



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : VERNIS PAILLETES / VERNIS NACRES

Product code : ODIF-VP/VN.

Ref : 21460 / 21474 / 21475 / 39463-3 / 39462-3 / 39464-3 / 39472 / 39471 / 39465-2.

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

Varnish.

1.3. Details of the supplier of the safety data sheet

Registered company name : ODIF.

Address : 118, chemin du Sermoraz - BP 413.01704.BEYNOST Cedex.France.

Telephone : +33 (0)4 78 55 07 43. Fax : +33 (0)4 72 25 84 63.

Email: odif@odif.com

<http://www.odif.com>

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Flammable aerosol, Category 1 (Aerosol 1, H222 - H229).

Eye irritation, Category 2 (Eye Irrit. 2, H319).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Extremely flammable (F+, R 12).

Vapours may cause drowsiness and dizziness (R 67).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Mixture for aerosol application.

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS07

GHS02

Signal Word :

DANGER

Hazard statements :

H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

H319

Causes serious eye irritation.

Precautionary statements - General :

P101

If medical advice is needed, have product container or label at hand.

P102

Keep out of reach of children.

P103	Read label before use.
Precautionary statements - Prevention :	
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.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
Precautionary statements - Storage :	
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 oC/122oF.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European CHemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures****Composition :**

Identification	(EC) 1272/2008	67/548/EEC	Note	%
CAS: 115-10-6 EC: 204-065-8 REACH: 01-2119472128-37 DIMETHYL ETHER	GHS04, GHS02 Dgr Flam. Gas 1, H220 Press. Gas, H280	F+ F+;R12	[1]	25 <= x % < 50
CAS: 67-64-1 EC: 200-662-2 REACH: 01-2119471330-49 ACETONE	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH:066	Xi,F Xi;R36 F;R11 R66-R67	[1]	10 <= x % < 25
CAS: 109-87-5 EC: 203-714-2 REACH: 01-2119664781-31 DIMETHOXYMETHANE	GHS02 Dgr Flam. Liq. 2, H225	F F;R11	[1]	10 <= x % < 25
CAS: 34590-94-8 EC: 252-104-2 (2-METHOXYMETHYLETHOXY)PROPANOL			[1]	2.5 <= x % < 10
CAS: 64-17-5 EC: 200-578-6 REACH: 01-2119457610-43 ETHANOL	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319	F F;R11	[1]	2.5 <= x % < 10
CAS: 79-24-3 EC: 201-188-9 NITROETHANE	GHS06, GHS02 Dgr Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 3, H331 Aquatic Chronic 3, H412	Xn Xn;R20/22 R10 R52/53	[1]	2.5 <= x % < 10
CAS: 78-93-3	GHS07, GHS02	Xi,F	[1]	0 <= x % < 1

EC: 201-159-0 REACH: 01-2119457290-43 BUTANONE	Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH:066	Xi;R36 F;R11 R66-R67		
INDEX: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25 PROPAN-2-OL	GHS02, GHS07 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	Xi,F Xi;R36 F;R11 R67	[1]	0 <= x % < 1

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures**In the event of exposure by inhalation :**

In the event of inhalation, move patient to the open air. Keep warm and at rest.

In the event of splashes or contact with eyes :

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Wash the skin thoroughly with soap and water or a recognised cleaner.

In the event of swallowing :

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention :

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Do not spray on a naked flame or any incandescent material.

Do not pierce or burn, even after use.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Do not breathe in aerosols.

