

Safety Data Sheet

D1

Revision date: 2011-03-30

according to regulation 1907/2006/EC

Print date: 2012-09-25

1 Identification of the substance/preparation and company/undertaking

1.1 Identification of the substance or preparation

Product name: D1

Uses: Operating fluid/ Lubricant for vacuum pumps

**Manufacturer/
Supplier:** PFEIFFER VACUUM GmbH
Berliner Strasse 43
D-35614 Asslar
Telefon ++49 6441/1802-0
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www.pfeiffer-vacuum.net
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**Emergency tele-
phone number:** Tel.: ++49 228/19240

2 Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements : H412 Harmful to aquatic life with long lasting effects.

Precautionary statements :

- Prevention: P273 Avoid release to the environment.
- Response: P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Hazardous components which must be listed on the label:

- 122-39-4 diphenylamine
- 90-30-2 N-1-naphthylaniline

Additional Labelling:

EUH208 Contains: N-1-naphthylaniline May produce an allergic reaction.
Restricted to professional users.

2.3 Other hazards

No information available. Do not handle until all safety precautions have been read and understood.

3 Composition/information on ingredients**3.1 Mixtures****Hazardous components**

Chemical Name	CAS-No. EG-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No. 1272/2008)	Concentration [%]
N-1-naphthylaniline	90-30-2 201-983-0	Xn; R22-R48/22 Xi; R43 N; R50/53	Akut Tox. 4; H302 Skin Sens. 1; H317 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0,25 - < 1
diphenylamine	122-39-4 204-539-4	T; R23/24/25 R33 N; R50-R53	Akut Tox. 3; H331 Akut Tox. 3; H311 Akut Tox. 3; H301 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 0,25

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4 First-aid measures**4.1 Description of first aid measures**

General advice :	No hazards which require special first aid measures.
If inhaled :	Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If symptoms persist, call a physician.
In case of skin contact:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.
In case of eye contact :	Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed :	Clean mouth with water and drink afterwards plenty of water.

Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : None known

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : For specialist advice physicians should contact the Poisons

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Burning produces noxious and toxic fumes.

5.3 Advice for firefighters

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

7 Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end uses

Specific use(s) : Raw material for industry

8 Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	update	Basis
diphenylamine	122-39-4	TGG 8 hr	10 mg/m ³	2006-03-23	BE OEL

8.2 Exposure controls

Engineering measures

Effective exhaust ventilation system
Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection: Breathing apparatus needed only when aerosol or mist is formed.
Respirator with filter for organic vapour

Hand protection : Polyvinyl alcohol or nitrile- butyl-rubber gloves
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Before removing gloves clean them with soap and water.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Skin and body protection : impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of workday.

Environmental exposure controls

General advice : If the product contaminates rivers and lakes or drains inform respective authorities.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	liquid
Colour	yellow
Odour	characteristic
Odour Threshold	No information available
Flash point	250 °C
Ignition temperature	No information available
Lower explosion limit	No information available
Upper explosion limit	No information available
Flammability (solid, gas)	No information available
Autoignition temperature	No information available
pH	No information available
Vapour pressure	No information available
Density	0,957 g/cm ³
Water solubility	No information available
Partition coefficient: n-octanol/water	No information available
Solubility in other solvents	No information available
Viscosity, dynamic	93,5 mPa.s at 40 °C
Relative vapour density	No information available
Evaporation rate	No information available

9.2 Other information

Oxidising potential : Note: No information available

10 Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Note: No decomposition if used as directed.

10.4 Conditions to avoid

Conditions to avoid : Exposure to moisture.
Contamination

10.5 Incompatible materials

Materials to avoid : Acids, Bases, Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon oxides, nitrogen oxides (NOx)

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : Remarks: Not classified due to lack of data.

**Acute oral toxicity
N-1-naphthylaniline :** LD50: 1.625 mg/kg
Species: rat

diphenylamine : LD50: > 1.500 mg/kg
Species: rat

Acute inhalation toxicity : Remarks: Not classified due to lack of data.

Acute dermal toxicity : Remarks: Not classified due to lack of data.

**Acute dermal toxicity
N-1-naphthylaniline :** LD50 Dermal: > 5.000 mg/kg
Species: rabbit

diphenylamine : LD50: > 5.000 mg/kg
Species: rabbit

Skin corrosion/irritation

Skin irritation : Remarks: According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

**Skin irritation
N-1-naphthylaniline :** Species: rabbit
Result: No skin irritation
Method: Draize Test

diphenylamine : Species: rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Eye irritation : Remarks: Not classified due to lack of data.

