SAFETY DATA SHEET

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

1.1. Product identifier

Product name : EXTERIOR VARNISH / METAL LEAF SEALER
Product code : ODIF-VMARIN

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

Relevant identified uses: Aerosol 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

HCS compliant.

Eye irritation, Category 2A (Eye Irrit. 2A).
Specific target organ toxicity (single exposure), Category 3 (STOT SE 3).

2.2. Label elements

Mixture for aerosol application.

HCS compliant.

Hazard pictograms :

GHS02 GHS07

Signal Word :
DANGER
Product identifiers :

CAS 67-64-1	ACETONE
	HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Hazard statements :

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements - General :

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ...

Precautionary statements - Response :

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/if you feel unwell.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Precautionary statements - Storage :

P410 + P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

No data available.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	HCS	Nota	%
CAS: 115-10-6 EC: 204-065-8 REACH: 01-2119472128-37 DIMETHYL ETHER	GHS02 Dgr Flam. Gas 1, H220	[1]	25 <= x % < 41.1
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	[1]	10 <= x % < 26.6
CAS: 34590-94-8 EC: 252-104-2 REACH: 01-2119450011-60 (2-METHOXYMETHYLETHOXY)PROPANOL	Flam. Liq. 4, H227	[1]	10 <= x % < 26.2
EC: 931-254-9 REACH: 01-2119484651-34 HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE	GHS07, GHS08, GHS02 Dgr Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336		2.5 <= x % < 6.1

(Full text of H-phrases: see section 16)

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 massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.
If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.
If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, 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 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 (CO_2)

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 inhaling the vapors.
Avoid any contact with the skin and eyes.
If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

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.
If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures
Use drums to dispose of collected waste in compliance with current regulations (see section 13).

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.
Remove contaminated clothing and protective equipment before entering eating 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 inhaling vapors.
Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.
Provide vapor extraction at the emission source and also general ventilation of the premises.
Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.
In all cases, recover emissions at source.
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.
Never open the packages under pressure.

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 (2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

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

- 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		A4; BEI	
34590-94-8	100 ppm	150 ppm		Skin	

- Germany - AGW (BAuA - TRGS 900, 29/01/2018) :

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

67-64-1		500 ppm 1200 mg/m³		2(I)		
34590-94-8		50 ppm 310 mg/m³		1(I)		

- Belgium (Arrêté du 09/03/2014, 2014) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :	
115-10-6	1000 ppm 1920 mg/m³					
67-64-1	500 ppm 1210 mg/m³	1000 ppm 2420 mg/m³				
34590-94-8	50 ppm 308 mg/m³			D		

- France (INRS - ED984 :2016) :

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	
34590-94-8	50	308	-	-	*	84	

- Switzerland (SUVAPRO 2017) :

CAS	VME	VLE	Valeur plafond	Notations	
115-10-6	1000 ppm 1910 mg/m³				
67-64-1	500 ppm 1200 mg/m³	1000 ppm 2400 mg/m³		B	
34590-94-8	50 ppm 300 mg/m³	50 ppm 300 mg/m³			

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :	
115-10-6	400 ppm 766 mg/m³	500 ppm 958 mg/m³				
67-64-1	500 ppm 1210 mg/m³	1500 ppm 3620 mg/m³				
34590-94-8	50 ppm 308 mg/m³	- ppm - mg/m³		Sk		

- USA / AIHA WEEL (American Industrial Hygiene Association, Workplace Environmental Exposure Limit, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :	
115-10-6	1000 ppm					

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

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Final use: **Workers.**

Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 13964 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 5306 mg of substance/m3

Final use: **Consumers.**

Exposure method: Ingestion.
Potential health effects: Long term systemic effects.
DNEL : 1301 mg/kg body weight/day

Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 1377 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 1137 mg of substance/m3

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

Final use: **Workers.**

Exposure method: Dermal contact.

Potential health effects:	Long term systemic effects.
DNEL :	65 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	310 mg of substance/m3
Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	1.67 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	15 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	37.2 mg of substance/m3

ACETONE (CAS: 67-64-1)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	186 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	1210 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Short term local effects.
DNEL :	2420 mg of substance/m3
Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	62 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	62 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	200 mg of substance/m3

DIMETHYL ETHER (CAS: 115-10-6)

Final use:	**Workers.**
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	1894 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	471 mg of substance/m3

Predicted no effect concentration (PNEC):

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

Environmental compartment:	Soil.
PNEC :	2.74 mg/kg
Environmental compartment:	Fresh water.

PNEC :	19 mg/l
Environmental compartment:	Sea water.
PNEC :	1.9 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	190 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	70.2 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	7.02 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	4168 mg/kg

ACETONE (CAS: 67-64-1)

Environmental compartment:	Soil.
PNEC :	29.5 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 :	21 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

DIMETHYL ETHER (CAS: 115-10-6)

Environmental compartment:	Soil.
PNEC :	0.045 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.155 mg/l
Environmental compartment:	Sea water.
PNEC :	0.016 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	0.681 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.069 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	180 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

Suitable type of protective clothing :
In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.
In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.
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.

- Respiratory protection

Avoid breathing vapours.
If the ventilation is insufficient, wear appropriate breathing apparatus.
When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.
Type of FFP mask :
Wear a disposable half-mask aerosol filter in accordance with standard EN149.
Category :
- FFP1
Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :
- A1 (Brown)
Particle filter according to standard EN143 :
- P1 (White)

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 :
- acids
- oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form :
- carbon monoxide (CO)
- carbon dioxide (CO_2)

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
Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.
Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

11.1.1. Substances

Acute toxicity :

DIMETHYL ETHER (CAS: 115-10-6)

Inhalation route (n/a) :	LC50 = 312 mg/l Species : Rat Duration of exposure : 4 h

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Oral route :	LD50 > 5000 mg/kg Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 3000 mg/kg Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (n/a) :	LC50 > 20 mg/l Species : Rat OECD Guideline 403 (Acute Inhalation Toxicity)

ACETONE (CAS: 67-64-1)

Oral route :	LD50 = 5800 mg/kg Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 15800 mg/kg Species : Rabbit
Inhalation route (n/a) :	LC50 = 76 mg/l Species : Rat Duration of exposure : 4 h

Germ cell mutagenicity :

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

No mutagenic effect.