Avoid eye contact with this mixture.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limits :**

- European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
115-10-6	1920	1000	-	-	-
67-64-1	1210	500	-	-	-
34590-94-8	308	50	-	-	Peau
78-93-3	600	200	900	300	-

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	500 ppm	750 ppm	-	-	-
109-87-5	1000 ppm	-	-	-	-
34590-94-8	100 ppm	150 ppm	-	-	-
64-17-5	1000 ppm	-	-	-	-
79-24-3	100 ppm	-	-	-	-
78-93-3	200 ppm	300 ppm	-	-	-
67-63-0	200 ppm	400 ppm	-	-	-

- Belgium (Order of 19/05/2009, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
115-10-6	1000 ppm	-	-	-	-
67-64-1	500 ppm	1000 ppm	-	-	-
109-87-5	1000 ppm	-	-	-	-
34590-94-8	50 ppm	-	-	-	-
64-17-5	1000 ppm	-	-	-	-
79-24-3	100 ppm	-	-	-	-
78-93-3	200 ppm	300 ppm	-	-	-
67-63-0	400 ppm	500 ppm	-	-	-

- France (INRS - ED984 :2008) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
115-10-6	1000	1920	-	-	-	-
67-64-1	500	1210	1000	2420	-	84
109-87-5	1000	3100	-	-	-	84
34590-94-8	50	308	-	-	*	84
64-17-5	1000	1900	5000	9500	-	84
79-24-3	100	310	-	-	-	84
78-93-3	200	600	300	900	*	84
67-63-0	-	-	400	980	-	84

- Switzerland (SUVA 2009) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Temps :	RSB :
115-10-6	1910	1000	-	-	-	-
67-64-1	1200	500	2400	1000	4x15	B
109-87-5	3100	1000	6200	2000	4x15	-
34590-94-8	300	50	300	50	15 min	-
64-17-5	960	500	1920	1000	4x15	-
79-24-3	310	100	1240	400	4x15	-
78-93-3	590	200	590	200	15 min	R B
67-63-0	500	200	1000	400	4x15	B

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
115-10-6	400 ppm	500 ppm	-	-	-
67-64-1	500 ppm	1500 ppm	-	-	-
109-87-5	1000 ppm	1250 ppm	-	-	-
34590-94-8	50 ppm	-	-	-	-
64-17-5	1000 ppm	-	-	-	-
78-93-3	200 ppm	300 ppm	-	-	-
67-63-0	400 ppm	500 ppm	-	-	-

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME :	VME :	Excess	Notes
115-10-6	1000 ml/m3	1900 mg/m3	8(II)	DFG

67-64-1	500 ml/m3	1200 mg/m3	2(I)	DFG	
109-87-5	1000 ml/m3	3200 mg/m3	2(II)	DFG	
34590-94-8	50 ml/m3	310 mg/m3	1(I)	DFG, EU	
64-17-5	500 ml/m3	960 mg/m3	2(II)	DFG, Y	
79-24-3	100 ml/m3	310 mg/m3	4(II)	DFG	
78-93-3	200 ml/m3	600 mg/m3	1(I)	DFG, H, Y	
67-63-0	200 ml/m3	500 mg/m3	2(II)	DFG, Y	

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

ACETONE (CAS: 67-64-1)

Final use:Exposure method:
Potential health effects:
DNEL :**Workers.**Dermal contact.
Long term systemic effects.
186 mg/kg body weight/dayExposure method:
Potential health effects:
DNEL :Inhalation.
Long term systemic effects.
1210 mg of substance/m3Exposure method:
Potential health effects:
DNEL :Inhalation.
Short term local effects.
2420 mg of substance/m3**Final use:**Exposure method:
Potential health effects:
DNEL :**Consumers.**Ingestion.
Long term systemic effects.
62 mg/kg body weight/dayExposure method:
Potential health effects:
DNEL :Dermal contact.
Long term systemic effects.
62 mg/kg body weight/dayExposure method:
Potential health effects:
DNEL :Inhalation.
Long term systemic effects.
200 mg of substance/m3**Predicted no effect concentration (PNEC):**

BUTANONE (CAS: 78-93-3)

Environmental compartment:
PNEC :Soil.
22.5 mg/kgEnvironmental compartment:
PNEC :Fresh water.
55.8 mg/lEnvironmental compartment:
PNEC :Sea water.
55.8 mg/lEnvironmental compartment:
PNEC :Intermittent waste water.
709 mg/lEnvironmental compartment:
PNEC :Fresh water sediment.
284.7 mg/kg

ETHANOL (CAS: 64-17-5)

Environmental compartment:
PNEC :Fresh water.
0.96 mg/lEnvironmental compartment:
PNEC :Sea water.
0.79 mg/lEnvironmental compartment:
PNEC :Intermittent waste water.
580 mg/l

Environmental compartment:

Fresh water sediment.

