

## 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 : GALVANISATION A FROID GALVAGEB MAT

UFI: K3JQ-KAE3-J20D-M0NN

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

High temperature paint for protection of metals.

## 1.3. Details of the supplier of the safety data sheet

#### Registered company name : GEB.

Address : CS 62062.95972.ROISSY CDG CEDEX . France.

Telephone : +33 1 48 17 99 99. Fax : +33 1 48 17 98 00.

geb@geb.fr

www.geb.fr

## 1.4. Emergency telephone number : +33 1 45 42 59 59.

Association/Organisation : INRS.

#### Other emergency numbers

N/A

## 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).

Skin irritation, Category 2 (Skin Irrit. 2, H315).

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

May produce an allergic reaction (EUH208).

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

Hazardous to the aquatic environment - Acute hazard, Category 1 (Aquatic Acute 1, H400).

Hazardous to the aquatic environment - Chronic hazard, Category 1 (Aquatic Chronic 1, H410).

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

## 2.2. Label elements

Mixture for aerosol application.

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

Hazard pictograms :



Product identifiers : 606-002-00-3 Additional labeling : EUH208

Contains OCTADECANOIC ACID, 12-HYDROXY-, REACTION PRODUCTS WITH HEXAMETHYLENEDIAMINE. May produce an allergic reaction.

#### Hazard statements : H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H410 Very toxic to aquatic life with long lasting effects. 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. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/eye protection/face protection. Precautionary statements - Response : P302 + P352IF ON SKIN: Wash with plenty of water. P304 + P340IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332 + P313If skin irritation occurs: Get medical advice/attention. P362 + P364Take off contaminated clothing and wash it before reuse. Precautionary statements - Storage : P403 Store in a well-ventilated place. P405 Store locked up. P410 + P412Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F. Precautionary statements - Disposal : P501 Discard content/container according to applicable regulations.

## GALVANISATION A FROID GALVAGEB MAT

## 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

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Composition	٠
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Composition .			
Identification	Classification (EC) 1272/2008	Note	%
CAS: 106-97-8	GHS02	С	25 <= x % < 50
EC: 203-448-7	Dgr	[i]	
REACH: 01-2119474691-32	Flam. Gas 1A, H220	[vii]	
	Press. Gas, H280		
BUTANE			
INDEX: 606-002-00-3	GHS02, GHS07	[i]	10 <= x % < 25
CAS: 78-93-3	Dgr		
EC: 201-159-0	Flam. Liq. 2, H225		
REACH: 01-2119457290-43	Eye Irrit. 2, H319		
	STOT SE 3, H336		
BUTANONE	EUH066		

