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Packing: 30g Cat-No. 200 39 125

COMPUOND NAME:

FOMBLIN[®] **GREASE VAC**

COMPANY IDENTIFICATION

Company: AUSIMONT S.p.A. AUSIMONT (Germany) GmbH

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1) **COMPOUND IDENTIFICATION**

FOMBLIN ® GREASE VAC Trade Name: VAC 1, VAC 2, VAC 3. Grades:

Chemical Description: Preparation based on perfluoropolyethers and polytetrafluoroethylene

Molecular Weight: n.a. Empirical Formula: n.a.

Structural Formula: $CF_3 - O - (CF - CF_2 - O)_n - (CF_2 - O)_m - CF_3$ $+(C_2F_4)_n$

> CF₃ perfluoropolyether Algoflon PTFE

CAS Name: not assigned CAS Number: not assigned EEC Number: not assigned **EINECS Number:** not assigned **ELINCS Number:** not assigned

2) COMPOSITION / INFORMATION ON INGREDIENTS

Composition of the preparation

Base oil perfluoropolyether CAS $N^{\circ} = 69991 - 67 - 9$ Algoflon - PTFE CAS $N^{\circ} = 9002 - 84 - 0$ Thickener

Substances with established exposure limits or classifiable as dangerous according to EC Directive 67/548 and following amendments, in concentratione equal or higher than that reported in EC directive 88/379 (item 3, sect.6):

Name Conc. CAS N° Symbol Risk Phrases

None

HAZARDS IDENTIFICATION 3)

Adverse human health effects

The product, when properly handled, according to the good working and hygienic practices, is not dangerous for the human health.

Environmental effects

The product, when properly handled, according to the good working and hygienic practices, is not dangerous for the environment.

Specific hazards

Harmful effects for health and environment may occur in case of thermal decomposition, due to heating or fire, for the emission of toxic and corrosive gases.

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4) MEDICAL INFORMATION – FIRST AID

Symptomatology following exposure

Eye contact Redness, irritation **Skin contact** Redness, irritation

Ingestion Abdominal pain, nausea, vomit.

First Aid Measures

Eye contact

Wash with plenty of water for at least 15 minutes.

Skin contact

Wash with water and soap.

Ingestion

Give some glasses of water to drink. Induce vomiting. Seek medical advice in case of persistent pain.

5) FIRE FIGHTING MEASURES

Specific hazards

The product is not flammable and not explosive.

Specific methods

Stay upwind and at safety distance from flames. In case of surrounding fire, remove the containers, when possible to do so in safe conditions. In case of fire keep containers cool by spraying with water.

Extinguishing media

Water, powders, foams, chemicals, CO₂.

Protection of fire - fighters

Self-contained breathing apparatus. Protective clothing for skin and eyes against corrosive vapours.

6) ACCIDENTAL RELEASE MEASURES

Personal precautions

Stop the release in safe conditions as soon as possible. Avoid the contact of the released with ignition sources or hot surfaces. Possible risk only in case of thermal decomposition of the released product.

Environmental precautions

Avoid the discharge of the released product in sewage systems, in surface and underground waters, in the soil.

Methods for cleaning up

Absorb the released liquid with earth, sand or sawdust. Collect it in suitable containers for disposal

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7) HANDLING AND STORAGE MEASURES

HANDLING Precautions

Avoid heating the product above its decomposition temperature (290 °C).

Technical measures

Provide working areas with adequate ventilation systems and with water wash facilities (eye-bath and emergency showers).

STORAGE Storage conditions

Keep away from heat sources. Keep away from combustible and explosive materials. Keep away from incompatible substances (see sect. 10).

Packaging

Product usually storage in polyethylene containers.

Recommended materials

Metal, plastic, glass.

Non suitable materials: ---

8) EXPOSURE CONTOL/PERSONAL PROTECTION

Exposure limits

Only threshold limits of by-products from thermal decomposition are available ACGIH 2002

HF TLV / CEILING = 2.6 mg / m^3 3 ppm COF₂ TLV / STEL = 13.5 mg / m^3 5 ppm

Engineering Measures

Provide working area with adequate ventilation/aspiration systems.

