



Safety Data Sheet TAB (2000) Liquid Fast

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

1.1. Product identifier

Product name : TAB (2000) Liquid Fast

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

Relevant identified uses

Main use category : Professional use

Use of the substance/mixture : Preparation intended for dental medical use

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

KERRHAWE S.A.
Via Strecce n°4
6934 Bioggio (Switzerland)
T 00-800-41-050-505

Manufacturer

Kerr Italia S.r.l.
Via Passanti, 332
84018 Scafati (SA) - Italy
T +39-081-850-8311

Contact person : safety@kerrhawe.com - tel. 00-800-41-050-505 (08.00-17.00)

1.4. Emergency telephone number

Emergency number : CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300 International and Maritime Telephone Number +1 (703) 527-3887

Country	Organisation/Company	Address	Emergency number
Gibraltar	GHA Call Centre Zone 2, Level3, St Bernard's Hospital	Harbour Views Road	+350 200 79700 +350 200 72266
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2	H225
Acute Tox. 4 (Oral)	H302
Skin Irrit. 2	H315
Skin Sens. 1	H317
STOT SE 2	H371
STOT SE 3	H335

Full text of H statements : see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazardous ingredients :

methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate; N,N-dimethyl-p-toluidine; ethylene dimethacrylate; methanol

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour.
 H302 - Harmful if swallowed.
 H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H335 - May cause respiratory irritation.
 H371 - May cause damage to organs.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, open flames, sparks. No smoking.
 P233 - Keep container tightly closed.
 P260 - Do not breathe spray, vapours, mist, fume.
 P264 - Wash hands thoroughly after handling.
 P280 - Wear eye protection, protective gloves.
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P308+P311 - IF exposed or concerned: Call a doctor, a POISON CENTER.
 P302+P352 - IF ON SKIN: Wash with plenty of water/...
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
 P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P362+P364 - Take off contaminated clothing and wash it before reuse.
 P370+P378 - In case of fire: Use foam, carbon dioxide (CO₂), dry extinguishing powder to extinguish.
 P403+P235 - Store in a well-ventilated place. Keep cool.
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

Extra phrases :

The product is seen as a medical device and therefore not subject to labelling (EU-regulation 1272/2008, article 1, paragraph 5d).
 A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

2.3. Other hazards

Other hazards not contributing to the classification :

None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	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 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335
methanol	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X (REACH-no) 01-2119433307-44	5 - 10	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
ethylene dimethacrylate (Note D)	(CAS-No.) 97-90-5 (EC-No.) 202-617-2 (EC Index-No.) 607-114-00-5	1 - 5	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) 01-2119956633-31	0.1 - 1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT RE 2, H373 Aquatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits
methanol	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X (REACH-no) 01-2119433307-44	(3 =<C < 10) STOT SE 2, H371 (C >= 10) STOT SE 1, H370
ethylene dimethacrylate	(CAS-No.) 97-90-5 (EC-No.) 202-617-2 (EC Index-No.) 607-114-00-5	(C >= 10) STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.
- First-aid measures after skin contact : Take off immediately all contaminated clothing. Wash immediately with lots of water (15 minutes)/shower. Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Drink plenty of water. Get medical advice/attention.

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

- Symptoms/effects after inhalation : May cause respiratory irritation.
- Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.
- Symptoms/effects after eye contact : May cause eye irritation. redness, itching, tears.
- Symptoms/effects after ingestion : Harmful if swallowed. May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract. Ingestion may cause nausea and vomiting. Abdominal pain.
- Chronic symptoms : May cause damage to organs.

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

Not applicable.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media**

- Suitable extinguishing media : Foam. Carbon dioxide. Dry powder. Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapour. The vapours are denser than air and may travel along the ground. Distance ignition possible.
- Explosion hazard : Vapours may form explosive mixture with air.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

- Protection during firefighting : Do not enter fire area without proper personal protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

- General measures : Wear appropriate personal protective equipment - see Section 8. Avoid contact with skin and eyes. Eliminate every possible source of ignition. Stop leak if safe to do so.

