Safety Data Sheet
INDURENT GEL

Revision nr. 6
Dated 02/10/2020

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

1.1. Product identifier

Mixture identification:

Product Name: INDURENT GEL

Code: C100700

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

For professional use only. Catalyst for condensation silicone for dental impression.
Avoid use: in article for supply to, or use by, the general public.

1.3. Details of the supplier of the safety data sheet

Name
Zhermack S.p.a
Via Bovazecchino 100
45021 Badia Polesine (RO)
Italy
tel. +39 0425-597611
fax +39 0425-597689

Competent person responsible for the safety data sheet:
msds@zhermack.com

1.4. Emergency telephone number

+39 0425 597611 (office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The Regulation EC 1272/2008, on classification, labelling and packaging of substances and mixtures (CLP), shall not apply to a medical device in the finished state used in direct physical contact with the human body according to art. 1.5, letter d). Therefore the product is exempted from the CLP labeling requirements.

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.
EUH208 Contains carvone (ISO); 2-methyl-5-(prop-1-en-2-yl)cyclohex-2-en-1-one. May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Applicable

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 5% - < 10%	Trimethoxypropylsilane	CAS: 1067-25-0 EC: 213-926-7 REACH No.: 01-21199723 14-37-XXXX	2.6/3 Flam. Liq. 3 H226 3.2/2 Skin Irrit. 2 H315
>= 5% - < 10%	Dioctyltin oxide	CAS: 870-08-6 EC: 212-791-1 REACH No.: 01-21199712 68-27-XXXX	3.8/2 STOT SE 2 H371
>= 3% - < 5%	tetraethyl silicate; ethyl silicate	Index number: 014-005-00-0 CAS: 78-10-4 EC: 201-083-8 REACH No.: 01-21194961 95-28-XXXX	3.8/3 STOT SE 3 H335 2.6/3 Flam. Liq. 3 H226 3.1/4/Inhal Acute Tox. 4 H332 3.3/2 Eye Irrit. 2 H319
>= 0,3% - < 0,5%	carvone (ISO); 2-methyl-5-(prop-1-en-2-yl)cyclohex-2-en-1-one	Index number: 606-148-00-8 CAS: 99-49-0 EC: 202-759-5	3.4.2/1 Skin Sens. 1 H317 3.1/4/Oral Acute Tox. 4 H302
< 0.1%	methanol	Index number: 603-001-00-X CAS: 67-56-1 EC: 200-659-6 REACH No.: 01-21194333 07-44-XXXX	3.8/1 STOT SE 1 H370 2.6/2 Flam. Liq. 2 H225 3.1/3/Oral Acute Tox. 3 H301 3.1/3/Dermal Acute Tox. 3 H311 3.1/3/Inhal Acute Tox. 3 H331

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water.
Carbon dioxide (CO2).
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:
Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.
For emergency responders:
Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.
Incompatible materials:
See section 10.5.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

INDURENT GEL
Trimethoxypropylsilane - CAS: 1067-25-0

OEL Type	TWA		Duratio	STEL		Duratio	Notes	Country

			n			**n**		
No data available								

Dioctyltin oxide - CAS: 870-08-6

OEL Type	**TWA**		**Duration**	**STEL**		**Duration**	**Notes**	**Country**
AGW	0.01 mg/m3	0.002 ppm	8h	0.02 mg/m3	0.004 ppm	15min		GERMANY

tetraethyl silicate; ethyl silicate - CAS: 78-10-4

OEL Type	**TWA**		**Duration**	**STEL**		**Duration**	**Notes**	**Country**
VME/VLE	85 mg/m3	10 ppm	8h	85 mg/m3	10 ppm	15min		SWITZERLAND
AK	44 mg/m3		8h					HUNGARY
GVI/KGVI	44 mg/m3	5 ppm	8h					CROATIA
HTP	43 mg/m3	5 ppm	8h	86 mg/m3	10 ppm	15min		FINLAND
MAK	44 mg/m3	5 ppm	8h	88 mg/m3	10 ppm	15min		AUSTRIA
NDS/NDSCh	44 mg/m3		8h					POLAND
NPEL	44 mg/m3	5 ppm	8h					SLOVAKIA (Slovak Republic)
EU	44 mg/m3	5 ppm	8h					
OELV	44 mg/m3	5 ppm	8h					IRELAND
RD	44 mg/m3	5 ppm	8h					LITHUANIA
RV	44 mg/m3	5 ppm	8h					LATVIA
TGG	44 mg/m3		8h					NETHERLANDS
TLV	44 mg/m3	5 ppm	8h					MALTA
TLV	44 mg/m3	5 ppm	8h					NORWAY
TLV	44 mg/m3	5 ppm	8h					ROMANIA
TLV	50 mg/m3	5.85 ppm	8h	200 mg/m3	23.4 ppm	15min		CZECH REPUBLIC
TLV	85 mg/m3	10 ppm	8h					DENMARK
TLV	44 mg/m3	5 ppm	8h					CYPRUS
TLV	44 mg/m3	5 ppm	8h					BULGARIA
TLV	44	5 ppm	8h					GREECE