Personal Protective Equipment

Respiratory protection not necessary in normal use, self-contained breathing apparatus

in case of fire.

Eye protection Safety goggles **Hand protection** Rubber gloves

Skin and body protection Worksuit or rubber apron

Hygiene measures Do not drink, eat and smoke during handling.

9) PHYSICAL AND CHEMICAL PROPERTIES

Physical State: grease Colour: white Odour: odourless Melting point: not available Boiling point: not available Flashpoint: not flammable Explosion properties: not explosive Oxidising properties: not oxidiser

Vapour Pressure: $< 5 * 10^{-13}$ mmHg at 20 °C

Vapour density: not available Density: 1,9 g / ml Solubility in water: not soluble

Solubility in organic solvents: partially soluble in fluorinated solvents

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10) STABILITY AND REACTIVITY

Stability

The product is stable in normal conditions of use and storage.

Conditions to avoid

Avoid heating the product above 290 °C. Avoid contact with flames.

Materials to avoid

Strong alkaline non-aqueous compounds. Lewis acids (AlC_b, SbF₅, CoF₃) above 100 °C. Powdered magnesium, aluminium and their alloys above 100 °C.

Hazardous decomposition products

The product may decompose at temperature above 290 $^{\circ}$ C with emission of HF and COF₂, which are toxic and corrosive gases; the decomposition is promoted by metals, so in presence of titanium and its alloys the decomposition temperature lowers at 260 $^{\circ}$ C.

11) TOXICOLOGICAL INFORMATION

Penetrations routes

Contact or ingestion of the product, Inhalation of gases from thermal decomposition.

Adverse effects for the Human Health

Delayed and/or immediate effects after short and/or prolonged exposure:

Acute toxicity no known effect Local effects/irritating power no known effect **Sensitization** no known effect **Chronic toxicity** no known effect Carcinogenicity no known effect Mutagenicity no known effect **Reproduction toxicity** no known effect **Experimental Toxicological Data** no available data.

12) ECOTOXICOLOGICAL INFORMATION

Environmental effects

Mobilityno available dataPersistence/degradabilityno available dataBioaccumulationno available dataEcostability datano available dataEcotoxicity datano available data

 LC_{50} fish no available data Spezies: -- EC_{50} crusteacans no available data Spezies: -- EC_{50} algae no available data Spezies: --

EVALUATION

Use the product according to the good working practice, avoiding polluting the environment.

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13) DISPOSAL CONSIDERATIONS

Waste treatment

Send the waste product to thermal destruction, using high - temperature incinerators designed to burn fluorine compounds.

Packaging treatment

Reuse, when possible, the containers, after thorough washing. Send the waste containers to authorised landfills, according to local laws and regulations.

14) TRANSPORT INFORMATION

Specific hazards

Product not dangerous for transportation.

Packaging information

Product usually shipped in polyethylene containers of different capacities (drums, jerricans, tanks).

International Transport Classification

UN Number not assigned
Packaging group not assigned
Road Transportation (ADR) not classified
Rail Transportation (RID / RMP) not classified
Sea Transportation (IMDG / IMO) not classified
Air Transportation (ICAO / IATA) not classified

15) REGULATORY INFORMATION

CEE Regulations (Directive 67 / 548 and following amendments)

Classification

Classification type not required

Hazard class none

Labeling

Trade name **FOMBLIN** [®] **GREASE** Grades VAC 1, VAC 2, VAC 3.

Hazard Symbol not required Risk Phrases not required Safety Phrases not required

National Regulations

TSCA Status

All components are listed on the Toxic Substances Control Act – Section 8 (b) Chemical Inventory

International Regulations

All components are listed on the chemical inventories of the following countries:

Japan (ENCS), Australia (AICS), Canada (DSL), Korea (ECL)

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16) OTHER INFORMATION

none

BIBLIOGRAPHY

AUSIMONT internal data

Safety Data Sheet according EEC Directive 93 / 112

The information given in this safety data sheet is for safety purpose only. It is given in good faith and based on the best knowledge and experience of the company at the date of issuing. The company is not responsible for damages caused by the use of the product in applications for which it was not intended or for conditions of use outside its control.

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