1 Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier:**

Chemical name : Organic tin compound
Trade name : **Catalyst Gel**

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

Industrial - Catalyst for RTV-2 silicone rubbers

1.3 **Details of the supplier of the safety data sheet:**

Company name : TRAYART srl
Street/POB-No. : Via Paiette 13/Q
State/city/postal code : IT - 35040 – Castelbaldo (PD)
Telephone : +39 0425 546515

e-mail : info@trayart.it

1.4 Emergency telephone number:

For urgent inquiries refer to : +39 0425 546515 (Mon-Fri: 8:00/12:00 - 14:00/18:00)

2 Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) 1272/2008, GHS:

Class	Category	Route of exposure
Flammable liquids	Category 3	
Specific Target Organ Toxicity - Repeated exposure	Category 2	

The full wording of the risk (R) and hazard (H) phrases is given in section 16 of the sheet.
Any additional information concerning the risk for health and/or the environment are given in sections 11 and 12 of this sheet.

2.2 Label elements:

Labelling according to Regulation (EC) 1272/2008, GHS:

Pictogram(s):

Signal Word: Warning

Product contains:
Tetraethyl-silicate, Alkylstanno-siloxane, Vinyltrimethoxysilane

H-Code	Hazard Statements
H226	Flammable liquid and vapour.
H373	May cause damage to organs through prolonged or repeated exposure.

P-Code	Precautionary Statements
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351 +P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P403+P233	Store in a well ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/

	national/international regulations.

2.3 Other hazards:
n.d.

3 Composition/information on ingredients

3.1 Substances:
n.a.

3.2 Mixtures:

Type	Product	N° CAS / REACH N°	N° EINECS	Conc. %	Classification*
INHA	Tetraethyl silicate	78-10-4 / 01-2119496195-28-XXXX	201-083-8	5 - 10%	GHS02,07, Flam. Liq. 3, H226; Acute Tox 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335
INHA	Alkylstanno-siloxane	93925-43-0 / -	300-346-5	5 - 10%	GHS 02,08, Flam. Liq. 3, H226; STOT RE 1, H372; Aqu. Chron. 4, H413
INHA	Vinyltrimethoxysilane	2768-02-7 / 01-2119513215-52-XXXX	220-449-8	5 - 10%	GHS02,07, Flam. Liq. 3, H226; Acute Tox. 4, H332
INHA	Benzoic Acid	65-85-0 / 01-2119455536-33-XXXX	200-618-2	0 - 1%	GHS 05,07, Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT RE 1, H372

Type: INHA: Ingredient, VERU: Impurity
* The full wording of the risk (R) and hazard (H) phrases is given in section 16 of the sheet.

4 First aid measures

4.1 Description of first aid measures:

Inhalation
Move victim to fresh air. Seek medical treatment in case of troubles.

Skin contact
Immediately wipe affected skin area with paper towel or cloth. Thoroughly wash skin with soap and water. If symptoms persist, consult a physician (show the label or safety data sheet).

Eye contact
Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

Swallowing
Rinse mouth with water. Never give an unconscious person anything through the mouth. Consult physician immediately.

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

Inhalation
May cause irritation.

Skin contact
May cause mild skin irritation.

Eye contact
May cause slight irritation to eyes.

Swallowing
n.d.

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

Consultation of a physician
If necessary after first aid.

For rescue team
Personal protection equipment for the members of the rescue team. Strictly observe the rules of hygiene during and after work.

First aid media
Emergency shower and eyewash.

5 Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing media
CO_2, foam, extinguishing powder.

Extinguishing media which shall not to be used for safety reasons
Full water jet.

5.2 Special hazards arising from the substance or mixture:

Hazards caused by exposure in the event of fire
In case of fire may be liberated: Silicium dioxide, traces of incompletely burned carbon compounds, formaldehyde, nitrogen oxides (NO_x), carbon monoxide and carbon dioxide.

5.3 Advice for fire-fighters:

Additional information
In case of fire cool endangered containers with water.

Protective equipment
Wear self-contained breathing apparatus.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Provide adequate ventilation. Do not breathe vapour/aerosol. Wear suitable protective clothing. Avoid contact with skin and eyes.

6.2 **Environmental precautions:**
Do not allow to penetrate into soil, water bodies or drains.

6.3 **Methods and material for containment and cleaning up:**
Take up mechanically, placing in appropriate containers for disposal.

6.4 Reference to other sections:
Any information on personal protection and disposal is given in sections 1, 8 and 13.

7 Handling and storage

7.1 Precautions for safe handling:
Avoid contact with moist air. Do not breathe vapour/aerosol. Wear suitable protective clothing. Avoid contact with skin and eyes. Use protective equipment.

7.2 **Conditions for safe storage, including any incompatibilities:**
Provide adequate ventilation, and local exhaust as needed. Keep container tightly closed in a cool place. Keep away from heat sources, sparks and open flames. Store containers in upright position. Do not drop, drag or bang the container. Do not re-use the empty container. Do not weld. Keep containers tightly closed in a cool, well-ventilated place. Avoid contact with oxidizing substances.