	mg/m3							
TLV-ACGIH	85 mg/m3	10 ppm	8h					
VL	44 mg/m3	5 ppm	8h					LUXEMBOURG
VLE	44 mg/m3	5 ppm	8h					PORTUGAL
VLEP	85 mg/m3	10 ppm	8h					FRANCE
VLEP	44 mg/m3	5 ppm	8h	0 mg/m3	0 ppm			ITALY
VLEP	44 mg/m3	5 ppm	8h					BELGIUM
WEL	44 mg/m3	5 ppm	8h					UNITED KINGDOM
MAK	86 mg/m3	10 ppm	8h	86 mg/m3	10 ppm	15min		GERMANY
AGW	12 mg/m3	1.4 ppm	8h	12 mg/m3	1.4 ppm	15min		GERMANY
MV	170 mg/m3	20 ppm	8h	170 mg/m3	20 ppm	15min		SLOVENIA
MAK	85 mg/m3	10 ppm	8h	85 mg/m3	10 ppm	15min		SWITZERLAND
ACGIH		10 ppm	8h				URT and eye irr, kidney dam	
TLV-ACGIH		10 ppm	8h				URT & eye irr, kidney dam	

carvone (ISO); 2-methyl-5-(prop-1-en-2-yl)cyclohex-2-en-1-one - CAS: 99-49-0

OEL Type	TWA		Duration	STEL		Duration	Notes	Country
No data available								

methanol - CAS: 67-56-1

OEL Type	TWA		Duration	STEL		Duration	Notes	Country
AGW	270 mg/m3	200 ppm	8h	1080 mg/m3	800 ppm	15min	Skin	GERMANY
MAK	130 mg/m3	100 ppm	8h	260 mg/m3	200 ppm	15min	Skin	GERMANY
MAK	260 mg/m3	200 ppm	8h	1040 mg/m3	800 ppm	15min	Skin	SWITZERLAND
VME/VLE	260 mg/m3	200 ppm	8h	1040 mg/m3	800 ppm	15min	Skin	SWITZERLAND
MV	260 mg/m3	200 ppm	8h	1040 mg/m3	800 ppm	15min	Skin	SLOVENIA
AK	260 mg/m3		8h				Skin	HUNGARY
GVI/KGVI	260	200	8h				Skin	CROATIA

	mg/m3	ppm						
HTP	270 mg/m3	200 ppm	8h	330 mg/m3	250 ppm	15min	Skin	FINLAND
MAK	260 mg/m3	200 ppm	8h	1040 mg/m3	800 ppm	15min	Skin	AUSTRIA
NDS/NDSCh	100 mg/m3		8h	300 mg/m3		15min	Skin	POLAND
NGV/KGV	250 mg/m3	200 ppm	8h	Ceiling 350 mg/m3	Ceiling 250 ppm	15min	Skin	SWEDEN
NPEL	260 mg/m3	200 ppm	8h				Skin	SLOVAKIA (Slovak Republic)
EU	260 mg/m3	200 ppm	8h				Skin	
OELV	260 mg/m3	200 ppm	8h				Skin	IRELAND
RD	260 mg/m3	200 ppm	8h				Skin	LITHUANIA
RV	260 mg/m3	200 ppm	8h				Skin	LATVIA
TGG	133 mg/m3		8h				Skin	NETHERLANDS
TLV	260 mg/m3	200 ppm	8h	325 mg/m3	250 ppm	15min		GREECE
TLV	260 mg/m3	200 ppm	8h				Skin	ESTONIA
TLV	260 mg/m3	200 ppm	8h				Skin	MALTA
TLV	130 mg/m3	100 ppm	8h				Skin	NORWAY
TLV	260 mg/m3	200 ppm	8h				Skin	ROMANIA
TLV	250 mg/m3	188.5 ppm	8h	1000 mg/m3	754 ppm	15min	Skin	CZECH REPUBLIC
TLV	260 mg/m3	200 ppm	8h				Skin	DENMARK
TLV	260 mg/m3	200 ppm	8h				Skin	CYPRUS
TLV	260 mg/m3	200 ppm	8h				Skin	BULGARIA
TLV-ACGIH		200 ppm	8h		250 ppm	15min	Skin	
VL	260 mg/m3	200 ppm	8h				Skin	LUXEMBOURG
VLE	260 mg/m3	200 ppm	8h				Skin	PORTUGAL
VLEP	260 mg/m3	200 ppm	8h	1300 mg/m3	1000 ppm	15min	Skin	FRANCE
VLEP	260 mg/m3	200 ppm	8h				Skin	ITALY