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INDEX: 030-001-01-9	GHS09		10 <= x % < 25
CAS: 7440-66-6	Wng		10 < - x % < 23
EC: 231-175-3	Aquatic Acute 1, H400		
EC. 251-175-5	M Acute = $1$		
ZINC DOWDED ZINC DUCT (CTADILISED)	Aquatic Chronic 1, H410		
ZINC POWDER - ZINC DUST (STABILISED)			
	M  Chronic = 1		2.5 0/ 10
CAS: 64742-49-0	GHS07, GHS09, GHS08, GHS02		2.5 <= x % < 10
EC: 927-510-4	Dgr		
REACH: 01-2119475515-33	Flam. Liq. 2, H225		
	Asp. Tox. 1, H304		
NAPHTHA (PETROLEUM),	Skin Irrit. 2, H315		
HYDROTREATED LIGHT	STOT SE 3, H336		
	Aquatic Chronic 2, H411		
CAS: 1330-20-7	GHS06, GHS08, GHS02	С	1 <= x % < 2.5
EC: 215-535-7	Dgr	[i]	
REACH: 01-2119488216-32	Flam. Liq. 3, H226		
	Asp. Tox. 1, H304		
XYLENE	Acute Tox. 4, H312		
	Skin Irrit. 2, H315		
	Eye Irrit. 2, H319		
	Acute Tox. 3, H331		
	STOT SE 3, H335		
	STOT RE 2, H373		
	Aquatic Chronic 3, H412		1 0/ 2.5
CAS: 64742-95-6	GHS07, GHS08, GHS02		1 <= x % < 2.5
EC: 918-668-5	Dgr		
REACH: 01-2119455851-35	Flam. Liq. 3, H226		
	Asp. Tox. 1, H304		
SOLVENT NAPHTHA (PETROLEUM), LIGHT	STOT SE 3, H335		
AROM.	STOT SE 3, H336		
CAS: 100-41-4	GHS07, GHS08, GHS02	[i]	0.1 <= x % < 1
EC: 202-849-4	Dgr		
REACH: 01-2119489370-35	Flam. Liq. 2, H225		
	Asp. Tox. 1, H304		
ETHYLBENZENE	Acute Tox. 4, H332		
	STOT SE 3, H335		
	STOT RE 2, H373		
	Aquatic Chronic 3, H412		
INDEX: 601-023-00-4	GHS02, GHS07, GHS08	[i]	0.1 <= x % < 1
			0.1 < -x % < 1
CAS: 100-41-4	Dgr		
EC: 202-849-4	Flam. Liq. 2, H225		
REACH: 01-2119489370-35	Acute Tox. 4, H332		
	STOT RE 2, H373		
ETHYLBENZENE	Asp. Tox. 1, H304		
EC: 434-430-9	GHS07, GHS08		0.1 <= x % < 1
REACH: 01-0000018057-71	Wng		
	Skin Sens. 1B, H317		
OCTADECANOIC ACID, 12-HYDROXY-,	STOT RE 2, H373		
REACTION PRODUCTS WITH	Aquatic Chronic 4, H413		
HEXAMETHYLENEDIAMINE			
CAS: 64-17-5	GHS07, GHS02	[i]	0.1 <= x % < 1
EC: 200-578-6	Dgr	L 3	
REACH: 01-2119457610-43	Flam. Liq. 2, H225		
	Eye Irrit. 2, H319		
ETHANOL	2,0		
INDEX: 603-108-00-1	GHS02, GHS05, GHS07	[i]	0 <= x % < 0.1
CAS: 78-83-1			$0 \sim -\Lambda /0 \sim 0.1$
	Dgr Elam Lig 3 H226		
EC: 201-148-0	Flam. Liq. 3, H226		
	STOT SE 3, H335		
2-METHYLPROPAN-1-OL	Skin Irrit. 2, H315		
	Eye Dam. 1, H318		
	STOT SE 3, H336		

## GALVANISATION A FROID GALVAGEB MAT

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## GALVANISATION A FROID GALVAGEB MAT

CAS: 108-88-3	GHS07, GHS08, GHS02	[i]	0 <= x % < 0.1
EC: 203-625-9	Dgr	[ii]	
REACH: 01-2119471310-51	Flam. Liq. 2, H225		
	Asp. Tox. 1, H304		
TOLUENE	Skin Irrit. 2, H315		
	STOT SE 3, H336		
	Repr. 2, H361d		
	STOT RE 2, H373		
	Aquatic Chronic 3, H412		

Specific concentration limits:			
Identification	Specific concentration limits	ATE	
CAS: 106-97-8		inhalation: $ATE = 658 \text{ mg/l}$	ce an
EC: 203-448-7		(dust/mist)	
REACH: 01-2119474691-32			
BUTANE			
CAS: 1330-20-7		inhalation: ATE = $5.53 \text{ mg/l}$	
EC: 215-535-7		(dust/mist)	
REACH: 01-2119488216-32		dermal: ATE = $1001 \text{ mg/kg BW}$	
XYLENE			
CAS: 64-17-5		inhalation: $ATE = 51 \text{ mg/l } 4h$	
EC: 200-578-6		(vapours)	
REACH: 01-2119457610-43		oral: ATE = $10470 \text{ mg/kg BW}$	
ETHANOL			

## Information on ingredients :

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

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

[ii] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

[vii] Propellant gas

#### **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 an allergic reaction, seek medical attention.

#### 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.

## 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 (CO2)

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 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 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.

