SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name : JOINT LIQUIDE
Product code : 331.

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

Adhesive for the sealing
Professional use

1.3. Details of the supplier of the safety data sheet

Registered company name : ORAPI.
Address : PARC INDUSTRIEL DE LA PLAINE DE L'AIN - 225 ALLEE DES CEDRES.01150.SAINT-VULBAS.FRANCE.
Telephone : 33-(0)4-74-40-20-20. Fax : 33-(0)4-74-40-20-21.
fds@orapi.com

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

Association/Organisation : INRS .

Other emergency numbers

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

May produce an allergic reaction (EUH208).
Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

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

Additional labeling :

EUH208	Contains 2-PROPENOIC ACID, 2-METHYL-, 2-HYDROXYETHYL ESTER, REACTION PRODUCTS WITH PHOSPHORUS OXIDE. May produce an allergic reaction.
EUH208	Contains 2'-PHENYLACETOHYDRAZIDE. May produce an allergic reaction.

Hazard statements :

H412	Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P273	Avoid release to the environment.

Precautionary statements - Response :

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.

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 57 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.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 3290-92-4 EC: 221-950-4 REACH: 01-2119542176-41 TRIMETHACRYLATE DE TRIMETHYLOLPROPANE	GHS09 Aquatic Chronic 2, H411		2.5 <= x % < 10
CAS: 13463-67-7 EC: 236-675-5		[1]	0 <= x % < 2.5

REACH: 01-2119489379-17 TITANIUM OXIDE			
CAS: 80-15-9 EC: 201-254-7 REACH: 01-2119475796-19 ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE	GHS06, GHS05, GHS09, GHS08, GHS02 Dgr Self-react. E, H242 Org. Perox. E, H242 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Acute Tox. 3, H331 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 2, H411		0 <= x % < 2.5
CAS: 1187441-10-6 EC: 810-703-1 REACH: 01-2120140608-57 2-PROPENOIC ACID, 2-METHYL-, 2-HYDROXYETHYL ESTER, REACTION PRODUCTS WITH PHOSPHORUS OXIDE	GHS05, GHS07 Dgr Skin Sens. 1B, H317 Eye Dam. 1, H318		0 <= x % < 2.5
CAS: 114-83-0 EC: 204-055-3 2'-PHENYLACETOHYDRAZIDE	GHS06 Dgr Acute Tox. 3, H301 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 STOT SE 3, H335		0 <= x % < 2.5

(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 an allergic reaction, seek medical attention.
Bring to the fresh air.
Consult a physician in case of disorder.

In the event of splashes or contact with eyes :

Wash abundantly with fresh and clean water during 15 minutes by maintaining the isolated eyelids.
Consult a specialist

In the event of splashes or contact with skin :

In the event of an allergic reaction, seek medical attention.
Remove clothing impregnated and wash carefully the skin with some water and some soap or use a known cleaner.
Not to use solvents or thinners.
Consult a doctor in the event of irritation.

In the event of swallowing :

Seek medical attention, showing the label.
Do not induce vomiting.

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

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :
- foam
- powder
- carbon dioxide (CO_2)

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

Avoid contact with skin and eyes.
Avoid inhalation of vapours.

For first aid worker

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

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.
Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

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

7.1. Precautions for safe handling

Always wash hands after handling.
Remove and wash contaminated clothing before re-using.
Avoid contact with skin, eyes and clothing.
Do not breathe vapours, fume, mist.

Fire prevention :

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.

Prohibited equipment and procedures :

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

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container away from heat, bad weather, dampness and freezing.
Keep container tightly closed and in a cool, dry and well-ventilated place.

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 :

- France (INRS - ED984 :2016) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
13463-67-7	-	10	-	-	-	-

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
13463-67-7	- ppm 4 mg/m³	- ppm - mg/m³			

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

TITANIUM OXIDE (CAS: 13463-67-7)

Final use:	**Workers.**
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	10 mg de substance/m3

Predicted no effect concentration (PNEC):

TITANIUM OXIDE (CAS: 13463-67-7)

Environmental compartment:	Soil.
PNEC :	100 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.127 mg/l
Environmental compartment:	Sea water.
PNEC :	1 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	1000 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	100 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	100 mg/l

TRIMETHACRYLATE DE TRIMETHYLOLPROPANE (CAS: 3290-92-4)

Environmental compartment:	Soil.
PNEC :	0.097 mg/kg
Environmental compartment:	Fresh water.
PNEC :	2.76 µg/l
Environmental compartment:	Sea water.
PNEC :	0.276 µg/l
Environmental compartment:	Intermittent waste water.
PNEC :	0.02 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	0.495 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.05 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	10 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

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 in accordance with standard EN166.