VLEP	266 mg/m3	200 ppm	8h	333 mg/m3	250 ppm	15min	Skin	BELGIUM
WEL	266 mg/m3	200 ppm	8h	333 mg/m3	250 ppm	15min	Skin	UNITED KINGDOM
VLA	266 mg/m3	200 ppm	8h				Skin	SPAIN
ACGIH		200 ppm	8h		250 ppm		Skin, BEI - Headache, eye dam, dizziness, nausea	

DNEL Exposure Limit Values

Trimethoxypropylsilane - CAS: 1067-25-0

Consumer: 154.17 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Consumer: 8.77 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 30.25 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 1.26 mg/kg/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 17.86 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 123.82 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Dioctyltin oxide - CAS: 870-08-6

Worker Professional: 0.03 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects

Consumer: 0.001 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 0.03 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

tetraethyl silicate; ethyl silicate - CAS: 78-10-4

Consumer: 14 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects

Consumer: 14 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Professional: 85 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 3 mg/kg/d - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Consumer: 14 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Consumer: 3 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 14 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 56 mg/kg/d - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Worker Professional: 56 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 85 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

methanol - CAS: 67-56-1

Consumer: 8 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Consumer: 50 mg/kg - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Professional: 40 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Worker Professional: 260 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

PNEC Exposure Limit Values
Trimethoxypropylsilane - CAS: 1067-25-0
Target: Soil (agricultural) - Value: 0.25 mg/kg
Target: Fresh Water - Value: 1.49 mg/l
Target: intermittent release - Value: 14.9 mg/l
Target: Marine water - Value: 0.149 mg/l
Target: Freshwater sediments - Value: 5.6 mg/kg
Target: Marine water sediments - Value: 0.56 mg/kg
Target: Microorganisms in sewage treatments - Value: 10 mg/l
tetraethyl silicate; ethyl silicate - CAS: 78-10-4
Target: Soil (agricultural) - Value: 0.05 mg/kg
Target: Fresh Water - Value: 0.19 mg/l
Target: intermittent release - Value: 10 mg/l
Target: Marine water - Value: 0.019 mg/l
Target: Freshwater sediments - Value: 0.83 mg/kg
Target: Marine water sediments - Value: 0.083 mg/kg
Target: Microorganisms in sewage treatments - Value: 4000 mg/l
methanol - CAS: 67-56-1
Target: Fresh Water - Value: 154 mg/l
Target: Marine water - Value: 15.4 mg/l
Target: Freshwater sediments - Value: 570.4 mg/l
Target: Microorganisms in sewage treatments - Value: 100 mg/l
Biological Exposure Index
methanol - CAS: 67-56-1
Value: 15 mg/L - Biological Indicator: Methyl alcohol in urine - Sampling Period: End of turn

8.2. Exposure controls
Precautionary measures:
Give adequate ventilation to the premises where the product is stored and/or handled.
Eye protection:
Wear airtight protective goggles.
Protection for skin:
Wear professional overalls and safety footwear.
Protection for hands:
Permeation resistant gloves A H J in PVA or fluorinated rubber.
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.
Respiratory protection:
Mask with a type AX filter
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered (e.g. TLV-TWA).
Thermal Hazards:
None