#### 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 :

CAS	VME-mg/m3:	VME-ppm :	VLE-mg/m3:	VLE-ppm :	Notes :
78-93-3	600	200	900	300	-
1330-20-7	221	50	442	100	Peau
100-41-4	442	100	884	200	Peau
100-41-4	442	100	884	200	Peau
108-88-3	192	50	384	100	Peau
- UK :					
CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
106-97-8	600 ppm	750 ppm		Carc	
	1450 mg/m3	1810 mg/m3			
78-93-3	200 ppm	300 ppm		Sk. BMGV	
	600 mg/m3	899 mg/m3			
1330-20-7	50 ppm	100 ppm		Sk. BMGV	
	220 mg/m3	441 mg/m3			
100-41-4	100 ppm	125 ppm		Sk	
	441 mg/m3	552 mg/m3			
100-41-4	100 ppm	125 ppm		Sk	
	441 mg/m3	552 mg/m3			
64-17-5	1000 ppm				
	1920 mg/m3				
78-83-1	50 ppm	75 ppm			
	154 mg/m3	231 mg/m3			
108-88-3	50 ppm	100 ppm		Sk	
	191 mg/m3	384 mg/m3			

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

ETHANOL (CAS: 64-17-5) Final use: Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

#### Final use:

Exposure method: Potential health effects: DNEL :

#### Workers.

Dermal contact. Long term systemic effects. 343 mg/kg body weight/day

Inhalation. Long term systemic effects. 950 mg of substance/m3

Inhalation. Short term local effects. 1900 mg of substance/m3

**Consumers.** Ingestion. Long term systemic effects. 87 mg/kg body weight/day

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Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

ETHYLBENZENE (CAS: 100-41-4) Final use: Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

**Final use:** Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

BUTANONE (CAS: 78-93-3) Final use: Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

**Final use:** Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL : Dermal contact. Long term systemic effects. 206 mg/kg body weight/day

Inhalation. Long term systemic effects. 114 mg of substance/m3

Workers. Dermal contact. Long term systemic effects. 180 mg/kg body weight/day

Inhalation. Short term local effects. 293 mg of substance/m3

Inhalation. Long term systemic effects. 77 mg of substance/m3

**Consumers.** Ingestion. Long term systemic effects. 1.6 mg/kg body weight/day

Inhalation. Long term local effects. 15 mg of substance/m3

Workers. Dermal contact. Long term systemic effects. 1161 mg/kg body weight/day

Inhalation. Long term systemic effects. 600 mg of substance/m3

**Consumers.** Ingestion. Long term systemic effects. 31 mg/kg body weight/day

Dermal contact. Long term systemic effects. 412 mg/kg body weight/day

Inhalation. Long term systemic effects. 106 mg of substance/m3

## Predicted no effect concentration (PNEC):

ETHANOL (CAS: 64-17-5) Environmental compartment: PNEC :

BUTANONE (CAS: 78-93-3) Environmental compartment: PNEC :

## 8.2. Exposure controls

## Personal protection measures, such as personal protective equipment

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

Soil. 0.63 mg/kg

Fresh water. 0.96 mg/l

Sea water. 0.79 mg/l

Intermittent waste water. 2.75 mg/l

Fresh water sediment. 3.6 mg/kg

Marine sediment. 2.9 mg/kg

Waste water treatment plant. 580 mg/l

Vermivore predators (oral). 0.72 mg/kg

Soil. 22.5 mg/kg

Fresh water. 55.8 mg/l

Sea water. 55.8 µg/l

Intermittent waste water. 55.8 mg/l

Fresh water sediment. 284.7 mg/kg

Marine sediment. 284.7 µg/kg

Waste water treatment plant. 709 mg/l

Vermivore predators (oral). 1000 mg/m3

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)

- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

Thk: 0.075 mm

## - Body protection

Avoid skin contact.

Wear suitable 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)

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

## 9.1. Information on basic physical and chemical properties

## Physical state

Physical state :

Viscous liquid. Spray.

