

Material Safety Data Sheet Cover-Sheet – This page provides additional New Zealand specific information for this product and must be read in conjunction with the Safety Data Sheet (SDS) attached

Product Name:	Orthoplast
Manufacturer:	Vertex
SDS Expiry:	7 December 2023
Supplier Details:	Henry Schein New Zealand 23 William Pickering Drive, Albany PO Box 101 140, North Shore, Auckland 0745 Ph. 0800 808 855 www.henryschein.co.nz
Emergency Contacts:	Poisons/Hazardous Chemical Info Centre – 0800POISON/0800764766 (24 Hours) Phone 111 for Fire, Ambulance or Police
HSNO Class/Category:	3, 6
HSNO Group Standard:	Dental Products Flammable Group Standard 2017 HSR002556
Statements/Pictograms:	As per attached Safety Data Sheet (SDS)
Date Prepared:	This coversheet was prepared on 22 January 2021

This SDS coversheet has been produced by Henry Schein NZ and has been prepared in accordance with NZ EPA advice on making overseas SDS compliant to HSNO Act. The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specifications of the product. Users must satisfy that the product is entirely suitable for their purpose. The SDS and this coversheet may be revised from time to time, please ensure you have a current copy.





Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 7/12/2018 Version: 1.0

1.1. Product identifier		
Product form	: Mixture	
Product name	: Vertex Orth	noplast
Product group	: Trade prod	luct
1.2. Relevant identified uses of the su	bstance or mixture	e and uses advised against
1.2.1. Relevant identified uses		
Main use category	: Professiona	ll use
Use of the substance/mixture	: Manufacture	e of 3D-printed applications for the dental industry
Use of the substance/mixture	: Dentistry	
Title	Use descri	iptors
Vertex Orthoplast	SU20	
Full text of use descriptors: see section 16	I	
1.2.2. Uses advised against No additional information available		
1.3. Details of the supplier of the safe	tv data sheet	
Supplier	ly data sheet	Manufacturer
Henry Schein Hallas Ltd.		Vertex Dental
Building 3, Level 6		Centurionbaan 190
189 – O'Riordan Street,		3769 AV Soesterberg - The Netherlands
Mascot, NSW 2020 - Australia		T +31 886160400
T 1300 65 88 22		info@vertex-dental.com - www.vertex-dental.com
customer.care@henryschein.com.au - https://	/henryschein.com.au	
1.4. Emergency telephone number		
Emergency number		1 26 urpose of informing medical personnel in cases of accidental intoxications. The one number is 24 hours/day available.)
SECTION 2: Hazards identification	'n	
2.1. Classification of the substance or	mixture	
	;) No. 1272/2008 [CLF	P]
	rding to Regulation (	
Mixtures/Substances: SDS EU 2015: Accor		H225
Mixtures/Substances: SDS EU 2015: Accor		
Mixtures/Substances: SDS EU 2015: Accor Flammable liquids, Category 2		H315
Mixtures/Substances: SDS EU 2015: Accor Flammable liquids, Category 2 Skin corrosion/irritation, Category 2		H315 H317
Classification according to Regulation (EC Mixtures/Substances: SDS EU 2015: Accor Flammable liquids, Category 2 Skin corrosion/irritation, Category 2 Skin sensitisation, Category 1 Specific target organ toxicity — Single expose Respiratory tract irritation	Jre, Category 3,	

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP)



Signal word (CLP) Hazardous ingredients

Hazard statements (CLP)

- : ethylene dimethacrylate; methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2methylpropenoate
- : H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.

: Danger

- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P280 - Wear protective gloves. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
	P370+P378 - In case of fire: Use foam, dry extinguishing powder, carbon dioxide (CO2) to extinguish. P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
Extra phrases	: HAZARDOUS CHEMICAL and DANGEROUS GOODS.

## 2.3. Other hazards

No additional information available

# **SECTION 3: Composition/information on ingredients**

### 3.1. Substances

Not applicable

3.2. Mixtures

Nome	Dreduct identifier	0/h.	Close if is a tight and a second in a ta
Name	Product identifier	% w/w (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (Note D)	(CAS-No.) 80-62-6 (EC-No.) 201-297-1 (EC Index-No.) 607-035-00-6 (REACH-no) 01-2119452498-28	>= 75	Flam. Liq. 2, H225 STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317
ethylene dimethacrylate (Note D)	(CAS-No.) 97-90-5 (EC-No.) 202-617-2 (EC Index-No.) 607-114-00-5 (REACH-no) 01-2119965172-38	< 10	STOT SE 3, H335 Skin Sens. 1, H317
N,N-dimethyl-p-toluidine (Note C)	(CAS-No.) 99-97-8 (EC-No.) 202-805-4 (EC Index-No.) 612-056-00-9 (REACH-no) 01-2119937766-23	0.1 - 1	Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 STOT RE 2, H373 Aquatic Chronic 3, H412

### Specific concentration limits:

Name	Product identifier	Specific concentration limits
	(CAS-No.) 97-90-5 (EC-No.) 202-617-2 (EC Index-No.) 607-114-00-5 (REACH-no) 01-2119965172-38	(C >= 10) STOT SE 3, H335

Note C : Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3.

