

Safety Data Sheet



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Revision date: 22/03/2018

Version: 1

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

1.1. Product identifier

Product name : **A400**
Product form : Mixture
Product code : A400

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

Relevant identified uses

Use of the substance/mixture : Lubricants and lubricant additives
Reserved for professional users

Uses advised against

Restrictions on use : No data available.

1.3. Details of the supplier of the safety data sheet

Pfeiffer Vacuum SAS
98, avenue de Brogny - BP 2069
74009 Annecy Cedex
T +(33) 04 50 65 77 77
support-service@pfeiffer-vacuum.fr

1.4. Emergency telephone number

Emergency number : The emergency telephone number for France is the ORFILA (INRS) number: + 33 (0) 1 45 42 59 59. This number gives details of all the poison control centres in France. These poison control and toxicovigilance centres provide free medical care 24/7 (excluding the cost of the call). For the emergency telephone number for your own country, please contact the relevant local authorities and visit the ECHA (European Chemicals Agency) website: http://echa.europa.eu/help/nationalhelp_contact_en.asp

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

EUH-statements : EUH210 - Safety data sheet available on request.

2.3. Other hazards

Other hazards which do not result in classification : No data available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Inorganic and organic components in mineral oil

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
White mineral oil (petroleum)	(CAS-No.) 8042-47-5 (EC-No.) 232-455-8 (REACH-no) 01-2119487078-27	70 - 90	Asp. Tox. 1, H304
1-Decene, homopolymer, hydrogenated	(CAS-No.) 68037-01-4 (EC-No.) 500-183-1 (REACH-no) 01-2119486452-34	20 - 30	Asp. Tox. 1, H304

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Get medical advice/attention if you feel unwell.
- First-aid measures after inhalation : If any vapours are inhaled, remove the victim to the fresh air and keep at rest. If experiencing respiratory symptoms, call a doctor.
- First-aid measures after skin contact : Wash skin with plenty of water. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If symptoms persist, call a physician.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

No additional information available

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Sprayed water
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical powder.

Unsuitable extinguishing media : No data available.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in the event of fire : Exposure to combustion products can be dangerous for the health. Carbon dioxide (CO₂). Carbon monoxide (CO). In case of fire, carbon oxides and smoke are formed. Exposure to substances produced by combustion or decomposition may be dangerous for the health.

5.3. Advice for firefighters

Precautionary measures fire : Do not enter or remain in the hazard area without chemical protection suits and autonomous breathing apparatus. Wear a full fire-resistant suit. Do not let the extinguishing water enter the sewage system or water flows. Cool containers exposed to the fire in water. If the leak or spillage has not caught fire, use water spray to disperse vapours and protect the personnel trying to stop the leak. Water spray can be used to distance run-offs of the product away from the areas exposed.

Other information : Residues of contaminated fire extinguishing water should be disposed of according to local regulations. Fire-fighting and rescue operations, and clearing operations under the effect of the combustion and hot gas can be performed with breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

For non-emergency personnel

Protective equipment : Ensure adequate ventilation. In compliance with good manufacturing practices, do not eat, drink or smoke when handling chemicals. Avoid inhalation, ingestion and contact with skin and eyes. Wear full protective clothing and self-contained breathing apparatus.

For emergency responders

Protective equipment : Avoid contact with skin and eyes. Emergency staff should be equipped with appropriate personal protection equipment (refer to section 8).

Emergency procedures : Move away or remove any source of ignition or sparks.

6.2. Environmental precautions

Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Avoid dispersion (for example by retention basin or oil barriers).

Retain contaminated wash water and dispose of it.

Warn the local authorities if significant leaks cannot be contained.

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6.3. Methods and material for containment and cleaning up

Other information : Remove with an inert absorbent.
For large spillages, install dams or other containment methods to limit the propagation of the product. If the dammed product can be pumped, store the gathered product in an appropriate container.
Clean the residual substances with the help of an appropriate absorbent.
Local or national regulation may apply to the spillage and disposal of this product, as well as to the materials and objects used for the cleaning. You will have to determine which regulations apply.
The sections 13 and 15 of this safety data sheet provide information about certain local or national requirements.

6.4. Reference to other sections

For information on handling, see section 7. For information on personal protective equipment, see section 8. For information on disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Provide local exhaust or general room ventilation.
Hygiene measures : Ensure that eye-rinsing systems and safety showers are located near the work space. Do not eat, drink or smoke when using. Wash contaminated clothing before putting back on.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide local exhaust or general room ventilation.
Storage conditions : Store in properly labelled containers. Store under observance of specific national legislation.
Incompatible materials : Heat sources. Direct sunlight. Oxidizing agents, reducing agents, acids, bases.
Packaging materials : Keep in original containers closed.

7.3. Specific end use(s)

No data / information available. These precautions only concern manipulation at room temperature. Use at high temperatures or applications by aerosol/spraying may require additional precautions. For more information concerning the use of silicones/organic oils in aerosol applications for consumers, please refer to the indications of the document concerning the use of these types of substances in aerosol applications for consumers, applications developed by the silicone industry (www.SEHSC.com) or contact customer service.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information : No data available.