7.3 Specific end use(s):
Information not available.

8 Exposure controls/personal protection

8.1 Control parameters:

Chemical name	N° CAS	N° EINECS	Type/limit value
Alkylstanno-siloxane	93925-43-0	300-346-5	TLV-TWA (8 ore): 0.1 mg/m^3 (come Sn) TLV-STEL (15 min): 0.2 mg/m^3 (come Sn)
Methanol	67-56-1	200-659-6	Time Weighted Average: 200 ppm/260 mg/m^3 (TWA): (EU ELV). Time Weighted Average: 200 ppm/260 mg/m^3 (TWA): (OEL IT). Skin designation: (EU ELV): Can be absorbed through the skin. Skin designation: (OEL IT): Can be absorbed through the skin.
Tetraethyl silicate	78-20-4	201-083-8	10 ppm (85 mg/m^3) Time Weighted Average (TWA): EOL (IT)

8.2 Exposure controls:

Respiratory protection
In case of dusts/vapors/aerosols being formed or if the limit values like TLV are exceeded: use respiratory equipment with suitable filter (filter type A) or wear a self-contained respiratory apparatus according to EN 371.

Hand protection
Protective gloves according to EN 374. Glove material: Plastic or rubber. Breakthrough time: > 480 min. Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection
Tightly sealed safety glasses according to EN 166.

Body protection
Wear suitable protective clothing.

General protection and hygiene measures
Avoid contact with skin, eyes and clothing. Use in accordance with good industrial hygiene and safety rules. Wash hands before breaks and immediately after handling the product. Keep working clothes separately. Use suitable protective gloves and eye/face protection. When using, do not eat, drink or smoke.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance	: gel
Colour	: red
Odour	: peppermint
pH	: n.d.
Melting point	: n.d.
Flash point	: 35°C (c.c. ASTM D-56)
Evaporation rate	: n.d.
Flammability of solids and gases	: n.d.
Vapour pressure	: : < 0.1 kPa (20°C)
Vapour density	: n.d.
Specific gravity (a 20°C)	: 1.02 g/ml
Water solubility	: not soluble
Partition coefficient (n-octane/water)	: n.d.
Ignition temperature	: n.d.
Decomposition temperature	: > 200°C
Viscosity (a 20°C)	: 20 ÷ 50 mPa·s

Explosive properties : n.d.
Reactive properties : n.d.

9.2 Other information:
n.d.

10 Stability and reactivity

10.1 Reactivity:
n.d.

10.2 Chemical stability:
Product is stable under normal conditions. High temperatures, intense light produce lens changes to the product.

10.3 Possibility of hazardous reactions:
Methanol and ethanol in case of hydrolysis.

10.4 Conditions to avoid:
Keep away from heat sources, sparks and open flames.

10.5 Incompatible materials:
Oxidizing agents, strong acids, strong bases, alkaline, water.

10.6 Hazardous decomposition products:
n.d.

11 Toxicological information

11.1 Information on toxicological effects:
There is no product testing, we report the results on testing of dangerous ingredients.

Alkylstanno-siloxane:

Acute Toxicity	: n.d.
Acute Irritation	: n.d.
Corrosion/Irritating to skin	: n.d.
Severe eyes irritation	: n.d.
Inhalation sensitization	: no data available
Epidermal sensitization	: test LLNA negative
Mutagenicity	: n.d.
Carcinogenicity	: n.d.
Reproduction	: n.d.
STOT - Single exposure	: n.d.
STOT - Repeated exposure	: n.d.
Aspiration hazard	: n.d.

Tetraethylsilicate:

Acute toxicity	: LD50 oral	> 2500 mg/kg	(rat)
	: LC50 inhalation	10-16 mg/l/4h *vapour*	(rat)
	: LD50 epidermal	n.d.	
Irritant effect	: Skin	not irritant	(rabbit)
	: Eyes	irritant	(human)
Chronic Toxicity	: NOAEL oral	10 mg/Kg (rat 28 days)	
	: LOAEL inhalation	0.43 mg/l (rat 28 days)	
Awareness	: Non sensitizing.		
Carcinogenicity	: No evidence of carcinogenicity.		
Reproduction	: There aren't effects that may affect fertility.		

Vinyltrimethoxysilane:

Acute toxicity	: LD50 oral	7120 mg/kg	(rat)
	: LC50 inhalation	16,8 mg/l/4h *vapour*	(rat)
	: LD50 epidermal	3540 mg/kg	(rabbit)
Irritant effect	: Skin	not irritating	(rabbit)

	: Eyes	not irritating	(rabbit)
Chronic Toxicity	: NOEL oral	< 62.5 mg/Kg (rat 28 days)	
	: NOAEL inhalation	> 0.058 mg/l (rat 98 days)	
Awareness	: Non sensitizing.		
Carcinogenicity	: No evidence of carcinogenicity.		
Reproduction	: There aren't effects that may affect fertility.		