However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words "non-stabilised".

Full text of H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effects,	
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
4.3. Indication of any immediate medical at	ention and special treatment needed
No additional information available	

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SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide.
Unsuitable extinguishing media	: Water.
5.2. Special hazards arising from the substa	ance or mixture
No additional information available	
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measur	
6.1. Personal precautions, protective equip	
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapours/spray.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Notify au	thorities if liquid enters sewers or public waters.
6.3. Methods and material for containment a	and cleaning up
Methods for cleaning up	: Contain and collect spillages with non-combustible absorbent materials, e.g. Store away from other materials. Keep in suitable, closed containers for disposal.
Other information	: Remove all sources of ignition.
6.4. Reference to other sections	

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	: Use only outdoors or in a well-ventilated area. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing vapours, mist. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. No open flames. No smoking. Use only non-sparking tools.
Hygiene measures	: Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, including a	ny incompatibilities
Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment.
Storage conditions	: Keep only in the original container in a cool, well-ventilated place. Keep in fireproof place. Keep container tightly closed.
Incompatible products	: Strong bases. Strong acids.
Storage temperature	: < 30 °C
Heat and ignition sources	: Keep away from : ignition sources. Direct sunlight. heat sources.
7.3. Specific end use(s)	
No additional information available	

SECTION 8: Exposure controls/personal protection 8.1. Control parameters			
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)			
Australia	Local name	Methyl methacrylate	
Australia	TWA (mg/m³)	208 mg/m <sup>3</sup>	
Australia	TWA (ppm)	50 ppm	
Australia	STEL (mg/m³)	416 mg/m <sup>3</sup>	
Australia	STEL (ppm)	100 ppm	
Australia	Remark (AU)	Sen - Respiratory and/or Skin Sensitiser.	

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methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)		
DNEL/DMEL (Workers)	The second set 2 is 2.1 who see down as	
Acute - local effects, dermal	1.5 mg/cm <sup>2</sup>	
Long-term - systemic effects, dermal	13.67 mg/kg bodyweight/day	
Long-term - local effects, dermal	1.5 mg/cm <sup>2</sup>	
Long-term - systemic effects, inhalation	208 mg/m <sup>3</sup>	
Long-term - local effects, inhalation	208 mg/m <sup>3</sup>	
DNEL/DMEL (General population)		
Acute - local effects, dermal	1.5 mg/cm <sup>2</sup>	
Long-term - systemic effects, inhalation	74.3 mg/m <sup>3</sup>	
Long-term - systemic effects, dermal	8.2 mg/kg bodyweight/day	
Long-term - local effects, dermal	1.5 mg/cm <sup>2</sup>	
Long-term - local effects, inhalation	104 mg/m <sup>3</sup>	
PNEC (Water)		
PNEC aqua (freshwater)	0.94 mg/l	
PNEC aqua (marine water)	0.94 mg/l	
PNEC aqua (intermittent, marine water)	0.94 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	5.74 mg/kg bw	
PNEC (Soil)		
PNEC soil	1.47 mg/kg bw	
PNEC (STP)		
PNEC sewage treatment plant	10 mg/l	
ethylene dimethacrylate (97-90-5)	·	
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	1.3 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	2.45 mg/m <sup>3</sup>	
DNEL/DMEL (General population)		
Long-term - systemic effects,oral	0.83	
Long-term - systemic effects, inhalation	1.45 mg/m <sup>3</sup>	
Long-term - systemic effects, dermal	0.83 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0.139 mg/l	
PNEC aqua (marine water)	0.0139 mg/l	
PNEC aqua (intermittent, freshwater)	0.15 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	1.6 mg/kg bw	
PNEC sediment (marine water)	0.16 mg/kg bw	
PNEC (Soil)		
PNEC soil	0.239 mg/kg bw	
PNEC (STP)		
PNEC sewage treatment plant	57 mg/l	
N,N-dimethyl-p-toluidine (99-97-8)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	0.694167 mg/kg bodyweight/day	
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N,N-dimethyl-p-toluidine (99-97-8)		
Long-term - systemic effects, inhalation	1.224 mg/m <sup>3</sup>	
DNEL/DMEL (General population)		
Long-term - systemic effects,oral	0.173542 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	0.301812 mg/m <sup>3</sup>	
Long-term - systemic effects, dermal	0.292522 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0.0137 - 0.15259 mg/l	
PNEC aqua (marine water)	0.00137 - 0.015259 mg/l	
PNEC aqua (intermittent, freshwater)	0.0137 - 0.15259 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	45.378 - 48.245 mg/kg bw	
PNEC sediment (marine water)	45.378 - 48.245 mg/kg bw	
PNEC (Soil)		
PNEC soil	18.677 - 20.365 mg/kg bw	
PNEC (STP)		
PNEC sewage treatment plant	1.36 - 4.286 mg/l	
8.2. Exposure controls		

## Appropriate engineering controls:

Ensure that there is a suitable ventilation system.