8.2. Exposure controls

Appropriate engineering controls :
Ensure sufficient ventilation, especially in enclosed spaces.
Reduce the exposure concentrations at the workplace as far as possible.

Hand protection	: Due to the many possible conditions of exposure, the user should consider the actual period of use of a chemical protection glove to be significantly shorter than the period prior to permeation. It is essential to comply with the manufacturer's instructions for use, in particular concerning minimum thickness and minimum period prior to permeation. This information in no way replaces the compliance tests conducted by the final user. The protection provided by the glove depends on the conditions in which the substance/mixture is used. At the very least use chemical-resistant, leak-proof gloves (in accordance with standard EN 374). The use of this product means that the type of material and thickness of the gloves as well as the time taken to break down the material used to make the gloves cannot be decided until an in-depth study of the workstation has taken place, leading to a clear definition of the conditions of use and the most accurate possible evaluation. The gloves should therefore be chosen with the advice of the personal protective equipment manufacturer.
Eye protection	: Goggles with lateral protection (according to standard EN 166).
Skin and body protection	: Skin protection appropriate to the conditions of use should be provided. Wear suitable protective clothing.
Respiratory protection	: In the event of insufficient ventilation, wear suitable respiratory equipment. Mask with gas-vapours / dust filter type A/P2 (according to standard EN 141/EN143).
Environmental exposure controls	: Avoid release into natural bodies of water, waste water or the soil.
Consumer exposure controls	: Take off contaminated clothing and wash before reuse. Wash hands after working with the product.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 35 °C
Flash point	: 220 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available

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Explosive limits	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.86
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: Not classed as a combustion agent.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity relating to the substances, containers and contaminants to which the substance or mixture may be exposed during their transport, storage and use : No data available.

10.2. Chemical stability

The product is stable in normal conditions of use. Stability of the substance or mixture under normal and predictable storage and handling room conditions in terms of temperature and pressure : Chemically stable under standard room conditions (room temperature).

10.3. Possibility of hazardous reactions

Reaction or polymerisation of the substance or mixture releasing excessive heat or pressure or generating other dangerous conditions : This product will not polymerise by releasing excessive heat or pressure or by generating other dangerous conditions. (See section 10.1 for reactivity which can generate risks by taking into account the substances, containers and contaminants to which the substance or mixture may be exposed during their transport, storage and use.).

10.4. Conditions to avoid

Listing of conditions such as temperature, pressure, light, shocks, electrostatic discharges, vibrations or other physical stresses which may lead to a dangerous situation : According to our knowledge, temperature, pressure, light, shocks, etc. do not lead to a dangerous situation. Keep away from open flames, hot surfaces and ignition sources.

10.5. Incompatible materials

Families of substances or mixtures, or specific substances, such as water, air, acids, bases, oxidising agents, with which the substance or mixture may react by generating a dangerous situation : Strong oxidising agents, strong acids and strong bases.

10.6. Hazardous decomposition products

Known dangerous decomposition products and products which may be reasonably predictable as such following use, storage, pouring and heating : This product does not decompose under normal conditions. Decomposition products in case of fire : consult section 5.2. No hazardous decomposition products are known.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Additional information : To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

Acute toxicity : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

White mineral oil (petroleum) (8042-47-5)

Additional information

Acute toxicity by oral ingestions
DL50 (Rat) > 5.000 mg/kg

Acute toxicity by inhalation

CL50 (Rat) > 5 mg/l

Exposure period 4 h

Test atmosphere Dust/mist

Evaluation The substance or the mixture does not present an acute toxicity by inhalation

Acute toxicity by skin contact

DL50 (rabbit) > 2.000 mg/kg

Evaluation The substance or the mixture does not present an acute toxicity by skin contact

1-Decene, homopolymer, hydrogenated (68037-01-4)

Additional information

Acute toxicity by oral ingestion

DL50 (Rat) > 5.000 mg/kg

Acute toxicity by inhalation

CL50 (Rat) > 5,2 mg/l

Exposure period 4 h

Test atmosphere dust/mist

Method OCDE guideline 403

Evaluation The substance or the mixture does not present an acute toxicity by inhalation

Acute toxicity by skin contact

DL50 (Rat) > 2.000 mg/kg

Method OCDE guideline 402

Remarks Based on data from similar components

Skin corrosion/irritation : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

White mineral oil (petroleum) (8042-47-5)

Additional information

Species rabbit

Result No skin irritation

1-Decene, homopolymer, hydrogenated (68037-01-4)

Additional information

Species rabbit

Result No skin irritation

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Serious eye damage/irritation : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

White mineral oil (petroleum) (8042-47-5)

Additional information	Species rabbit Result No eye irritation
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1-Decene, homopolymer, hydrogenated (68037-01-4)