**Eye irritation
N-1-naphthylaniline :** Species: rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Respiratory or skin sensitization

Sensitisation : Remarks: Not classified due to lack of data.

**Sensitisation
N-1-naphthylaniline :** Maximisation Test
Species: guinea pig
Classification: May cause sensitization by skin contact.
Patch Test
Species: Human
Classification: May cause sensitization by skin contact.

Germ cell mutagenicity Ames test
N-1-naphthylaniline : Result: negative

Chinese Hamster Ovary (CHO)
 Result: negative

Genotoxicity in vivo in vivo assay
N-1-naphthylaniline : Species: mouse
 Result: negative

Mutagenicity Assessment

Remarks : Not classified due to lack of data.

Carcinogenicity Assessment

Remarks : Not classified due to lack of data.

Reproductive toxicity Assessment

Remarks : Not classified due to lack of data.

Target Organ Systemic Toxicant - Single exposure

Remarks: Not classified due to lack of data.

Target Organ Systemic Toxicant - Repeated exposure

Remarks: Not classified due to lack of data.

Aspiration hazard

Aspiration toxicity : No aspiration toxicity classification

Toxicology Assessment

Further information : No data is available on the product itself.

12 Ecological information

12.1 Toxicity

Toxicity to fish : no data available

Toxicity to fish LC50: 0,44 mg/l
N-1-naphthylaniline : Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)
 semi-static test Analytical monitoring: yes

diphenylamine : LC50: 3,79 mg/l
 Exposure time: 96 h

Species: Pimephales promelas (fathead minnow)
 flow-through test
 LC50: > 20 mg/l
 Exposure time: 48 h

Species: Leuciscus idus (Golden orfe)
 LC50: 5,1 mg/l
 Exposure time: 48 h

Species: Oryzias latipes (Orange-red killifish)

Toxicity to daphnia and other aquatic invertebrates. (Chronic toxicity) N-1-naphthylaniline : NOEC: 0,02 mg/l
 Exposure time: 21 d
 Species: Daphnia magna (Water flea)
 Analytical monitoring: yes

12.2 Persistence and degradability

Biodegradability : no data available

Biodegradability N-1-naphthylaniline : aerobic
 According to the results of tests of biodegradability this product is not readily biodegradable.
 0 %
 Method: OECD Test Guideline 301

12.3 Bioaccumulative potential

Bioaccumulation : no data available

Bioaccumulation N-1-naphthylaniline : Species: Cyprinus carpio (Carp)
 Exposure time: 56 d
 Temperature: 25 °C
 Concentration: 0,1 mg/l
 Bioconcentration factor (BCF): 427 - 2.730

12.4 Mobility in soil

Mobility : no data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other adverse effects

Additional ecological information : The product itself has not been tested.
 An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13 Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
 Do not contaminate ponds, waterways or ditches with chemical or used container.
 Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents.
 Dispose of as unused product.
 Do not re-use empty containers.

14 Transport information

ADR	Not dangerous goods.
IATA	Not dangerous goods.
IMDG	Not dangerous goods.
RID	Not dangerous goods.

15 Regulatory information

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

Candidate List of Substances of Very High Concern for Authorisation : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 96/82/EC Update: 2003
Directive 96/82/EC does not apply

Water contaminating class (Germany) : WGK 1 slightly water endangering self classification

Notification status

US.TSCA	Not On TSCA Inventory
DSL	This product contains the following components that are not on the Canadian DSL nor NDSL lists
AICS	Not in compliance with the inventory
NZIoC	Not in compliance with the inventory
ENCS	Not in compliance with the inventory
KECI	Not in compliance with the inventory
PICCS	Not in compliance with the inventory
IECSC	Not in compliance with the inventory
CH INV	The formulation contains substances listed on the Swiss Inventory

15.2 Chemical Safety Assessment

No information available.

16 Other information

Full text of R-phrases referred to under sections 2 and 3

R22	Harmful if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R33	Danger of cumulative effects.
R43	May cause sensitization by skin contact.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50	Very toxic to aquatic organisms.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

16.1 Responsible department:

Development Dep./Technical Documentation

Notice to reader

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.