For non-emergency personnel

- Emergency procedures : Keep upwind. Evacuate unnecessary personnel.

For emergency responders

No additional information available

6.2. Environmental precautions

Discharging into rivers and drains is forbidden. Collect spillage.

6.3. Methods and material for containment and cleaning up

- For containment : Collect all waste in suitable and labelled containers and dispose according to local legislation. Non- sparking tools should be used.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

6.4. Reference to other sections

See Heading 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Ensure good ventilation of the work station. Prevent the build-up of electrostatic charge. Use only non-sparking tools. No open flames. No smoking. Avoid the formation of mists in the atmosphere.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Use explosion-proof electrical equipment.
 Storage conditions : Keep container tightly closed. Keep cool. Protect from moisture. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Take precautionary measures to prevent the formation of static electricity. Use non-sparking tools.

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)		
EU	Local name	Methyl methacrylate
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (ppm)	100 ppm
Ireland	Local name	Methyl methacrylate
Ireland	OEL (8 hours ref) (ppm)	100 ppm
Ireland	OEL (15 min ref) (ppm)	50 ppm
Ireland	Notes (IE)	IOELV, Sens.
United Kingdom	Local name	Methyl methacrylate
United Kingdom	WEL TWA (mg/m³)	208 mg/m³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m³)	416 mg/m³
United Kingdom	WEL STEL (ppm)	100 ppm
methanol (67-56-1)		
EU	Local name	Methanol
EU	IOELV TWA (mg/m³)	260 mg/m³
EU	IOELV TWA (ppm)	200 ppm
EU	Notes	skin
Ireland	Local name	Methanol
Ireland	OEL (8 hours ref) (mg/m³)	260 mg/m³
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	Notes (IE)	Sk, IOELV
Malta	Local name	Methanol
Malta	OEL TWA (mg/m³)	260 mg/m³
Malta	OEL TWA (ppm)	200 ppm
United Kingdom	Local name	Methanol
United Kingdom	WEL TWA (mg/m³)	266 mg/m³
United Kingdom	WEL TWA (ppm)	200 ppm
United Kingdom	WEL STEL (mg/m³)	333 mg/m³
United Kingdom	WEL STEL (ppm)	250 ppm
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station. Use spark-/explosionproof appliances and lighting system. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Gloves. Safety glasses. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

Hand protection	: Butylrubber protective gloves. Neoprene rubber gloves. Layer thickness : 0,2 - 0,4 mm. Breakthrough time : 8 (> 480 minutes). STANDARD EN 374.
Eye protection	: Safety glasses. STANDARD EN 166.
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Gas mask with filter type. A2. Standard EN 149.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: characteristic.
Odour threshold	: Not determined
pH	: Not determined
Relative evaporation rate (butylacetate=1)	: Product evaporates rapidly when in contact with the air
Melting point	: Not determined
Freezing point	: Not determined
Boiling point	: Not determined
Flash point	: 10 °C
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
Flammability (solid, gas)	: Highly flammable liquid and vapour.
Vapour pressure	: Not determined
Relative vapour density at 20 °C	: Not determined
Relative density	: Not determined
Solubility	: In water, material is partially soluble.
Log Pow	: Not determined
Viscosity, kinematic	: Not determined
Viscosity, dynamic	: Not determined
Explosive properties	: Product is not explosive.
Oxidising properties	: Highly flammable liquid and vapour.
Explosive limits	: Not determined

9.2. Other information

Additional information	: None to our knowledge.
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Keep away from heat and direct sunlight.

10.5. Incompatible materials

Strong acids and oxidants.

