

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.04.2021

V - 8.1

Revision: 13.04.2021

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

- **1.1 Product identifier**
 - Trade name: VIGON® EFM Aerosol
 - UFI: F301-D0MR-U00T-9U7V
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 - Application of the substance / the mixture Cleaning agent/ Cleaner
 - Uses advised against No further relevant information available.
- **1.3 Details of the supplier of the safety data sheet**
 - Manufacturer/Supplier:
ZESTRON
...a Business Division of Dr.O.K.Wack Chemie GmbH
Bunsenstrasse 6
D - 85053 Ingolstadt
Tel. +49 841 63590 Fax +49 841 63540
www.zestron.com
info@ZESTRON.com
- Further information obtainable from: Safety department
- **1.4 Emergency telephone number:** During business hours: +49 841 63523

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - Classification according to Regulation (EC) No 1272/2008

Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
Skin Irrit. 2	H315	Causes skin irritation.
STOT SE 3	H336	May cause drowsiness or dizziness.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

- **2.2 Label elements**
 - Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
 - Hazard pictograms



GHS02 GHS07 GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
Naphtha (petroleum), hydrotreated light
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

· 2.3 Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.2 Mixtures****· Description:** Mixture of the substances with nonhazardous additions.**· Dangerous components:**

CAS: 64742-49-0 EC number: 921-024-6 Reg.nr.: 01-2119475514-35	Naphtha (petroleum), hydrotreated light Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	25-50%
CAS: 74-98-6 EINECS: 200-827-9	propane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	20-50%
CAS: 106-97-8 EINECS: 203-448-7	butane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	20-50%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25-xxxx	propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	5-<10%
CAS: 107-98-2 EINECS: 203-539-1 Reg.nr.: 01-2119457435-35	1-methoxy-2-propanol Flam. Liq. 3, H226; STOT SE 3, H336	1-5%

· SVHC None**· Additional information:** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****· 4.1 Description of first aid measures****· General information:** Take affected persons out into the fresh air.**· After inhalation:** Supply fresh air; consult doctor in case of complaints.**· After skin contact:**

Immediately remove any clothing soiled by the product.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.**· After swallowing:** Do not induce vomiting; call for medical help immediately.**· 4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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

No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, sand, extinguishing powder. Do not use water.
Alcohol resistant foam
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources.
- **6.2 Environmental precautions:**
Do not allow to penetrate the ground/soil.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb liquid components with liquid-binding material.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
Do not spray onto a naked flame or any incandescent material.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**
Protect from heat and direct sunlight.
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection**· 8.1 Control parameters****· Ingredients with limit values that require monitoring at the workplace:****107-98-2 1-methoxy-2-propanol**

IOELV	Short-term value: 568 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm Skin
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· DNELs**64742-49-0 Naphtha (petroleum), hydrotreated light**

Oral	DNEL system. effects (long-term)	699 mg/kg (Consumer)
Dermal	DNEL system. effects (long-term)	699 mg/kg (Consumer) 773 mg/kg (Worker)
Inhalative	DNEL system. effects (long-term)	608 mg/m ³ (Consumer) 2,035 mg/m ³ (Worker)

107-98-2 1-methoxy-2-propanol

Dermal	DNEL system. effects (long-term)	50.6 mg/kg (Worker)
Inhalative	DNEL system. effects (long-term)	369 mg/m ³ (Worker)

· PNECs**107-98-2 1-methoxy-2-propanol**

PNEC	10 mg/l (fresh water)
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· Additional information: The lists valid during the making were used as basis.**· 8.2 Exposure controls****· Appropriate engineering controls** No further data; see item 7.**· Individual protection measures, such as personal protective equipment****· General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Ensure good ventilation/exhaustion at the workplace.

· Respiratory protection: Not necessary if room is well-ventilated.**· Hand protection**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Nitrile rubber, NBR

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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection Tightly sealed goggles

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SECTION 9: Physical and chemical properties**· 9.1 Information on basic physical and chemical properties****· General Information****· Physical state**

Aerosol

· Colour:

Colourless

Clear

· Odour:

Specific type

· Odour threshold:

Not determined

· Melting point/freezing point:

Undetermined.