### Hand protection:

Wear suitable gloves resistant to chemical penetration. The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374. penetration time (maximum wearing period): 60 m. Suitable material: butyl rubber. Layer thickness : 0,7 mm . If there is a risk of liquid being splashed : Nitrile rubber gloves Incidental

### Eye protection:

Wear eye glasses with side protection according to EN 166.

### Skin and body protection:

Wear suitable protective clothing

### **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment. At high concentrations: Wear respiratory protection. Combination filtering device (DIN EN 141). High gas/vapour concentration: gas mask with filter type A

### Personal protective equipment symbol(s):



### Other information:

Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and ch	emical properties	
Physical state	: Liquid	
Colour	: clear. Colourless.	
Odour	: Ester. characteristic. strong. Acrid.	
Odour threshold	: No data available	
рН	: Not applicable	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: -48 °C	
Freezing point	: No data available	
Boiling point	: 100.5 °C	

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Flash point	: 10 °C
Auto-ignition temperature	: 421 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapour
Vapour pressure	: 3.6 Pa @ 20°C
Relative vapour density at 20 °C	: No data available
Relative density	: 0.94 @ 15.5 °C
Solubility	: miscible with most organic solvents.
	Water: 1.6 % slightly soluble
	Organic solvent:Soluble in organic solvents
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not applicable.
Oxidising properties	: Not applicable.
Explosive limits	: 2.1 - 12.5 vol %
9.2. Other information	
VOC content	: < 95 %

SECTION 10: Stability and reactivity	SECTIO	ON 10: St	ability and	reactivity
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10.1. Reactivity

Stable under normal conditions.

### 10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**10.3. Possibility of hazardous reactions** 

Exothermic reaction. Keep away from oxidizers, strong acids and strong bases.

### **10.4. Conditions to avoid**

Direct sunlight. Extremely high or low temperatures. Open flame. Water, humidity.

**10.5. Incompatible materials** 

## Strong acids. Strong bases.

**10.6. Hazardous decomposition products** 

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information 11.1. Information on toxicological effects		
•	Not classified	
Acute toxicity (dermal)	Not classified	
Acute toxicity (inhalation)	Not classified	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)		
LD50 oral rat	7900 - 9400 mg/kg	

EDGe dial lat	1000 0400 mg/kg
LD50 dermal rabbit	5000 mg/kg
LC50 inhalation rat (mg/l)	29.8 mg/l/4h

ethylene dimethacrylate (97-90-5)	
LD50 oral rat	8300 ml/kg
LD50 dermal rat	2000 mg/kg

N,N-dimethyl-p-toluidine (99-97-8)	
LD50 oral rat	1650 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat (mg/l)	1.4 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation.
	pH: Not applicable
Serious eye damage/irritation	: Not classified
	pH: Not applicable
Respiratory or skin sensitisation	: May cause an allergic skin reaction.

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Germ cell mutagenicity	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
Carcinogenicity	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
Reproductive toxicity	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
STOT-single exposure	: May cause respiratory irritation.	
Additional information	: Based on available data, the classification criteria are not met	
STOT-repeated exposure	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)		
LOAEC (inhalation, rat, vapour, 90 days)	416 mg/m <sup>3</sup> air	
NOAEL (oral, rat, 90 days)	124.1 - 164 mg/kg bodyweight/day	
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	500 - 1000 ppm	
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ethylene dimethacrylate (97-90-5)	
NOAEL (oral, rat, 90 days)	100 - 1500 mg/kg bodyweight/day

N,N-dimethyl-p-toluidine (99-97-8)	
LOAEL (oral, rat, 90 days)	201.786 mg/kg bodyweight/day
Aspiration hazard Additional information	: Not classified : Based on available data, the classification criteria are not met

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general	: Avoid release to the environment.	
Acute aquatic toxicity	Not classified	
Chronic aquatic toxicity	Not classified	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)		
LC50 fishes	79 mg/l	
EC50 Daphnia	69 mg/l	
EC50 72h algae (1)	110 mg/l	
LOEC (chronic)	68 mg/l (21 d)	
NOEC (acute)	40 mg/l (4 d)	
NOEC chronic fish	37 mg/l (21 d)	

ethylene dimethacrylate (97-90-5)	
LC50 fishes	15.95 mg/l
EC50 Daphnia	44.9 mg/l
EC50 72h algae (1)	17.3 mg/l
NOEC (chronic)	5.05 mg/l

