Storage group 10

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)**

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
108-67-8	mesitylene (trimethylbenzenes)	8 hours	100	20	
91-20-3	naphthalene	8 hours	50	10	
95-63-6	1,2,4-trimethylbenzene	8 hours	100	20	

biological limits (TRGS 903)

CAS No	Name	Parameter	BGW	Examination material	Test date
95-63-6	Trimethylbenzol (alle Isomeren): 1,2,4-Trimethylbenzol	Dimethylbenzoesäuren (Summe aller Isomeren nach Hydrolyse)	400 mg/g Kreatinin	U	c, b
108-67-8	Trimethylbenzol (alle Isomeren): Mesitylen (1,3,5-Trimethylbenzol)	Dimethylbenzoesäuren (Summe aller Isomeren nach Hydrolyse)	400 mg/g Kreatinin	U	c, b

8.2. Exposure controls**Respiratory protection**

Respiratory protection required when limit values (AGW) are exceeded.

Short term: filter apparatus, filter A

Not necessary with adequate exhaust ventilation.

Hand protection

The selection of the suitable gloves does not only depend on different material, but also on further marks of quality and varies from manufacturer to manufacturer.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

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Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Fluorine rubber, 0,7 mm, 60 min, 480 min. e.g. "Vitoject" (KCL GmbH, Email: Vertrieb@kcl.de)

Eye protection

safety goggles

Other protection measures

protective clothing

Appropriate engineering controls

Ensure good ventilation, where necessary use fume hood.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

liquid

Colour

light brown

Odour

of hydrocarbons

Odour threshold

No information available.

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	No information available.				
boiling point	> 160 °C				
Melting point / Freezing point	No information available.				
Flash point	> 61 °C				
Vapourisation rate	No information available.				
Flammable (solid)	No information available.				
Flammability (gas)	No information available.				
Ignition temperature	No information available.				
Self ignition temperature	No information available.				
Lower explosion limit	No information available.				
Upper explosion limit	No information available.				
Vapour pressure	< 100 hPa	50 °C			
Relative density	< 1 g/cm ³	20 °C			
Vapour density	No information available.				
Solubility in water		20 °C			more or less insoluble

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	Value	Temperature	at	Method	Remark
Solubility/other	No information available.				
Partition coefficient n-octanol/water (log P O/W)	No information available.				
Decomposition temperature	No information available.				
Viscosity	< 10 mPa*s	20 °C			

Oxidising properties

No information available.

Explosive properties

No information available.

9.2. Other information

Refer to technical data sheet.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

Stable under recommended storage conditions.

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Reacts with strong acids and alkalis.

Reactions with oxidising agents.

10.4. Conditions to avoid

Heat, open flames, sparks

10.5. Incompatible materials**Materials to avoid**

Reactions with strong acids and alkalies.

Reactions with oxidising agents.

10.6. Hazardous decomposition products

Concerning possible decomposition products see section 5.

Thermal decomposition

Remark No decomposition if used as directed.

Additional information

As a general rule we recommend avoiding the contact with strong chemical reagents, such as acids, bases, reductors and oxidizers.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
Irritability skin	irritant			
Irritability eye	irritant			
Skin sensitization	sensitizing			

Specific target organ toxicity (single exposure)

May cause drowsiness and dizziness.

Experiences made from practice

Inhalation can cause damage to the respiratory tract or lungs.

Inhalation / eye contact: in high concentrations irritating to the mucous membranes, narcotic effect and influence on power of reaction and loss of coordination possible.

Often and prolonged skin contact may dry and defat the skin, which may lead to skin irritation and inflammation (dermatitis).

Additional information

The product should be handled with the care usual when dealing with chemicals.

Further hazardous properties can not be excluded.

SECTION 12: Ecological information

12.1. Toxicity

No information available.

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Biological degradability				slightly degradable

12.3. Bioaccumulative potential

Product can accumulate in organisms.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

General regulation

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for the product

There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany the Recycling and Waste Management Act (KrWG) stipulates recycling as a requirement. This means that a distinction must be made between "wastes for recycling" and "wastes for disposal". Particular aspects - in the main concerning delivery - are also governed by the Laender. Must not be disposed together with household garbage.

Recommendations for packaging

Totally emptied packaging may be taken for recycling.
 Totally emptied packaging may be treated as household waste.
 Disposal according to official regulations.
 Packaging that cannot be cleaned should be disposed of like the product.

General information

Allocation of the waste number has to be done according to the EWC directive industry- and process-specific.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	3082	3082	3082
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha (petroleum), heavy aromatic)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N. O.S. (Solvent naphtha (petroleum), heavy aromatic)	Environmentally hazardous substance, liquid, n.o.s. (Solvent naphtha (petroleum), heavy aromatic)
14.3. Transport hazard class(es)	9	9	9
14.4. Packing group	III	III	III
14.5. Environmental hazards	Yes	Yes	Yes

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

Land and inland navigation transport ADR/RID

Hazard label(s) 9
 tunnel restriction code E
 Classification code M6

SECTION 15: Regulatory information

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

National regulations

Water hazard class 2 following VwVwS
hazardous to water

Decree for case of interference/remarks Quantity limits according to Hazardous Incident Ordinance must be observed.

15.2. Chemical Safety Assessment

No information available.

SECTION 16: Other information

Training advice

See the technical data sheet for more information.

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

Further information

The national special regulations have to be implemented by each user their own responsibility!
The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Please note: Our Material Safety Data Sheets have been prepared in accordance with EU directives, WITHOUT taking into account the specific national regulations for handling hazardous materials and chemicals.

Indication of changes: "!" = Data changed compared with the previous version.

Sources of key data used

Data sheets of the suppliers.

European Chemicals Agency (ECHA)

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.