SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : MAMMUT PAINT® RAL - Professional Paint 520/400 ml

Product code : All RAL codes **EXCEPT** Red Brown Primer (11695) and RAL 9006 ALUMINUM WHITE (13296)

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

As spray

PROFESSIONAL PAINT

1.3. Details of the supplier of the safety data sheet

Registered company name : A.M.P.E.R.E. System.

Address : 3 Rue Antoine Balard - P.A. du Vert Galant .95310.SAINT OUEN L'AUMONE.FRANCE.

Telephone : +33 1 34 64 72 72. Fax : +33 1 30 37 55 17.

fds@amperesystem.com / http://www.amperesystem.com

1.4. Emergency telephone number :

UK : National Poisons Information Service - 0344 892 0111

Ireland : National Poisons Information Centre - Beaumont Hospital - PO Box 1297 Beaumont Road 9 Dublin : +353 1 809 2566 (Healthcare professionals-24/7) - +353 1 809 2166 (public, 8am - 10pm, 7/7)

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

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

Repeated exposure may cause skin dryness or cracking (EUH066).

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

Skin sensitisation, Category 1A (Skin Sens. 1A, H317).

Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).

Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).

The propellant gas is not taken into account when determining the health and environmental classification of the mixture.

2.2. Label elements

The mixture is an aerosol fitted with a sealed spray attachment.

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

Hazard pictograms :

GHS09

GHS02

GHS07

Signal Word :

DANGER

Product identifiers :

606-001-00-8	ACETONE
EC 919-857-5	HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS.
EC 605-296-0	FATTY ACIDS,C18, UNSADT, DIMERS, REACTION PRODUCTS WITH N,N-DIMETHYL-1,3PROPANEDIAMINE AND 1,3-PROPANEDIAMINE

Hazard statements :

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
Precautionary statements - Response :	
P302 + P352	IF ON SKIN: Wash with plenty of water/...
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.
P321	Specific treatment (see ... on this label).
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
Precautionary statements - Storage :	
P410 + P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.
Precautionary statements - Disposal :	
P501	Dispose of contents / container in accordance with local / regional / national / international regulations.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 59 of REACH: http://echa.europa.eu/fr/candidate-list-table

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

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	Classification (EC) 1272/2008	Note	%
CAS: 115-10-6 EC: 204-065-8 REACH: 01-2119472128-37-XXXX DIMETHYL ETHER	GHS02 Dgr Flam. Gas 1A, H220 Press. Gas, H280	[i] [vii]	25 <= x % < 50
INDEX: 606-001-00-8 CAS: 67-64-1 EC: 200-662-2 REACH: 01-2119471330-49-XXXX ACETONE	GHS02, GHS07 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[i]	10 <= x % < 25
CAS: 64742-48-9 EC: 919-857-5 REACH: 01-2119463258-33-XXXX HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS.	GHS08, GHS07, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336 EUH066	P	10 <= x % < 25
CAS: 108-65-6 EC: 203-603-9 REACH: 01-2119475791-29-XXXX 2-METHOXY-1-METHYLETHYL ACETATE	GHS07, GHS02 Wng Flam. Liq. 3, H226 STOT SE 3, H336	[i]	2.5 <= x % < 10

EC: 905-588-0 REACH: 01-2119486136-34-xxxx PRODUCT OF REACTION OF ETHYLBENZENE AND XYLENE	GHS07, GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373		2.5 <= x % < 10
INDEX: 030-011-00-6 CAS: 7779-90-0 EC: 231-944-3 REACH: 01-2119485044-40-XXXX TRIZINC BIS(ORTHOPHOSPHATE)	GHS09 Wng Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1		2.5 <= x % < 10
CAS: 8007-18-9 EC: 232-353-3 REACH: 01-2119491302-44 JAUNE D'OXYDE D'ANTIMOINE, DE NICKEL ET DE TITANE		[xvii]	1 <= x % < 2.5
CAS: 104-76-7 EC: 203-234-3 REACH: 01-2119487289-20-XXXX 2-ÉTHYLHEXANE-1-OL	GHS07 Wng Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335	[i]	0.1 <= x % < 1
CAS: 162627-17-0 EC: 605-296-0 REACH: 01-21199706040-38-xxxx FATTY ACIDS,C18, UNSADT, DIMERS, REACTION PRODUCTS WITH N,N-DIMETHYL-1,3PROPANEDIAMINE AND 1,3-PROPANEDIAMINE	GHS07 Wng Skin Sens. 1A, H317		0 <= x % < 0.1
CAS: 34590-94-8 EC: 252-104-2 REACH: 01-2119450011-60-XXXX (2-MÉTHOXYMÉTHYLETHOXY)PROPANOL		[i]	0 <= x % < 0.1

Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 108-65-6 EC: 203-603-9 REACH: 01-2119475791-29-XXXX 2-METHOXY-1-METHYLETHYL ACETATE		oral: ATE = 8532 mg/kg BW
EC: 905-588-0 REACH: 01-2119486136-34-xxxx PRODUCT OF REACTION OF ETHYLBENZENE AND XYLENE		oral: ATE = 3523 mg/kg BW

Information on ingredients :

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

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

[vii] Propellant gas

[xvii] Restricted substance under Regulation (EC) No. 1907/2006 (REACH), Annex XVII.

Note P: The carcinogen or mutagen classification does not apply because the substance contains less than 0.1 % w/w of benzene (EINECS 200-753-7).

Other data :

The percentage of propellant is not taken into account for the labelling following the CLP regulation endorsed by CARACAL andvalidated by the European Commission on 03 December 2020.

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.

If a large quantity in inhaled, move the patient into the fresh air and keep him / her warm and still.

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 splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated aera is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

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 immediately, 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.

Pressurized container

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
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO_2)

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.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

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.

-

Do not breathe vapors

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. 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 skin and 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.

Do not pierce or burn even after use.

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.

It's to recommend to indicate the stock of spray. Sprays must be surrounded by a metal grating or by wall to avoid the projections of sprays.

Store between +5°C and +30°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 :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
115-10-6 DIMETHYL ETHER	1920	1000	-	-	-
67-64-1 ACETONE	1210	500	-	-	-
108-65-6 2-METHOXY-1-METHYLETHYL ACETATE	275	50	550	100	-
104-76-7 2-ÉTHYLHEXANE-1-OL	5.4	1	-	-	-
34590-94-8 (2-MÉTHOXYMÉTHYLETHOXY) PROPANOL	308	50	-	-	-

- UK :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
115-10-6 DIMETHYL ETHER	400 ppm 766 mg/m3	500 ppm 958 mg/m3			
67-64-1 ACETONE	500 ppm 1210 mg/m3	1500 ppm 3620 mg/m3			
108-65-6 2-METHOXY-1-METHYLETHYL ACETATE	50 ppm 274 mg/m3	100 ppm 548 mg/m3			
104-76-7 2-ÉTHYLHEXANE-1-OL	1 ppm 5.4 mg/m3				
34590-94-8 (2-MÉTHOXYMÉTHYLETHOXY) PROPANOL	50 ppm 308 mg/m3				

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

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

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	283 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	308 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

PRODUCT OF REACTION OF ETHYLBENZENE AND XYLENE

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	180 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	289 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	77 mg of substance/m3

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	153.5 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	275 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 :	54.8 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	33 mg of substance/m3

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS. (CAS: 64742-48-9)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	208 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	871 mg of substance/m3

Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	125 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	125 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	185 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

Predicted no effect concentration (PNEC):

(2-MÉTHOXYMÉTHYLETHOXY)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/l

PRODUCT OF REACTION OF ETHYLBENZENE AND XYLENE

Environmental compartment:	Fresh water.
PNEC :	0.327 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	12.46 mg/l

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

Environmental compartment:	Soil.
PNEC :	0.29 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.635 mg/l
Environmental compartment:	Sea water.
PNEC :	0.0635 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	6.35 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	3.29 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.329 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	100 mg/l

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:	Waste water treatment plant.
PNEC :	100 mg/l
Environmental compartment:	Fresh water predators (oral).
PNEC :	3.04 mg/kg
Environmental compartment:	Salt water predators (oral).
PNEC :	30.4 mg/kg

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 ISO 16321.

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 EN ISO 374-1.

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 :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVA (Polyvinyl alcohol)

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

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/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 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 inhaling vapors.

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/A1.

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)

Exposure controls linked to environmental protection

Do not empty into drains.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Booster :	colorless liquid propellent / explosed caracteristics (%vol) : 3.3 - 26.20
Spray :	Spray : Pressure to 20°C : 4.5 bars ± 1 bar

Physical state

Physical state :	Fluid liquid. Spray.

Colour

Unspecified

Odour

Odour threshold :	Not stated.

Melting point

Melting point/melting range :	Not relevant.

Freezing point

Freezing point / Freezing range :	Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not relevant.

Flammability
Flammability (solid, gas) : Not stated.