PNEC :	3.6 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	2.9 mg/kg
ACETONE (CAS: 67-64-1)	
Environmental compartment:	Soil.
PNEC :	33.3 mg/kg
Environmental compartment:	Fresh water.
PNEC :	10.6 mg/l
Environmental compartment:	Sea water.
PNEC :	1.06 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	29.5 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	30.4 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	3.04 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	100 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- PVA (Polyvinyl alcohol)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties**General information :**

Physical state :	Fluid liquid.
	Spray.

Important health, safety and environmental information

pH :	Not relevant.
Vapour pressure (50°C) :	Below 110 kPa (1.10 bar).
Density :	< 1
Water solubility :	Insoluble.
Chemical combustion heat :	Not specified.
Inflammation time :	Not specified.
Deflagration density :	Not specified.
Inflammation distance :	Not specified.
Flame height :	Not specified.
Flame duration :	Not specified.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- heating
- heat

10.5. Incompatible materials

Keep away from :

- oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage

11.1.1. Substances**Acute toxicity :**

DIMETHYL ETHER (CAS: 115-10-6)

Inhalation route :

LC50 = 312 mg/l

Species : Rat

NITROETHANE (CAS: 79-24-3)

Oral route :

LD50 = 1083 mg/kg

Species : Rat

Dermal route : LD50 > 2000 mg/kg
Species : Rabbit

Inhalation route (Vapours) : 2 < LC50 <= 10 mg/l

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)

Oral route : LD50 = 5135 mg/kg
Species : Rat

DIMETHOXYMETHANE (CAS: 109-87-5)

Oral route : LD50 = 6423 mg/kg
Species : Rat

Dermal route : LD50 > 5000 mg/kg
Species : Rabbit

Inhalation route : LC50 = 15000 mg/l
Species : Rat

ACETONE (CAS: 67-64-1)

Oral route : LD50 = 5800 mg/kg
Species : Rat

Dermal route : LD50 > 15800 mg/kg
Species : Rabbit

Inhalation route : LC50 = 76 mg/l
Species : Rat

Serious damage to eyes/eye irritation :

ETHANOL (CAS: 64-17-5)
Causes serious eye irritation.

Corneal haze : 1 <= Average score < 2 and effects totally reversible within 21 days of observation

Conjunctival redness : 2 <= Average score < 2.5 and effects totally reversible within 21 days of observation

11.1.2. Mixture

No toxicological data available for the mixture.

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 64-17-5 : IARC Group 1 : The agent is carcinogenic to humans.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

NITROETHANE (CAS: 79-24-3)

Fish toxicity : LC50 = 880 mg/l
Species : Danio rerio
Duration of exposure : 96 h

Crustacean toxicity : EC50 > 21.9 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

Algae toxicity : ECr50 = 17.4 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 72 h

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)

Fish toxicity : LC50 = 10000 mg/l
Species : Pimephales promelas
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 1919 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

Algae toxicity : Duration of exposure : 72 h

DIMETHOXYMETHANE (CAS: 109-87-5)

Fish toxicity : LC50 > 1000 mg/l
Duration of exposure : 96 h

Crustacean toxicity : EC50 > 1200 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

ACETONE (CAS: 67-64-1)

Fish toxicity : LC50 = 5540 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 8800 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

Algae toxicity : NOEC = 430 mg/l
Duration of exposure : 96 h

DIMETHYL ETHER (CAS: 115-10-6)

Fish toxicity : LC50 > 4000 mg/l
Species : Poecilia reticulata
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 755.449 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability**12.2.1. Substances****NITROETHANE (CAS: 79-24-3)**

Biodegradability : Not fast degrading.