Colour Unspecified	
<b>Odour</b> Odour threshold :	Not stated.
Melting point Melting point/melting range :	Not relevant.
Freezing point Freezing point / Freezing range :	Not stated.
<b>Boiling point or initial boiling point and boiling</b> Boiling point/boiling range :	g range Not relevant.
<b>Flammability</b> Flammability (solid, gas) :	Not stated.
Lower and upper explosion limit Explosive properties, lower explosivity limit (%	)Not stated.
: Explosive properties, upper explosivity limit (%	b)Not stated.
: Flash point	N-4
Flash point interval : Auto-ignition temperature	Not relevant.
Self-ignition temperature :	Not relevant.
<b>Decomposition temperature</b> Decomposition point/decomposition range :	Not relevant.
<b>pH</b> pH (aqueous solution) : pH :	Not stated. Not relevant.
Kinematic viscosity Viscosity :	< 20,5 mm²/s (PA 40°C)
Solubility Water solubility	Insoluble.
Water solubility : Fat solubility :	Not stated.
Partition coefficient n-octanol/water (log value Partition coefficient: n-octanol/water :	) Not stated.
<b>Vapour pressure</b> Vapour pressure (50°C) :	Not relevant.
<b>Density and/or relative density</b> Density :	1.1 (PA)
<b>Relative vapour density</b> Vapour density :	Not stated.
9.2. Other information	Not stated.
VOC (g/l) : % VOC :	603.7 82.5
<b>9.2.1. Information with regard to physical haza</b> No data available.	ard classes
Aerosols	N-4
Chemical combustion heat : Inflammation time :	Not specified. Not specified.
Deflagration density :	Not specified.
Inflammation distance :	Not specified.
Flame height :	Not specified.
Flame duration :	Not specified.

## 9.2.2. Other safety characteristics

No data available.

#### Formation of explosible dust/air mixtures

Characteristic of dust particles : Maximum pressure generated by the explosion : Deflagration index (Kst) : Minimum ignition energy : MEC/LEL:

## 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**

No data available.

#### **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

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

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

## a) Acute toxicity :

BUTANE (CAS: 106-97-8) Inhalation route (Dusts/mist) :	LC50 = 658 mg/l Species : Rat
XYLENE (CAS: 1330-20-7) Dermal route :	LD50 = 1001 mg/kg body weight
Inhalation route (Dusts/mist) :	LC50 = 5.53 mg/l

ETHANOL (CAS: 64-17-5) Oral route :	LD50 = 10470 mg/kg body weight OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 2000 mg/kg body weight Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (Vapours) :	LC50 = 51 mg/l Species : Rat OECD Guideline 403 (Acute Inhalation Toxicity) Duration of exposure : 4 h
NAPHTHA (PETROLEUM), HYDROTREATED Oral route :	LIGHT (CAS: 64742-49-0) LD50 > 5840 mg/kg body weight Species : Rat
Dermal route :	LD50 > 2920 mg/kg body weight Species : Rat
Inhalation route (n/a) :	LC50 > 23300 mg/m3 Species : Rat OECD Guideline 403 (Acute Inhalation Toxicity)
<b>b) Skin corrosion/skin irritation :</b> ETHANOL (CAS: 64-17-5)	Species : Rabbit OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
	Species : Rabbit OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
c) Serious damage to eyes/eye irritation : ETHANOL (CAS: 64-17-5)	Species : Rabbit OECD Guideline 405 (Acute Eye Irritation / Corrosion) Species : Rabbit OECD Guideline 405 (Acute Eye Irritation / Corrosion) Species : Rabbit OECD Guideline 405 (Acute Eye Irritation / Corrosion) Species : Rabbit OECD Guideline 405 (Acute Eye Irritation / Corrosion)
d) Respiratory or skin sensitisation : ETHANOL (CAS: 64-17-5)	
Local lymph node stimulation test :	Non-Sensitiser. Species : Mouse OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Guinea Pig Maximisation Test (GMPT) :	Non-sensitiser.

## GALVANISATION A FROID GALVAGEB MAT

Species : Others

e) Germ cell mutagenicity :

ETHANOL (CAS: 64-17-5)

No mutagenic effect.

OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

f) Carcinogenicity :

No data available.

g) Reproductive toxicant : ETHANOL (CAS: 64-17-5) Study on fertility :

Species : Rat OECD Guideline 414 (Prenatal Developmental Toxicity Study)

## h) Specific target organ systemic toxicity - single exposure :

No data available.

#### i) Specific target organ systemic toxicity - repeated exposure :

ETHANOL (CAS: 64-17-5) Inhalation route :

C > 20 mg/litre/6h/day Species : Rat Duration of exposure : 90 days

ETHYLBENZENE (CAS: 100-41-4) Inhalation route :

C > 0.75 mg/litre/6h/day Duration of exposure : 28 days

#### j) Aspiration hazard :

No data available.

