SAFETY DATA SHEET (GHS)

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE/PRODUCT AND MANUFACTURER/IMPORTER

1.1 Product identifier:-

Product name:	**Telio Lab Cold Liquid**
Product number:	Void

1.2 Other means of identification:-

Not applicable.

1.3 Recommended use of the chemical and restrictions on use:-

Not applicable.

Identified uses:	Auxiliary for dental technology

1.4 Details of the manufacturer and importer:-

Manufacturer:	Ivoclar Vivadent AG Bendererstrasse 2 FL-9494 Schaan PRINCIPALITY OF LIECHTENSTEIN
Importer:	Ivoclar Vivadent Pty Ltd 1- 5 Overseas Drive Noble Park North VIC 3174 Tel: + 61 3 9795 9599 Fax: + 61 3 9795 9645 Email: info@ivoclarvivadent.com
1.5 Emergency phone number:	13 11 26 Poisons Hotline (24 hours / 7 days)

2. HAZARD(S) IDENTIFICATION

2.1 GHS Classification:-

Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

2.2 GHS Label elements, including precautionary statements:-

Hazard Pictogram:


GHS07


GHS02

Signal word:	Danger
Hazard-determining components of labelling:	methyl methacrylate
Hazard statements:	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.
Precautionary statements:	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. P262 Do not get in eyes, on skin, or on clothing. P280 Wear protective gloves/protective clothing/eye protection/face protection.

	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

2.3 **Additional information:** Medical devices as defined in Directive 93/42/EEC and which are invasive or used in direct physical contact with the human body, are exempted from the provisions of Regulation (EC) No 1272/2008 (CLP/GHS) usually if they are in the finished state and intended for the final user.

Other hazards:-	Void	
Results of PBT and vPvB assessment;	**PBT:**	Not applicable.
	vPvB:	Not applicable.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of substances listed below with nonhazardous additions.

Ingredient name	CAS No.	Classification	Concentration
methyl methacrylate	80-62-6	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	50-100%

4. FIRST AID MEASURES

4.1 Description of necessary first aid measures:-

If inhaled:	Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation.
In case of skin contact:	Immediately rinse with water.
In case of eye contact:	Rinse opened eye for several minutes under running water. Then consult a doctor.
If swallowed:	Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.
4.2 Symptoms caused by exposure:-	No further relevant information available
4.3 Medical attention and special treatment:-	No further relevant information available.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing equipment:-

Suitable extinguishing media:	CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam
Unsuitable extinguishing media:	Water with full jet
5.2 Specific hazards arising from the substance/mixture/product:-	No further relevant information available.

5.3 Special protective equipment and precautions for fire fighters:-

Special personal protective equipment:	Cool endangered receptacles with water spray.
Precautions:	No further relevant information available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:-

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:-

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and materials for containment and cleaning up:-

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:-

Only adequately trained personnel should handle this product.
Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities:-

Store only in the original receptacle.
Store in a cool location.
Store away from oxidising agents.
Store receptacle in a well ventilated area.
Keep container tightly sealed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure control measures:-

Occupational exposure limits:

Component	CAS No.	Value	Parameters	Basis
methyl methacrylate	80-62-6	Short-term value: 416 mg/m³, 100 ppm Long-term value: 208 mg/m³, 50 ppm		

Ingredients with biological limit values:

8.2 Biological monitoring:-

The lists valid during the making were used as basis.
Exposure controls / Personal protective equipment / General protective and hygienic measures:
Usual hygienic measures for dental practice.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

8.3 Control banding:-

Void

8.4 Engineering controls:-

Void

8.5 Individual protection measures include PPE:-

Eye/face protection: 	**Safety glasses** Tightly sealed goggles Use tightly fitting safety glasses as per Australian Standard AS 1336 and AS/NZS 1337.
Skin protection:	The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material

can be given for the product/ the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Butyl rubber, BR

· Not suitable are gloves made of the following materials:

Commercial medical gloves do not provide protection against the sensitizing effect of methacrylates.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Recommended filter device for short term use:

Filter A1
Filter A2
Filter A3

9. PHYSICAL/CHEMICAL PROPERTIES

9.1 Information on physical/chemical properties:-

a)	**Appearance/Form:**	Fluid
b)	**Colour:**	Colourless
c)	**Odour:**	Pungent
d)	**Odour threshold:**	Not determined.
e)	**pH-value (10 g/l) at 20 °C:**	Not determined.
f)	**Melting point/melting range:**	-48 °C
g)	**Boiling point/boiling range:**	101 °C
h)	**Flash point:**	10 °C
i)	**Ignition temperature:**	430 °C
j)	**Self-igniting:**	Product is not self-igniting.
k)	**Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
l)	**Upper/lower flammability or explosive limits:**	Lower 2.1 Vol % Upper 12.5 Vol %
m)	**Vapour pressure 20°C:**	47 hPa
n)	**Density at 20°C:**	0.941 g/cm³
o)	**Relative density:**	Not determined.
p)	**Vapour density:**	Not applicable.
q)	**Evaporation rate:**	Not applicable.
r)	**Solubility in / Miscibility with**	1.6 g/l

	water at 20 °C:	
s)	**Partition coefficient: n- octanol/water:**	Not determined.
t)	**Viscosity:**	Dynamic | Not applicable. Kinematic | Not applicable.
u)	**Solids content:**	Not determined.