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)

Biodegradability : Fast degrading.

DIMETHOXYMETHANE (CAS: 109-87-5)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

DIMETHYL ETHER (CAS: 115-10-6)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

ACETONE (CAS: 67-64-1)

Chemical oxygen demand : DCO = 2.1 g/g

Five-day biochemical oxygen demand : DBO5 = 1.9 g/g

Biodegradability : Fast degrading.
DBO5/DCO = 0.90

12.3. Bioaccumulative potential

12.3.1. Substances

NITROETHANE (CAS: 79-24-3)
Octanol/water partition coefficient : log K_{ow} = 0.18

Bioaccumulation : BCF = 1

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)
Octanol/water partition coefficient : log K_{ow} = -0.35

DIMETHOXYMETHANE (CAS: 109-87-5)
Octanol/water partition coefficient : log K_{ow} = 0

ACETONE (CAS: 67-64-1)
Octanol/water partition coefficient : log K_{ow} = -0.24

Bioaccumulation : BCF < 10

DIMETHYL ETHER (CAS: 115-10-6)
Octanol/water partition coefficient : log K_{ow} = 0.18

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws) : Hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2014).

14.1. UN number

1950

14.2. UN proper shipping name

UN1950=AEROSOLS, flammable

14.3. Transport hazard class(es)

- Classification :



2.1

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	2	5F	-	2.1	-	1 L	190 327 344 625	E0	2	D
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ			
	2.1	See SP63	-	SP277	F-D,S-U	63 190 277 327 344 959	E0			
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	2.1	-	-	203	75 kg	203	150 kg	A145 A167 A145 A167 A802	E0	
	2.1	-	-	Y203	30 kg G	-	-	A145 A167 A802	E0	

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available.

SECTION 15 : REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****- Classification and labelling information included in section 2:**

The following regulations have been used:

- Directive 67/548/EEC and its adaptations
- Directive 1999/45/EC and its adaptations
- Directive 75/734/CEE modified by directive 2013/10/UE
- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

- Container information:

No data available.

- Particular provisions :

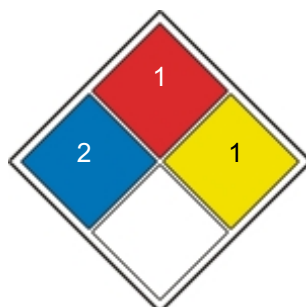
No data available.

- German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws) : Hazardous for water.

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) :

NFPA 704, Labelling: Health=2 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



- Swiss ordinance on the incentive tax on volatile organic compounds :

78-93-3	butanone (méthyléthylcétone)
67-64-1	acétone
115-10-6	éther diméthylque (oxyde de diméthyle)
64-17-5	éthanol, seulement s'il s'agit d'alcools impropres à la consommation (art. 31 de la loi fédérale sur l'alcool)
67-63-0	propane-2-ol (alcool isopropylique)
34590-94-8	2-(3-méthoxypropoxy)propane-1-ol

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Hazard symbols :



Extremely flammable

Risk phrase :

R 12 Extremely flammable.
R 67 Vapours may cause drowsiness and dizziness.

Safety phrase :

S 16 Keep away from sources of ignition - No smoking.
S 2 Keep out of the reach of children.
S 46 If swallowed, seek medical advice immediately and show this container or label.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.
Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.
S 51 Use only in well-ventilated areas.

Title for H, EUH and R indications mentioned in section 3 :

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
R 10	Flammable.
R 11	Highly flammable.
R 12	Extremely flammable.
R 20/22	Harmful by inhalation and if swallowed.
R 36	Irritating to eyes.
R 52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefährdungsklasse (Water Hazard Class).
GHS02 : Flame
GHS07 : Exclamation mark