Lower and upper explosion limit
Explosive properties, lower explosivity limit (%) : Not stated.
Explosive properties, upper explosivity limit (%) : Not stated.

Flash point
Flash point interval : Not relevant.

Auto-ignition temperature
Self-ignition temperature : Not relevant.

Decomposition temperature
Decomposition point/decomposition range : Not relevant.

pH
pH (aqueous solution) : Not stated.
pH : Not relevant.

Kinematic viscosity
Viscosity : Not stated.

Solubility
Water solubility : Insoluble.
Fat solubility : Not stated.

Partition coefficient n-octanol/water (log value)
Partition coefficient: n-octanol/water : Not stated.

Vapour pressure
Vapour pressure (50°C) : Below 110 kPa (1.10 bar).

Density and/or relative density
Density : < 1

Relative vapour density
Vapour density : Not stated.

Particle characteristics
The mixture does not contain nanoforms.

9.2. Other information
No data available.

9.2.1. Information with regard to physical hazard classes
No data available.

Aerosols
Chemical combustion heat : >= 30 kJ/g.

9.2.2. Other safety characteristics
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
Keep away from oxydizing agent, acids or base

10.5. Incompatible materials

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 hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1. Substances

a) Acute toxicity :

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

Oral route :	LD50 > 5000 mg/kg body weight Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 9510 mg/kg body weight Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)

FATTY ACIDS,C18, UNSADT, DIMERS, REACTION PRODUCTS WITH N,N-DIMETHYL-1,3PROPANEDIAMINE AND 1,3-PROPANEDIAMINE (CAS: 162627-17-0)

Oral route :	LD50 > 10000 mg/kg body weight Species : Rat

JAUNE D'OXYDE D'ANTIMOINE, DE NICKEL ET DE TITANE (CAS: 8007-18-9)

Oral route :	LD50 >= 2.200 mg/kg body weight Species : Rat

PRODUCT OF REACTION OF ETHYLBENZENE AND XYLENE

Oral route :	LD50 = 3523 mg/kg body weight Species : Rat
	Species : Rabbit

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

Oral route :	LD50 = 8532 mg/kg body weight Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 5000 mg/kg Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (Vapours) :	LC50 35.7

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS. (CAS: 64742-48-9)

Oral route :	LD50 > 5000 mg/kg body weight Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 5000 mg/kg body weight Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (Dusts/mist) :	LC50 > 5 mg/l Species : Rat

b) Skin corrosion/skin irritation :

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

Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

c) Serious damage to eyes/eye irritation :

No data available.

d) Respiratory or skin sensitisation :

No data available.

e) Germ cell mutagenicity :

No data available.

f) Carcinogenicity :

No data available.

g) Reproductive toxicant :

No data available.

h) Specific target organ systemic toxicity - single exposure :

No data available.

i) Specific target organ systemic toxicity - repeated exposure :

No data available.

j) Aspiration hazard :

No data available.

11.1.2. Mixture

11.1.2.1 Information on hazard classes

a) Acute toxicity :

Oral route :	No data available.
Dermal route :	No data available.
Inhalation route (Dusts/mist) :	No data available.

b) Skin corrosion/skin irritation :

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.

c) Serious damage to eyes/eye irritation :

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

d) Respiratory or skin sensitisation :

May cause an allergic reaction by skin contact.

e) Germ cell mutagenicity :

No data available.

f) Carcinogenicity :

No data available.

g) Reproductive toxicant :

No data available.

h) Specific target organ systemic toxicity - single exposure :

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.

i) Specific target organ systemic toxicity - repeated exposure :

No data available.

j) Aspiration hazard :

No data available.

11.1.2.2 Other information

Symptoms related to the physical, chemical and toxicological characteristics

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.

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

CAS 9009-54-5 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

11.2. Information on other hazards

Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with effects on human health.

SECTION 12 : ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

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

12.1. Toxicity

12.1.1. Substances

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

Fish toxicity :	NOEC = 47.5 mg/l Species : Oryzias latipes Duration of exposure : 14 days OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)
Crustacean toxicity :	NOEC >= 100 mg/l Species : Daphnia magna Duration of exposure : 21 days OECD Guideline 211 (Daphnia magna Reproduction Test)

PRODUCT OF REACTION OF ETHYLBENZENE AND XYLENE

Fish toxicity :	LC50 = 2.6 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h
Crustacean toxicity :	EC50 > 1 mg/l Species : Daphnia magna Duration of exposure : 24 h
Algae toxicity :	ECr50 = 2.2 mg/l Duration of exposure : 72 h

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS. (CAS: 64742-48-9)