N,N-dimethyl-p-toluidine (99-97-8)	
LC50 fishes	45 - 52.8 mg/l
EC50 Daphnia	13.7 mg/l
EC50 other aquatic organisms 1	42.864 mg/l microorganisms
EC50 72h algae (1)	22 - 24.37 mg/l
12.2. Persistence and degradability	
No additional information available	

additional information availa DIE

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12.3. Bioaccumulative potential	
Vertex Orthoplast	
Bioaccumulative potential	Not established.

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)Log Pow1.38 @ 20 °C and pH 7

ethylene dimethacrylate (97-90-5)	
Log Pow	2.4

N,N-dimethyl-p-toluidine (99-97-8)		
Log Pow	1.729 @ 35 °C and pH 5.6	
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Other adverse effects		
Additional information	: Avoid release to the environment.	

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Regional legislation (waste)	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials	: Avoid release to the environment.

### **SECTION 14: Transport information** In accordance with ADN / ADR / IATA / IMDG / RID ΙΑΤΑ ADR IMDG ADN RID 14.1. UN number 1247 1247 1247 1247 1247 14.2. UN proper shipping name METHYL METHYL Methyl methacrylate METHYL METHYL METHACRYLATE METHACRYLATE METHACRYLATE METHACRYLATE monomer, stabilized MONOMER, STABILIZED MONOMER, STABILIZED MONOMER, STABILIZED MONOMER, STABILIZED **Transport document description** UN 1247 METHYL METHACRYLATE METHACRYLATE methacrylate monomer, METHACRYLATE METHACRYLATE MONOMER, STABILIZED, MONOMER, STABILIZED, MONOMER, STABILIZED, stabilized, 3, II MONOMER, STABILIZED, 3, II, (D/E) 3, II (8°C c.c.) 3, II 3, II 14.3. Transport hazard class(es) 3 3 3 3 3 14.4. Packing group Ш П Ш П Ш 14.5. Environmental hazards Dangerous for the environment : No Marine pollutant : No No supplementary information available

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14.6. Special precautions for user	
Overland transport	
Classification code (ADR)	: F1
Special provisions (ADR)	: 386
Limited quantities (ADR)	: 11
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V8
Special provisions for carriage - Operation (ADR)	: S2, S4, S20
Hazard identification number (Kemler No.)	: 339
Orange plates	339 1247
Tunnel restriction code (ADR)	: D/E
Transport by sea	
Special provisions (IMDG)	: 386
Limited quantities (IMDG)	:1L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: C
Stowage and handling (IMDG)	: SW1, SW2
Flash point (IMDG)	: 8°C c.c.
Properties and observations (IMDG)	: Colourless, volatile liquid. Fla

Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A209
ERG code (IATA)	: 3L
Inland waterway transport	
Classification code (ADN)	: F1
Special provisions (ADN)	: 386
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

Colourless, volatile liquid. Flashpoint:  $8^\circ C \ c.c.$  Explosive limits: 1.5% to 11.6% Immiscible with water. Irritating to skin, eyes and mucous membranes.

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Rail transport	
Classification code (RID)	: F1
Special provisions (RID)	: 386
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 339
	of Manual and the IDO Ord

**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

15.1.1. EU-Regulations
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The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:		
<ol> <li>Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008</li> </ol>	ethylene dimethacrylate - 2-hydroxyethyl methacrylate - methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2- methylpropenoate - N,N-dimethyl-p-toluidine	
3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	Vertex Orthoplast - methyl methacrylate; methyl 2-methylprop-2- enoate; methyl 2-methylpropenoate	
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Vertex Orthoplast - ethylene dimethacrylate - 2-hydroxyethyl methacrylate - methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate - N,N-dimethyl-p-toluidine	
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	N,N-dimethyl-p-toluidine	
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2- methylpropenoate	

Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

VOC content Directive 2012/18/EU (SEVESO III)

: < 95 %

### 15.1.2. National regulations

No additional information available

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level

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EC50	Median effective concentration
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative
Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:		
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3	
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3	
Flam. Liq. 2	Flammable liquids, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H225	Highly flammable liquid and vapour	
H301	Toxic if swallowed.	
H311	Toxic in contact with skin.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H331	Toxic if inhaled.	
H335	May cause respiratory irritation.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H412	Harmful to aquatic life with long lasting effects.	
Full text of use descriptors		
SU20	Health services	
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 2	H225	On basis of test data
Skin Irrit. 2	H315	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method

SDS EU (REACH Annex II)

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product