10.6. Hazardous decomposition products

In case of fire: Toxic fumes may be released.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Acute toxicity : Oral: Harmful if swallowed.
 May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract
 Ingestion may cause nausea and vomiting.
 Abdominal pain

ATE CLP (oral)	909.091 mg/kg bodyweight
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methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate (80-62-6)	
LD50 oral rat	7872 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	78 mg/l/4h

ethylene dimethacrylate (97-90-5)	
LD50 oral rat	3300 mg/kg

Skin corrosion/irritation : Causes skin irritation.
 pH: Not determined

Serious eye damage/irritation : Not classified
 May cause eye irritation
 Redness, pain
 Lacrimation
 Based on available data, the classification criteria are not met
 pH: Not determined

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified
 Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
 Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
 Based on available data, the classification criteria are not met

STOT-single exposure : May cause damage to organs. May cause respiratory irritation.
 May cause shortness of breath, tightness of the chest, a sore throat and cough

STOT-repeated exposure : Not classified
 Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
 Based on available data, the classification criteria are not met

SECTION 12: ECOLOGICAL INFORMATION**12.1. Toxicity**

methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate (80-62-6)	
LC50 fish 1	191 mg/l (96 hours - <i>Lepomis macrochirus</i>)
EC50 Daphnia 1	69 mg/l (48 hours - <i>Daphnia magna</i>)

N,N-dimethyl-p-toluidine (99-97-8)	
LC50 fish 1	46 mg/l (96 hours - <i>Pimephales promelas</i>)

12.2. Persistence and degradability

TAB (2000) Liquid Fast	
Persistence and degradability	Biodegradable.
Biodegradation	32 %

methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate (80-62-6)	
Persistence and degradability	Not established.
Biodegradation	94 % (OECD 301C method)

methanol (67-56-1)	
BOD (% of ThOD)	0.4 - 0.8 % ThOD BOD5/COD
Biodegradation	99 % (OECD 301D method)

12.3. Bioaccumulative potential

TAB (2000) Liquid Fast	
Log Pow	Not determined
Bioaccumulative potential	Not potentially bioaccumulable.

methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate (80-62-6)	
Bioconcentration factor (BCF REACH)	3.5
Log Pow	1.38
N,N-dimethyl-p-toluidine (99-97-8)	
Bioconcentration factor (BCF REACH)	28.84
Log Pow	2.81
ethylene dimethacrylate (97-90-5)	
Log Pow	1.87
methanol (67-56-1)	
Bioconcentration factor (BCF REACH)	1
Log Pow	-0.64

12.4. Mobility in soil

TAB (2000) Liquid Fast	
Ecology - soil	Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment

TAB (2000) Liquid Fast	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

Other adverse effects : None to our knowledge.

SECTION 13: DISPOSAL CONSIDERATIONS






13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Do not discharge into drains.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1993	1993	1993	1993	1993
14.2. UN proper shipping name				
FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.	Flammable liquid, n.o.s.	FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.
Transport document description				
UN 1993 FLAMMABLE LIQUID, N.O.S. (methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate ; N,N-dimethyl-p-toluidine ; ethylene dimethacrylate ; methanol), 3, II, (D/E)	UN 1993 FLAMMABLE LIQUID, N.O.S. (methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate ; N,N-dimethyl-p-toluidine ; ethylene dimethacrylate ; methanol), 3, II			
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Special provisions (ADR) : 274, 601, 640D
 Limited quantities (ADR) : 11
 Excepted quantities (ADR) : E2
 Hazard identification number (Kemler No.) : 33
 Orange plates :



EAC code : •3YE

- Transport by sea

Special provisions (IMDG) : 274
 EmS-No. (Fire) : F-E
 EmS-No. (Spillage) : S-E

- Air transport

PCA Excepted quantities (IATA) : E2
 PCA Limited quantities (IATA) : Y341
 Special provisions (IATA) : A3

Rail transport

No data available

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

Not applicable

SECTION 15: REGULATORY INFORMATION

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

EU-Regulations

Contains no REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list
 Contains no REACH Annex XIV substances

National regulations

EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: OTHER INFORMATION

Indication of changes:

2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
4.2	Symptoms/effects after ingestion	Modified	
4.2	Symptoms/effects after eye contact	Added	
4.2	Symptoms/effects	Removed	
14.1	UN-No. (ADR)	Modified	
14.1	UN-No. (IMDG)	Modified	
14.1	UN-No. (IATA)	Modified	
14.1	UN-No. (ADN)	Modified	
14.2	Proper Shipping Name (ADN)	Modified	

14.2	Proper Shipping Name (ADR)	Modified	
14.6	Special provisions (ADR)	Added	
14.6	Special provisions (ADN)	Added	
14.6	Hazard identification number (Kemler No.)	Modified	

Date of issue : 27/05/2009
 Revision date : 30/11/2017
 Supersedes : 23/09/2015
 Date of total revision : 30/11/2017
 Version : 5.0
 Signature : A. Åsebø Murel

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
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
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 1	Specific target organ toxicity — single exposure, Category 1
STOT SE 2	Specific target organ toxicity — Single 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.
H302	Harmful 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.
H370	Causes damage to organs.
H371	May cause damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

The information in this safety data sheet is based on information from the manufacturer/supplier, present european and national legislation, and presupposes that the product is used within the specified area of application.



Safety Data Sheet TAB (2000) Liquid Regular

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

1.1. Product identifier

Product name : TAB (2000) Liquid Regular

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

Relevant identified uses

Main use category : Professional use

Use of the substance/mixture : Preparation intended for dental medical use

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

KERRHAWE S.A.
Via Strecce n°4
6934 Bioggio (Switzerland)
T 00-800-41-050-505

Manufacturer

Kerr Italia S.r.l.
Via Passanti, 332
84018 Scafati (SA) - Italy
T +39-081-850-8311

Contact person : safety@kerrhawe.com - tel. 00-800-41-050-505 (08.00-17.00)

1.4. Emergency telephone number

Emergency number : CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300 International and Maritime Telephone Number +1 (703) 527-3887

Country	Organisation/Company	Address	Emergency number
Gibraltar	GHA Call Centre Zone 2, Level3, St Bernard's Hospital	Harbour Views Road	+350 200 79700 +350 200 72266
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Skin Sens. 1 H317
STOT SE 3 H335

Full text of hazard classes and H-statements : see section 16

Specific concentration limits:

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

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

- First-aid measures general : If medical advice is needed, have product container or label at hand. 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 : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. 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, both acute and delayed

- Symptoms/effects after inhalation : May cause respiratory irritation.
- Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.

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

Treat symptomatically. In all cases of doubt, or when symptoms persist, seek medical attention.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media**

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam, carbon dioxide (CO₂) and powder.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapour. Vapours are heavier than air and spread above ground.
- Explosion hazard : May form flammable/explosive vapour-air mixture.
- Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide. Toxic fumes may be released.

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 personal protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

- General measures : Wear appropriate personal protective equipment - see Section 8. Avoid contact with skin and eyes. Do not breathe vapour. Ensure adequate ventilation, especially in confined areas. Remove ignition sources. No open flames. No smoking. Use special care to avoid static electric charges. Eliminate every possible source of ignition.

For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Discharging into rivers and drains is forbidden. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect all waste in suitable and labelled containers and dispose according to local legislation.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

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 : Avoid contact with skin and eyes. Ensure good ventilation of the work station. Prevent the build-up of electrostatic charge. Use only non-sparking tools. No open flames. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing mist, spray, vapours. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- 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 any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.
- Storage conditions : Keep container tightly closed. Keep cool. Keep only in original container. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight. Store in a well-ventilated place.
- Incompatible materials : Sources of ignition. 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)		
EU	Local name	Methyl methacrylate
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (ppm)	100 ppm
Ireland	Local name	Methyl methacrylate
Ireland	OEL (8 hours ref) (ppm)	100 ppm
Ireland	OEL (15 min ref) (ppm)	50 ppm
Ireland	Notes (IE)	IOELV, Sens.
United Kingdom	Local name	Methyl methacrylate
United Kingdom	WEL TWA (mg/m³)	208 mg/m³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m³)	416 mg/m³
United Kingdom	WEL STEL (ppm)	100 ppm