Fish toxicity :	LC50 > 1000 mg/l Duration of exposure : 96 h
Crustacean toxicity :	EC50 > 1000 mg/l Duration of exposure : 48 h
Algae toxicity :	ECr50 > 1000 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h

(2-MÉTHOXYMÉTHYLETHOXY)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 sp. Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) NOEC = 0.5 mg/l Species : Daphnia magna Duration of exposure : 21 days OECD Guideline 211 (Daphnia magna Reproduction Test)
Algae toxicity :	ECr50 = 969 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 96 h OECD Guideline 201 (Alga, Growth Inhibition Test) NOEC > 969 mg/l Species : Pseudokirchnerella subcapitata

Duration of exposure : 96 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

FATTY ACIDS,C18, UNSADT, DIMERS, REACTION PRODUCTS WITH N,N-DIMETHYL-1,3PROPANEDIAMINE AND 1,3-PROPANEDIAMINE (CAS: 162627-17-0)

Fish toxicity : LC50 > 150 mg/l
Species : Leuciscus idus
Duration of exposure : 48 h

Crustacean toxicity : EC50 > 150 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

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

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

FATTY ACIDS,C18, UNSADT, DIMERS, REACTION PRODUCTS WITH N,N-DIMETHYL-1,3PROPANEDIAMINE AND 1,3-PROPANEDIAMINE (CAS: 162627-17-0)

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

PRODUCT OF REACTION OF ETHYLBENZENE AND XYLENE

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

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

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

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS. (CAS: 64742-48-9)

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

12.3. Bioaccumulative potential

12.3.1. Substances

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

Octanol/water partition coefficient : log Koe = 0.004

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

Octanol/water partition coefficient : log Koe = 1.2
OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with environmental effects.

12.7. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 1 : Slightly 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.

Do not pierce or burn even after use.

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, 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 2025 - IMDG 2024 [42-24] - ICAO/IATA 2025 [66]).

14.1. UN number or ID 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

- Environmentally hazardous material :

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	Stowage Handling	Segregation
	2	See SP63	-	See SP277	F-D. S-U	63 190 277 327 344 381 959	E0	- SW1 SW22	SG69

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.

Marine pollutant (IMDG 3.1.2.9):(trizinc bis(orthophosphate))

14.7. Maritime transport in bulk according to IMO instruments

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 75/324/CEE modified by directive 2013/10/UE
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2023/707.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2024/2564. (ATP 22)

Container information:

No data available.

Particular provisions :

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture contains at least one restricted substance under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach. Please refer to Section 3 to identify the substance involved.

Authorisations agreed under Title VII of Regulation (EC) No.1907/2006 (REACH):

The mixture does not contain any substance subject to authorisation according to Annex XIV of REACH Regulation (EC) No 1907/2006: https://echa.europa.eu/fr/authorisation-list.

Substances that deplete the ozone layer (EC Regulation No. 1005/2009, Montreal Protocol) :

The mixture does not contain any substance posing a risk to the ozone layer.

Persistent organic pollutants (POP) (Regulation (EU) 2019/1021):

The mixture does not contain a persistent organic pollutant.

PIC Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (Rotterdam Convention):

The mixture is subject to the Prior Informed Consent (PIC) procedure.

The mixture contains a substance subject to the export notification procedure requirement.
64742-48-9 HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS.

Explosives precursors :

The mixture contains at least one substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors:

- Acetone (CAS 67-64-1)

The acquisition, introduction, possession or use of this restricted explosive precursor by members of the general public is subject to the reporting obligations.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 1 : Slightly hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Wording of the phrases 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.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure .
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
LQ : Limited Quantity
EQ : Excepted Quantity
EmS : Emergency Schedule
E : Packing Instruction
NOEC : The concentration with no observed effect.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
ATE : Acute Toxicity Estimate
BW : Body Weight
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
STEL : Short-term exposure limit
TWA : Moyenne pondérée dans le temps
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : Agreement concerning the international carriage of dangerous goods by road.
GHS02 : Flame
GHS07 : Exclamation mark
GHS09 : Environment
IATA : International Air Transport Association.
IMDG : International Maritime Dangerous Goods.
ICAO : International Civil Aviation Organisation
PBT: Persistent, bioaccumulable and toxic.
PIC: Prior Informed Consent.
POP: Persistent Organic Pollutant.
RID : Regulations concerning the International carriage of Dangerous goods by rail.
SVHC : Substances of very high concern.
WGK : Wassergefahrdungsklasse (Water Hazard Class).

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