Environmental exposure controls:
None
Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance and colour:	Gel,red	--	--
Odour:	mint	--	--
Odour threshold:	Not available	--	--
pH:	Not Relevant	--	--
Melting point / freezing point:	Not available	--	--
Initial boiling point and boiling range:	Not available	--	--
Flash point:	63.9°C ° C	EN ISO 3679	--
Evaporation rate:	Not available	--	--
Solid/gas flammability:	Not Relevant	--	--
Upper/lower flammability or explosive limits:	Not available	--	--
Vapour pressure:	Not available	--	--
Vapour density:	Not available	--	--
Relative density:	0.94 g/cm3	--	--
Solubility in water:	Insoluble	--	--
Solubility in oil:	Not available	--	--
Partition coefficient (n-octanol/water):	Not available	--	--
Auto-ignition temperature:	Not available	--	--
Decomposition temperature:	Not available	--	--
Viscosity:	25 kPa*s (@23°C)	--	--
Explosive properties:	Not available	--	--
Oxidizing properties:	Not available	--	--

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	Not available	--	--
Fat Solubility:	Not available	--	--
Conductivity:	Not available	--	--
Substance Groups relevant properties	Not available	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
The vapours may also form explosive mixtures with the air.
10.4. Conditions to avoid
Avoid moisture and high temperature.

Avoid bunching of electrostatic charges.
Avoid all sources of ignition.

10.5. Incompatible materials

Water
Avoid contact with strong oxidizing materials.
Acids
Alkalis

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

INDURENT GEL

a) acute toxicity
Not classified

b) skin corrosion/irritation
Not classified

c) serious eye damage/irritation
Not classified

d) respiratory or skin sensitisation
Not classified

e) germ cell mutagenicity
Not classified

f) carcinogenicity
Not classified

g) reproductive toxicity
Not classified

h) STOT-single exposure
Not classified

i) STOT-repeated exposure
Not classified

j) aspiration hazard
Not classified

Toxicological information of the main substances found in the product:

Trimethoxypropylsilane - CAS: 1067-25-0

a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat 22.2 mg/l - Duration: 4h - Source: (OECD 403, ECHA dossier).
Test: LD50 - Route: Oral - Species: Rat > 5170 mg/kg - Source: (OECD 401, ECHA dossier).

b) skin corrosion/irritation:
Species: Rabbit - Skin Irritant - Source: (OECD 404, ECHA dossier).

c) serious eye damage/irritation:

Species: Rabbit - Based on available data, the classification criteria are not met - Source: (OECD 405, ECHA dossier).

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (OECD 406, ECHA dossier).

e) germ cell mutagenicity:

Test: In vitro - Species: Salmonella Typhimurium - Negative - Source: (OECD 471, ECHA dossier).

Test: In vivo - Species: Mouse - Negative - Source: (OECD 474, ECHA dossier).

Dioctyltin oxide - CAS: 870-08-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg - Source: (MSDS supplier)

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: (OECD 402, ECHA dossier).

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Based on available data, the classification criteria are not met - Source: (LLNA, ECHA dossier).

e) germ cell mutagenicity:

Test: In vitro - Species: Salmonella Typhimurium - Negative - Source: (ECHA dossier).

Test: In vivo - Species: Mouse - Negative - Source: (OECD 474, ECHA dossier).

i) STOT-repeated exposure:

Route: Oral - Species: Rat - Notes: Target organ: Immune system - Positive - Source: (ECHA dossier).

tetraethyl silicate; ethyl silicate - CAS: 78-10-4

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat 16 mg/l - Duration: 4h - Source: (OECD 403, MSDS supplier).

Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg - Source: (OECD 423, MSDS supplier).

b) skin corrosion/irritation:

Species: Rabbit - Based on available data, the classification criteria are not met - Source: (OECD 404, MSDS supplier).

c) serious eye damage/irritation:

Species: Rabbit - Based on available data, the classification criteria are not met - Source: (OECD 405, MSDS supplier).

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (OECD 406, MSDS supplier).

i) STOT-repeated exposure:

Test: NOAEL - Route: Oral - Species: Rat 10 mg/kg - Based on available data, the classification criteria are not met - Source: (OECD 422, MSDS supplier).

Test: LOAEL - Route: Inhalation - Species: Mouse 0.43 mg/l - Based on available data, the classification criteria are not met - Source: (OECD 412, MSDS supplier).

carvone (ISO); 2-methyl-5-(prop-1-en-2-yl)cyclohex-2-en-1-one - CAS: 99-49-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 1640 mg/l - Source: (MSDS supplier).