#### 11.1.2. Mixture

a) Acute toxicity :

No data available.

#### b) Skin corrosion/skin irritation :

The irritant classification is based on the high/low pH value without irritation tests having been performed.

#### c) Serious damage to eyes/eye irritation :

No data available.

## d) Respiratory or skin sensitisation :

Contains at least one sensitising substance. May cause an allergic reaction.

## 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.
- 11.1.2.2 Other information

<b>11.2. Information on other hazards</b>	
Monograph(s) from the IARC (Internationa	
	s not classifiable as to its carcinogenicity to humans.
CAS 64-17-5 : IARC Group 1 : The agent is	-
CAS 100-41-4 : IARC Group 2B : The agent	
CAS 100-41-4 : IARC Group 2B : The agent	
CAS 1330-20-7 : TARC Group 3 : The agent	is not classifiable as to its carcinogenicity to humans.
ECTION 12 : ECOLOGICAL INFORMATI	ION
Very toxic to aquatic life with long lasting ef	fects.
The product must not be allowed to run into	drains or waterways.
12.1. Toxicity	
12.1.1. Substances	
SOLVENT NAPHTHA (PETROLEUM)	, LIGHT AROM. (CAS: 64742-95-6)
Fish toxicity :	NOEC = $1.23 \text{ mg/l}$
	Duration of exposure : 28 days
Algae toxicity :	ECr50 = 2.9 mg/l
<i>.</i>	Duration of exposure : 72 h
XYLENE (CAS: 1330-20-7)	
Fish toxicity :	LC50 = 2.6  mg/l
2	Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 1 mg/l
	Duration of exposure : 48 h
Algae toxicity :	ECr50 = 2.2 mg/l
Tigue toxicity .	Duration of exposure : 72 h
ETHANOL (CAR. $(4, 17, 5)$	
ETHANOL (CAS: 64-17-5) Fish toxicity :	LC50 = 14200  mg/l
·	Species : Pimephales promelas
	Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 5012 mg/l
Ş	Species : Daphnia magna
	Duration of exposure : 48 h
	NOEC = $9.6 \text{ mg/l}$
	Species : Daphnia magna
	Duration of exposure : 14 days
Algae toxicity :	ECr50 = 275 mg/l
	Duration of exposure : 72 h
	EC10 mg/l
	Duration of exposure : 72 h

## 12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

#### 12.2. Persistence and degradability

## 12.2.1. Substances

ETHANOL (CAS: 64-17-5) Biodegradability :

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

## SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. (CAS: 64742-95-6)

Biodegradability :

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

XYLENE (CAS: 1330-20-7) Biodegradability :

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

## 12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

#### No data available.

## 12.5. Results of PBT and vPvB assessment

No data available.

## 12.6. Endocrine disrupting properties

No data available.

#### 12.7. Other adverse effects

No data available.

## 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, 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 2023 - IMDG 2022 [41-22] - ICAO/IATA 2024 [65]).

#### 14.1. UN number or ID number

1950

#### 14.2. UN proper shipping name

UN1950=AEROSOLS, flammable

#### 14.3. Transport hazard class(es)



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	E0	2	D
								625			

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	U U	Segregation
								Handling	
	2	See SP63	-	See SP277	F-D. S-U	63 190 277	E0	- SW1 SW22	SG69
						327 344 381			
						959			

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	2.1	-	-	Forbidden	Forbidden	203	150 kg	A1 A145 A167	EO
							-	A802	
	2.1	-	-	Forbidden	Forbidden	-	-	A1 A145 A167	EO
								A802	

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):(zinc powder - zinc dust (stabilised))

## 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:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

## **Container information:**

No data available.

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

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach.

#### **Explosives precursors :**

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

#### **Particular provisions :**

No data available.

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

The mixture does not contain a persistent organic pollutant.

#### **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.
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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
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.

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

CMR: Carcinogenic, mutagenic or reprotoxic.

UFI : Unique formulation identifier.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

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 : Wassergefahrdungsklasse (Water Hazard Class).

GHS02 : Flame

GHS07 : Exclamation mark

GHS09 : Environment

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.