10. STABILITY AND REACTIVITY

10.1 Reactivity:-
No further relevant information available.

10.2 Chemical stability:-
Stable under normal handling and storage conditions.
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications

10.3 Possibility of hazardous reactions:-
Forms explosive gas mixture with air.
Reacts with strong oxidising agents.
Exothermic polymerisation.

10.4 Conditions to avoid:-
No further relevant information available.

10.5 Incompatible materials:-
No further relevant information available.

10.6 Hazardous decomposition products:-
None under normal conditions of storage and use.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:-
Acute toxicity / Values relevant for classification:
LD/LC50 values relevant for classification:
80-62-6 methyl methacrylate
Oral LD50 7872 mg/kg (rat)

Skin corrosion/irritation:	Irritant to skin and mucous membranes
Serious eye damage/eye irritation:	No irritating effect.
Respiratory or skin sensitization:	Sensitisation possible through skin contact
Germ cell mutagenicity:	No further relevant information available.
Carcinogenicity:	No further relevant information available.
Reproductive toxicity:	No further relevant information available.
Specific target organ toxicity - single exposure:	No further relevant information available.
Specific target organ toxicity - repeated exposure:	No further relevant information available.
Aspiration hazard:	No further relevant information available.
Additional information:	

11.2 Information on possible routes of exposure:-

Short Term (Acute) Exposure:	No further relevant information available.
Swallowed:	No further relevant information available.
Eyes:	No further relevant information available.
Skin:	No further relevant information available.
Inhaled:	No further relevant information available.
Long Term (Chronic) Exposure:	No further relevant information available.
Swallowed:	No further relevant information available.
Eyes:	No further relevant information available.
Skin:	No further relevant information available.
Inhaled:	No further relevant information available.
11.3 Early onset symptoms related to exposure:-	No further relevant information available.

11.4	**Delayed health effects from exposure:-**	No further relevant information available.
11.5	**Exposure levels and health effects:-**	No further relevant information available.
11.6	**Interactive effects:-**	No further relevant information available.
11.7	**Other:-**	No further relevant information available.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:-
No further relevant information available.

12.2 Persistence/degradability:-
No further relevant information available.

12.3 Bioaccumulative potential:-
No further relevant information available.

12.4 Mobility in soil:-
No further relevant information available.

12.5 Other adverse effects:-
No further relevant information available.

Additional ecological information / General notes:-
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.6 Other adverse effects:-
No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods:-
Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.
Uncleaned packaging:
· **Recommendation:** Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

UN number ADR / IMDG / IATA:-	1247
UN proper shipping name or technical name:-	
ADR:	1247 METHYL METHACRYLATE MONOMER, STABILIZED.
IMDG, IATA:	METHYL METHACRYLATE MONOMER, STABILIZED
Transport hazard class(es):	ADR

· Class 3 (F1) Flammable liquids.
· Label 3

· IMDG, IATA

· Class 3 Flammable liquids.
· Label 3

Label:	Void.
Packaging group:	II

Environmental hazards:	No
Special precautions for user:	Not applicable.
Danger code:	Warning: Flammable liquids. Danger code (Kemler): 33
EMS Number:	F-E,S-E
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
Transport/Additional information:	ADR · Limited quantities (LQ) LQ4 · Transport category 2 · Tunnel restriction code D/E
UN "Model Regulation":	UN1247, METHYL METHACRYLATE MONOMER, STABILIZED, 3, II

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance/mixture/product:-

The product is a medical device according to the Directive 93/42/EEC.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

Key to abbreviations/acronyms used in SDS:-	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.

Key literature references/data sources used to compile SDS:-

Void

Abbreviations and acronyms:-

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
IMDG: International Maritime Code for Dangerous Goods.
IATA: International Air Transport Association.
GHS: Globally Harmonised System of Classification and Labelling of Chemicals.
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
LC50: Lethal concentration, 50 percent.
LD50: Lethal dose, 50 percent.
Flam. Liq. 2: Flammable liquids, Hazard Category 2.
Flam. Liq. 3: Flammable liquids, Hazard Category 3.
Acute Tox. 4: Acute toxicity, Hazard Category 4.
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2.
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2.
Repr. 2: Reproductive toxicity, Hazard Category 2.
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3.
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2.
Asp. Tox. 1: Aspiration hazard, Hazard Category 1.

*** Data compared to the previous version altered**

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Users should rely on their own knowledge and inquiries and make their own determination as to the applicability of this information in relation to their particular purposes and specific circumstances. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace and in conjunction with other substances or products.

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.