- 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 :
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
Recommended properties :
- Impervious gloves in accordance with standard EN374

- Body protection

Work clothing worn by personnel shall be laundered regularly.
After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

In the event of insufficient ventilation, wear a respiratory apparatus of protection.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	Viscous liquid.

Important health, safety and environmental information

pH :	Not relevant.
Boiling point/boiling range :	Not relevant.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	Not stated.
Water solubility :	Insoluble.
Melting point/melting range :	Not relevant.
Self-ignition temperature :	Not relevant.
Decomposition point/decomposition range :	Not relevant.

9.2. Other information

Colour: white

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

No data available.

10.4. Conditions to avoid

Avoid :
- exposure to light
- flames and hot surfaces
- heat
- accumulation of electrostatic charges.
- heating
- frost

- sources of ignition

This product polymerizes without oxygen.

10.5. Incompatible materials

Keep away from :
- peroxides
- alkali metals
- acids
- bases
- oxidising agents
- reducing agents
- amines
- radical initiators

10.6. Hazardous decomposition products

The thermal decomposition may release/form :
- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No data available.

11.1.1. Substances

Acute toxicity :

2'-PHENYLACETOHYDRAZIDE (CAS: 114-83-0)

Oral route :	LD50 = 270 mg/kg Species : Mouse

ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE (CAS: 80-15-9)

Oral route :	LD50 = 382 mg/kg Species : Rat

TITANIUM OXIDE (CAS: 13463-67-7)

Oral route :	LD50 > 5000 mg/kg Species : Rat
Inhalation route (Dusts/mist) :	LC50 > 6.82 mg/l Species : Rat

Specific target organ systemic toxicity - repeated exposure :

TITANIUM OXIDE (CAS: 13463-67-7)

Oral route :	C = 24000 mg/kg poids corporel/jour Species : Rat Duration of exposure : 28 jours OCDE Ligne directrice 407 (Toxicité orale à doses répétées - pendant 28 jours sur les rongeurs)
Inhalation route :	C = 50 mg/litre/6h/jour Species : Rat Duration of exposure : 90 jours

11.1.2. Mixture

Respiratory or skin sensitisation :

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

SECTION 12 : ECOLOGICAL INFORMATION

Harmful 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

ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE (CAS: 80-15-9)

Fish toxicity :	LC50 = 3.9 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h

TITANIUM OXIDE (CAS: 13463-67-7)

Fish toxicity :	LC50 > 1000 mg/l Species : Pimephales promelas Duration of exposure : 96 h
Crustacean toxicity :	EC50 > 1000 mg/l Species : Daphnia magna Duration of exposure : 72 h
Algae toxicity :	ECr50 = 62 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h

TRIMETHACRYLATE DE TRIMETHYLOLPROPANE (CAS: 3290-92-4)

Fish toxicity :	LC50 = 2 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)
Crustacean toxicity :	EC50 > 9.22 mg/l Species : Daphnia magna Duration of exposure : 48 h OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)
Algae toxicity :	ECr50 = 3.88 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance) NOEC = 0.177 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

ALPHA, ALPHA-DIMETHYLBENZYL HYDROPEROXIDE (CAS: 80-15-9)

Biodegradability :	Non-rapidly degradable.

TITANIUM OXIDE (CAS: 13463-67-7)

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

TRIMETHACRYLATE DE TRIMETHYLOLPROPANE (CAS: 3290-92-4)

Biodegradability :	Non-rapidly degradable.

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. 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, 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

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

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. 2018/669 (ATP 11)

- Container information:

No data available.

- Particular provisions :

No data available.

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 :

H242	Heating may cause a fire.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302 + H312	Harmful if swallowed or in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
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.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure .
H411	Toxic to aquatic life with long lasting effects.

Abbreviations :

DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefahrdungsklasse (Water Hazard Class).
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.