· Boiling point or initial boiling point and boiling range

-44 °C

· Flammability

Not applicable.

· Lower and upper explosion limit**· Lower:**

1.7 Vol %

· Upper:

10.9 Vol %

· Flash point:

-97 °C

· Auto-ignition temperature:

Product is not selfigniting.

· Decomposition temperature:

Not determined.

· pH

Void

· Viscosity:**· Kinematic viscosity**

Not determined

· Dynamic:

Not determined

· Solubility**· water:**

Not miscible or difficult to mix.

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure at 20 °C:

8300 hPa

· Density and/or relative density**· Density:**

Not determined.

· Relative density

Not determined.

· Vapour density

Not determined.

· 9.2 Other information**· Appearance:****· Form:**

Aerosol

· Important information on protection of health and environment, and on safety.**· Ignition temperature:**

425 °C

· Explosive properties:

Not determined.

· Change in condition**· Evaporation rate**

Not applicable.

· Information with regard to physical hazard classes**· Explosives**

Void

· Flammable gases

Void

· AerosolsExtremely flammable aerosol. Pressurised container:
May burst if heated.**· Oxidising gases**

Void

· Gases under pressure

Void

· Flammable liquids

Void

· Flammable solids

Void

· Self-reactive substances and mixtures

Void

· Pyrophoric liquids

Void

· Pyrophoric solids

Void

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· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Store away from oxidising agents.
- **10.6 Hazardous decomposition products:**
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:**64742-49-0 Naphtha (petroleum), hydrotreated light**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>20 mg/l (rat)

106-97-8 butane

Inhalative	LC50/4 h	658 mg/l (rat)
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107-98-2 1-methoxy-2-propanol

Oral	LD50	4,016 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

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· **11.2 Information on other hazards**· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information· **12.1 Toxicity**· **Aquatic toxicity:** No further relevant information available.· **12.2 Persistence and degradability** No further relevant information available.· **12.3 Bioaccumulative potential** No further relevant information available.· **12.4 Mobility in soil** No further relevant information available.· **12.5 Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**· **Remark:** Toxic for fish· **Additional ecological information:**· **General notes:**

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations· **13.1 Waste treatment methods**· **Recommendation** Disposal must be made according to official regulations.· **European waste catalogue**

16 00 00 WASTES NOT OTHERWISE SPECIFIED IN THE LIST

16 05 00 gases in pressure containers and discarded chemicals

16 05 04* gases in pressure containers (including halons) containing hazardous substances

· **Uncleaned packaging:**· **Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information**· **14.1 UN number or ID number**· **ADR, IMDG, IATA** UN1950· **14.2 UN proper shipping name**

· **ADR** 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
· **IMDG** AEROSOLS (Naphtha (petroleum), hydrotreated light),
MARINE POLLUTANT
· **IATA** AEROSOLS, flammable

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· 14.3 Transport hazard class(es)	
· ADR	
· Class	2 5F Gases.
· Label	2.1
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· IMDG, IATA	
· Class	2.1
· Label	2.1
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· 14.4 Packing group	
· ADR, IMDG, IATA	Void
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· 14.5 Environmental hazards:	
Product contains environmentally hazardous substances: Naphtha (petroleum), hydrotreated light	
· Marine pollutant:	Yes
	Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
<hr/>	
· 14.6 Special precautions for user	
· Hazard identification number (Kemler code):	-
· EMS Number:	F-D, S-U
· Stowage Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
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· 14.7 Maritime transport in bulk according to IMO instruments	
Not applicable.	
<hr/>	
· Transport/Additional information:	
<hr/>	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
<hr/>	
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
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· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**
P3a FLAMMABLE AEROSOLS
E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
None of the ingredients is listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
None of the ingredients is listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
- **Classification according to Regulation (EC) No 1272/2008** Calculation method
- **Date of previous version:** 13.04.2021
- **Version number of previous version:** 8.0
- **Abbreviations and acronyms:**
Flam. Gas 1A: Flammable gases – Category 1A
Aerosol 1: Aerosols – Category 1
Press. Gas (Comp.): Gases under pressure – Compressed gas
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- *** Data compared to the previous version altered.**