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

INDURENT GEL

Not classified for environmental hazards

Based on available data, the classification criteria are not met

Trimethoxypropylsilane - CAS: 1067-25-0

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 816 mg/l - Duration h: 48h (EU Method C.2, Daphnia magna, ECHA dossier).
Endpoint: EC50 - Species: Algae > 913 mg/l - Duration h: 72h (EU Method C.3, Scenedesmus subspicatus, ECHA dossier).
Endpoint: LC50 - Species: Fish > 746 mg/l - Duration h: 96h (read across, Brachydanio rerio, ECHA dossier).

Dioctyltin oxide - CAS: 870-08-6

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 0.21 mg/l - Duration h: 48h (Daphnia magna, Immobilisation Test, MSDS supplier).
Endpoint: LC50 - Species: Fish > 0.09 mg/l - Duration h: 96h (Brachydanio rerio, MSDS supplier).
Endpoint: NOEC - Species: Algae 0.0097 mg/l (OECD 201, ECHA dossier).

tetraethyl silicate; ethyl silicate - CAS: 78-10-4

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 75 mg/l - Duration h: 48h (OECD 202, Daphnia magna, MSDS supplier).
Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72h (OECD 201, Pseudokirchnerella subcapitata, MSDS supplier).
Endpoint: LC50 - Species: Fish > 245 mg/l - Duration h: 96h (OECD 203, Brachydanio rerio, MSDS supplier).
Endpoint: NOEC - Species: Algae > 100 mg/l (OECD 201, Pseudokirchnerella subcapitata, MSDS supplier).
Endpoint: NOEC - Species: Daphnia > 75 mg/l (OECD 202, Daphnia magna, MSDS supplier).
Endpoint: NOEC - Species: Fish > 245 mg/l (OECD 203, Brachydanio rerio, MSDS supplier).

12.2. Persistence and degradability

Trimethoxypropylsilane - CAS: 1067-25-0
Biodegradability: Non-readily biodegradable

Dioctyltin oxide - CAS: 870-08-6
Biodegradability: Non-readily biodegradable

tetraethyl silicate; ethyl silicate - CAS: 78-10-4
Biodegradability: Readily biodegradable

12.3. Bioaccumulative potential

tetraethyl silicate; ethyl silicate - CAS: 78-10-4
Test: BCF - Bioconcentrantion factor 3.16
Test: Kow - Partition coefficient 3.18

12.4. Mobility in soil

Not available

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

Not available

14.3. Transport hazard class(es)

Not available

14.4. Packing group

Not available

14.5. Environmental hazards

ADR-Enviromental Pollutant: No
IMDG-Marine pollutant: No

14.6. Special precautions for user

Not available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not Applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:
Restriction 3

Restrictions related to the substances contained:
Restriction 20
Restriction 69

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1
None

Lagerklasse according to TRGS 510:

LGK 10: Combustible liquids

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)

WGK2 - Hazardous for water

Lagerklasse according to TRGS 510:

LGK 10: Combustible liquids

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

Dioctyltin oxide.

California Proposition 65

Substance(s) listed under California Proposition 65:
methanol - Listed as reproductive toxicant.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.
Substances for which a Chemical Safety Assessment has been carried out:

Trimethoxypropylsilane
Dioctyltin oxide
tetraethyl silicate; ethyl silicate

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H371 May cause damage to organs (immune system) if swallowed.
H335 May cause respiratory irritation.
H332 Harmful if inhaled.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H302 Harmful if swallowed.

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
STOT SE 1	3.8/1	Specific target organ toxicity - single exposure, Category 1
STOT SE 2	3.8/2	Specific target organ toxicity - single exposure, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECHA – European Chemical Agency
GESTIS - Information system on hazardous substances of the German Social Accident Insurance
IARC – International Agency for Research on Cancer
IPCS INCHEM – International Programme on Chemical Safety
ISS – Istituto Superiore di Sanità
PubChem - open chemistry database at the National Institutes of Health (NIH)

Safety Data Sheet
INDURENT GEL

A safety data sheet is not required for this product under article 31 of Regulation 1907/2006/EC.
This safety data sheet has been created on a voluntary basis.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.