Carcinogenicity :

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Carcinogenicity Test : Negative.
No carcinogenic effect.

Reproductive toxicant :

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

No toxic effect for reproduction

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12 : ECOLOGICAL INFORMATION

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

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

Crustacean toxicity : NOEC = 0.5 mg/l
Species : Daphnia magna
Duration of exposure : 21 days

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Fish toxicity :	LC50 > 1 mg/l Species : Oryzias latipes Duration of exposure : 48 h
Crustacean toxicity :	EC50 = 3.87 mg/l Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	ECr50 = 55 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 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
	NOEC = 2212 mg/l Species : Daphnia pulex

	Duration of exposure : 28 days
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 > 4000 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

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Biodegradability :	Rapidly degradable.

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

Biodegradability :	Rapidly degradable.

DIMETHYL ETHER (CAS: 115-10-6)

Biodegradability :	Non-rapidly degradable.

ACETONE (CAS: 67-64-1)

Chemical oxygen demand :	DCO = 2.1 g/g
Five-day biochemical oxygen demand :	DBO5 = 1.9 g/g
Biodegradability :	Rapidly degradable. DBO5/DCO = 0.90

12.3. Bioaccumulative potential

12.3.1. Substances

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Octanol/water partition coefficient :	log Koe = 4

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

Octanol/water partition coefficient :	log Koe < 3.
Bioaccumulation :	BCF < 100.

ACETONE (CAS: 67-64-1)

Octanol/water partition coefficient :	log Koe = -0.24
Bioaccumulation :	BCF < 10

DIMETHYL ETHER (CAS: 115-10-6)

Octanol/water partition coefficient :	log Koe = 0.18
Bioaccumulation :	BCF < 100.

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.

SECTION 13 : DISPOSAL CONSIDERATIONS

The appropriate waste management of the mixture and/or its container must be determined in accordance with local regulations.

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 2017 - IMDG 2016 - ICAO/IATA 2017).

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	See SP63	-	See SP277	F-D,S-U	63 190 277 327 344 381 959	E0

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	2.1	-	-	203	75 kg	203	150 kg	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 Marpol 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

The following regulations have been used:
- OSHA Hazard Communication Standard 29 CFR 1910.1200

- Container information:

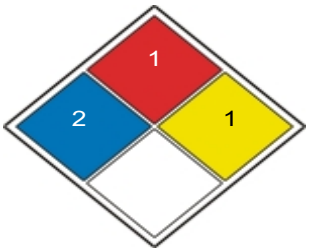
No data available.

- Particular provisions :

No data available.

- 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



- Clean Water Act : Toxic Pollutants (CWA 307A)

Unlisted.

- Clean Water Act : Hazardous Substances (CWA 311)

Unlisted.

- Clean Water Act : Hazardous Substances (CWA 304b)

CAS	Name
67-64-1	ACETONE

- Clean Water Act : Priority Pollutants (CWA Priority)

Unlisted.

- Clean Air Act : Hazardous Air Pollutants (CAA 112(b) HAP (188))

Unlisted.

- Clean Air Act : Organic Hazardous Air Pollutants National Emission Standards (CAA 112(b) HON (387))

CAS	Name
67-64-1	ACETONE
115-10-6	DIMETHYL ETHER

- Clean Air Act : Protection of Stratospheric Ozone (CAA 602)

Unlisted.

- SARA 110

CAS	Name
67-64-1	ACETONE

- SARA 302/304

Unlisted.

- SARA 313

CAS	Name
67-64-1	ACETONE

- California proposition 65 : Chemicals known to the state to cause cancer or reproductive toxicity

Unlisted.

- Massachusetts : Right to Know

CAS	Name
67-64-1	ACETONE
115-10-6	DIMETHYL ETHER

- New Jersey : Right to Know

CAS	Name
67-64-1	ACETONE
34590-94-8	(2-METHOXYMETHYLETHOXY)PROPANOL
115-10-6	DIMETHYL ETHER

- Pennsylvania : Hazardous Substance

CAS	Name
67-64-1	ACETONE
34590-94-8	(2-METHOXYMETHYLETHOXY)PROPANOL
115-10-6	DIMETHYL ETHER

- Rhode Island : Hazardous substance list

CAS	Name

67-64-1	ACETONE
34590-94-8	(2-METHOXYMETHYLETHOXY)PROPANOL
115-10-6	DIMETHYL ETHER

- TSCA (Toxic Substances Control Act) - USA

CAS	Name
67-64-1	ACETONE
53306-54-0	BIS(2-PROPYLHEPTYL) PHTHALATE
34590-94-8	(2-METHOXYMETHYLETHOXY)PROPANOL
28262-63-7	2-PROPENOIC ACID, 2-METHYL-, POLYMER WITH BUTYL 2-METHYL-2-PROPENOATE AND METHYL 2-METHYL-2-PROPENOATE
115-10-6	DIMETHYL ETHER

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.

Wording of the phrases mentioned in section 3 :

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H227	Combustible liquid.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or 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.
GHS02 : Flame
GHS07 : Exclamation mark
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
HCS : Hazard Communication standard (OSHA).