Benzoic acid:

Acute toxicity	: LD50 oral	> 2000 mg/kg	(rat)
	: LC50 inhalation	12,2 mg/l/4h *vapore*	(rat)
	: LD50 epidermal	> 10000mg/kg	(rabbit)
Irritant effect	: Skin	Slightly irritating	(rabbit)
	: Eyes	Risk serious injury	(rabbit)

12 Ecological information

12.1 Toxicity:

Alkylstanno-siloxane:

Toxicity for fish	: n.d.
Toxicity for daphnia	: n.d.
Toxicity for algae	: n.d.
Toxicity for bacteria	: n.d.

Tetraethylsilicate:

Toxicity to fish	: LC50 > 245 mg/l/96h. (OECD 203)
Toxicity to daphnia	: CE50 > 75 mg/l/48h (OECD 202)
Toxicity to algae	: CE50 > 100 mg/l/72h (OECD 201)
Toxicity to bacteria	: CE50 > 100 mg/l/3h (OECD 209)

Vinyltrimethoxysilane:

Toxicity to fish	: LC50 > 191 mg/l/96h. (OECD 203)
Toxicity to daphnia	: CE50 > 168.7 mg/l/48h (OECD 202)
Toxicity to algae	: CE50 > 210 mg/l/7d (OECD 201)
Toxicity to bacteria	: CE50 > 1000 mg/l/5h (OECD 209)

Benzoic acid:

Toxicity to fish	: 180 mg/l/96h. (OECD 203)
Toxicity to algae	: > 10 mg/l/14d (OECD 201)

12.2 Persistence and degradability:

Methyltin compounds are not readily biodegradable in degradation tests.

Tetraethylsilicate:

Biodegradability	: readily biodegradable (exposure time: 28 days)
Physical/chemical removability	: Half-life: 4,4 h (OECD TG 111)

Benzoic acid:

Bioaccumulation: Leuciscus idus (Leucisco dorato) - 3 d -50 µgr/l
Bioconcentration factor (BCF): 5,3

12.3 Bioaccumulative potential:

Not readily bioaccumulate.

12.4 Mobility in soil:

Uptake limited to the ground.

12.5 Results of PBT and vPvB assessment:

No PBT and vPvB present.

12.6 Other adverse effects:

Use in accordance with good working practices, avoid release to the environment.

13 Disposal considerations

13.1 Waste treatment methods:
Recover if possible. Dispose according to local and national regulations.

13.2 **Contaminated packaging:**
Dispose according to local and national regulations.

14 Transport information

14.1 UN number:
1993.

14.2 **UN proper shipping name:**
Flammable liquids N.O.S.

14.3 **Transport hazard class(es):**
Class : 3
Risk N° : 30
Label : 3

14.4 Packing group:
III.

14.5 Environmental hazards:
n.a.

14.6 Special precautions for user:
ADR – Classification code : F1
IMDG - EmS : F-E, S-E
IATA - PKg cargo : 310
IATA - PKg passenger-cargo : 309

14.7 **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**
n.d.

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
National and local regulations must be observed.

15.2 Chemical safety assessment:
n.d.

16 Other information

16.1 Product:
The information provided in this Safety Data Sheet is correct to the best of our knowledge at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It does not represent a guarantee for the properties of the product described in terms of the legal warranty.
This new data sheet replaces all previously printed documentation.

16.2 Other information:

Modified sections
Total revision according to new regulations.

Bibliography

Directive 1999/45/CE and following amendments
Directive 67/548/CEE and following amendments and adjustments
Regulation (EC) 1907/2006 (REACH) of the European Parliament
Regulation (EC) 1272/2008 (CLP) of the European Parliament
Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
Regulation (EC) 453/2010 of the European Parliament
Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
Regulation (EC) 487/2013 (IV Atp. CLP) of the European Parliament
Regulation (EC) 944/2013 (V Atp. CLP) of the European Parliament
Regulation (EC) 605/2014 (VI Atp. CLP) of the European Parliament

Test of hazard (H) phrases and symbols mentioned in section 2-3 of these sheet

GHS02 Flammable
GHS05 Corrosive
GHS07 Harmful or irritant
GHS08 Health hazard

Flam. Liq 3: Flammable liquids - category 3
Skin Irrit. 2: Skin irritation – category 2
Acute Tox 4: Acute toxicity - category 4
Eye Irrit. 2: Serious eye damage/eye irritation - category 2
STOT SE 3: Specific target organ toxicity - single exposure 3
Eye Dam. 1: Serious eye damage/eye irritation - category 1
STOT RE 1: Specific target organ toxicity - repeated exposure 1
STOT RE 2: Specific target organ toxicity - repeated exposure 2
Aqu. Chron. 4: Hazardous to the aquatic environment - category 4

H226 Flammable liquid and vapour.
H315 Causes skin irritation
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H413 May cause long lasting harmful effects to aquatic life.

Note

n.d. : not determined
n.a. : not applicable

- End of Safety Data Sheet -