Additional information	Species rabbit Result No eye irritation
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Respiratory or skin sensitisation : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

White mineral oil (petroleum) (8042-47-5)

Additional information	Test type Buehler test Exposure type Skin contact Species Guinea pig Result Negative
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1-Decene, homopolymer, hydrogenated (68037-01-4)

Additional information	Test type Maximalisation test Exposure type Skin contact Species Guinea pig Method OCDE guideline 406 Result negative
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Germ cell mutagenicity : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

White mineral oil (petroleum) (8042-47-5)

Additional information	In vitro genotoxicity Test type In vitro genetic mutation test on mammal cells Results negative In vivo genotoxicity Test type Micronucleus test on mammal ethrocytes (in vivo cytogenetic test) Species Mouse Application method Intraperitoneal injection Method OCDE guideline 474 Result negative Remarks Based on data from similar components
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1-Decene, homopolymer, hydrogenated (68037-01-4)

Additional information	Genotoxicity in vitro Test type Inverse bacterial mutation test (Ames) Method OCDE guideline 471 Result negative
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Carcinogenicity : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

White mineral oil (petroleum) (8042-47-5)

Additional information	Species rat Application method Ingestion Exposure period 24 months Result negative
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Reproductive toxicity : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

White mineral oil (petroleum) (8042-47-5)

Additional information	Effects on fertility Test type Toxicity study on reproduction across one generation Species Rat Application method Skin contact Result negative Incidences on the development of the foetus Test type Embryo-foetal development Species Rat Application method
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1-Decene, homopolymer, hydrogenated (68037-01-4)

Additional information	Effects on fertility Test type Toxicity study on reproduction across a generation Species Rat Application method Ingestion Result negative
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STOT-single exposure : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

STOT-repeated exposure : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

White mineral oil (petroleum) (8042-47-5)

Additional information	Species Rat LOAEL > 160 mg/kg Application method Ingestion Exposure period 90 days Species Rat LOAEL >= 1 mg/l Application method Inhalation (dust/steam/smoke) Exposure period 4 weeks Method OCDE guideline 412
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1-Decene, homopolymer, hydrogenated (68037-01-4)

Additional information

Species Rat
NOAEL 4.159,4 mg/kg
Application method Ingestion
Exposure period 91 days

Aspiration hazard : Not classified

To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.

Information on the likely routes of exposure :

Dermal contact : No data available.
Eyes contact : No data available.
Inhalation : No data available.
Ingestion : No data available.

SECTION 12: Ecological information

12.1. Toxicity

1-Decene, homopolymer, hydrogenated (68037-01-4)

ErC50 (algae)

EC50: 190 mg / l - Exposure time: 48 h - Species: Daphnia magna

NOEC (acute)

NOELR : 1.000 mg / l - Exposure time: 72 h - Species: Scenedesmus capricornutum (fresh water algae) - static test Method: OECD Test Guideline 201

12.2. Persistence and degradability

White mineral oil (petroleum) (8042-47-5)

Persistence and degradability

Result Difficultly biodegradable.
Biodegradation 31 %
Exposure period 28 days.

1-Decene, homopolymer, hydrogenated (68037-01-4)

Persistence and degradability

Result Difficultly biodegradable.
Biodegradation 2 %
Exposure period 28 days
Method OCDE guideline 301D.

12.3. Bioaccumulative potential

1-Decene, homopolymer, hydrogenated (68037-01-4)

Log Pow

> 6.5

12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Dispose of the product in accordance with the applicable local regulations. According to the European Waste Code (EWC), the waste code is not relative to the product itself but to its application.
The waste code should be assigned by the user, if possible after consulting the relevant authorities for waste disposal.

Waste treatment methods : Dispose of in accordance with the local/national safety regulations in force.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : It is recommended to avoid or reduce waste production as much as possible.

The disposal of this product, solutions and by-products shall comply with the legal requirements for environmental protection and waste disposal and the requirements of all local authorities at all times.

A licensed waste disposal contractor will be in charge of the disposal of surplus and non-recyclable products. Do not evacuate untreated waste into the sewers.

Only dispose of this product and its container by taking all standard precautions. Handle non-cleaned and non-rinsed containers with care. Empty containers or liners may retain product residues. Avoid dispersing spilled materials, as well as their leakage, and any contact with the soil, waterways, drains and sewers.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable

Proper Shipping Name (IMDG) : Not applicable

Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

Special transport precautions : For information on handling, see section 7. For information on personal protective equipment, see section 8. For information on disposal, see section 13.

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

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

White mineral oil (petroleum) - 1-Decene, homopolymer, hydrogenated

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

National regulations

Occupational illnesses (R-461-3, France) - 36

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15.2. Chemical safety assessment

No evaluation of the chemical safety has been performed.

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEL	No-Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:

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PFEIFFER  **VACUUM A400**

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Asp. Tox. 1	Aspiration hazard, Category 1
H304	May be fatal if swallowed and enters airways.
EUH210	Safety data sheet available on request.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product