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.
- Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.
- Hand protection : Wear protective gloves. Butylrubber protective gloves. Neoprene rubber gloves. Layer thickness : 0,2 - 0,4 mm. Breakthrough time : 8 (> 480 minutes). STANDARD EN 374.
- Eye protection : Chemical goggles or safety glasses. STANDARD EN 166.
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust. Standard EN 141. EN 140. EN 405



- Other information : Do not eat, drink or smoke during use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Colour	: Colourless.
Odour	: characteristic.
Odour threshold	: Not determined
pH	: Not determined
Relative evaporation rate (butylacetate=1)	: Not determined
Melting point	: Not determined
Freezing point	: Not determined
Boiling point	: 101 °C Methyl methacrylate
Flash point	: 10 °C
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
Flammability (solid, gas)	: Highly flammable liquid and vapour.
Vapour pressure	: Not determined
Relative vapour density at 20 °C	: Not determined
Relative density	: 0.93 - 0.95
Solubility	: In water, material is partially soluble.
Log Pow	: Not determined
Viscosity, kinematic	: Not determined
Viscosity, dynamic	: Not determined
Explosive properties	: Product is not explosive.
Oxidising properties	: Flammable liquid and vapour.
Explosive limits	: Not determined

9.2. Other information

Additional information : None to our knowledge.

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

Stable under normal conditions.

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Keep away from heat and direct sunlight. Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Oxidizing agent. Strong acids.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Acute toxicity : Not classified

methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate (80-62-6)	
LD50 oral rat	7872 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	78 mg/l/4h

ethylene dimethacrylate (97-90-5)	
LD50 oral rat	3300 mg/kg

Skin corrosion/irritation : Causes skin irritation.
pH: Not determined

Serious eye damage/irritation	: Not classified Liquid splashes in the eye may cause irritation. Based on available data, the classification criteria are not met pH: Not determined
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate (80-62-6)	
LC50 fish 1	191 mg/l (96 hours - Lepomis macrochirus)
EC50 Daphnia 1	69 mg/l (48 hours - Daphnia magna)
N,N-dimethyl-p-toluidine (99-97-8)	
LC50 fish 1	46 mg/l (96 hours - Pimephales promelas)

12.2. Persistence and degradability

TAB (2000) Liquid Regular	
Persistence and degradability	Biodegradable.
methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate (80-62-6)	
Persistence and degradability	Not established.
Biodegradation	94 % (OECD 301C method)

12.3. Bioaccumulative potential

TAB (2000) Liquid Regular	
Log Pow	Not determined
Bioaccumulative potential	Not potentially bioaccumulable.
methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate (80-62-6)	
Bioconcentration factor (BCF REACH)	3.5
Log Pow	1.38
ethylene dimethacrylate (97-90-5)	
Log Pow	1.87
N,N-dimethyl-p-toluidine (99-97-8)	
Bioconcentration factor (BCF REACH)	28.84
Log Pow	2.81

12.4. Mobility in soil

TAB (2000) Liquid Regular	
Ecology - soil	Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment

TAB (2000) Liquid Regular	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

Other adverse effects	: None to our knowledge.
Additional information	: Avoid release to the environment





SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Regional legislation (waste) : Dispose as hazardous waste.
- Waste treatment methods : Recover the product with absorbent material. Dispose of contents/container in accordance with licensed collector's sorting instructions.
- Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- Additional information : Handle empty containers with care because residual vapours are flammable.
- Ecology - waste materials : Avoid release to the environment.
- European List of Waste (LoW) code : 18 01 06* - chemicals consisting of or containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
1993	1993	1993	1993
14.2. UN proper shipping name			
FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.	Flammable liquid, n.o.s.	FLAMMABLE LIQUID, N.O.S.
Transport document description			
UN 1993 FLAMMABLE LIQUID, N.O.S. (methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate), 3, II, (D/E)	UN 1993 FLAMMABLE LIQUID, N.O.S., 3, II		
14.3. Transport hazard class(es)			
3	3	3	3
			
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			

14.6. Special precautions for user

- Overland transport

- Classification code (ADR) : F1
- Special provisions (ADR) : 274, 601, 640D
- 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) : T7
- Portable tank and bulk container special provisions (ADR) : TP1, TP8, TP28
- Tank code (ADR) : LGBF
- Vehicle for tank carriage : FL
- Transport category (ADR) : 2
- Special provisions for carriage - Operation (ADR) : S2, S20
- Hazard identification number (Kemler No.) : 33
- Orange plates :



Tunnel restriction code (ADR) : D/E

- Transport by sea

Special provisions (IMDG) : 274
 Limited quantities (IMDG) : 1 L
 Excepted quantities (IMDG) : E2
 Packing instructions (IMDG) : P001
 IBC packing instructions (IMDG) : IBC02
 Tank instructions (IMDG) : T7
 Tank special provisions (IMDG) : TP1, TP8, TP28
 EmS-No. (Fire) : F-E
 EmS-No. (Spillage) : S-E
 Stowage category (IMDG) : B
 Flash point (IMDG) : 10°C

- 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) : A3
 ERG code (IATA) : 3H

Rail transport

No data available

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

Not applicable

SECTION 15: REGULATORY INFORMATION

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

EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. 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	methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate - ethylene dimethacrylate - 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	TAB (2000) Liquid Regular - 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	TAB (2000) Liquid Regular - methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate - ethylene dimethacrylate - 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

National regulations

EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Indication of changes:

2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures after skin contact	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures general	Modified	
4.2	Symptoms/effects after inhalation	Modified	
4.3	Other medical advice or treatment	Modified	
5.2	Hazardous decomposition products in case of fire	Modified	
5.2	Fire hazard	Modified	
5.2	Explosion hazard	Modified	
5.3	Firefighting instructions	Modified	
6.1	General measures	Modified	
6.1	Protective equipment	Added	
6.1	Emergency procedures	Added	
6.2	Environmental precautions	Modified	
6.3	Methods for cleaning up	Modified	
7.1	Hygiene measures	Modified	
7.1	Precautions for safe handling	Modified	
7.1	Additional hazards when processed	Added	
7.2	Technical measures	Added	
7.2	Incompatible materials	Modified	
7.2	Storage conditions	Modified	
8.2	Personal protective equipment	Modified	
8.2	Appropriate engineering controls	Modified	
8.2	Respiratory protection	Modified	
8.2	Eye protection	Modified	
8.2	Hand protection	Modified	
10.1	Reactivity	Modified	
10.2	Chemical stability	Modified	
10.3	Possibility of hazardous reactions	Modified	
10.4	Conditions to avoid	Modified	
10.5	Incompatible materials	Modified	
10.6	Hazardous decomposition products	Modified	
11.1	Potential adverse human health effects and symptoms	Added	
11.1	Additional information	Modified	
12.1	Ecology - general	Removed	
12.2	Persistence and degradability	Modified	
12.3	Bioaccumulative	Modified	

	potential		
12.3	Log Pow	Added	
12.4	Ecology - soil	Modified	
13.1	Waste disposal recommendations	Modified	
13.1	Additional information	Added	
14.1	UN-No. (ADR)	Modified	
14.1	UN-No. (IMDG)	Modified	
14.1	UN-No. (IATA)	Modified	
14.1	UN-No. (ADN)	Modified	
14.2	Proper Shipping Name (ADN)	Modified	
14.2	Proper Shipping Name (ADR)	Modified	
14.6	Special provisions (ADR)	Added	
14.6	Special provisions (ADN)	Added	
14.6	Hazard identification number (Kemler No.)	Modified	

Data sources : EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

Other information : None.

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Signature : A. Åsebø Murel

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.

The information in this safety data sheet is based on information from the manufacturer/supplier, present european and national legislation, and presupposes that the product is used within the specified area of application.