SAFETY DATA SHEET

Version #: 07

Issue date: 07-17-2019 Revision date: 08-03-2023 Supersedes date: 07-16-2023

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

1.1. Product identifier

Trade name or designation

of the mixture

PLEXUS® MA830 Adhesive

Registration number

None. Synonyms SKU# IT185

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

Identified uses Not available. Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

ITW Performance Polymers Company Name

Bay 150 Address

Shannon Industrial Estate

Co. Clare Ireland V14 DF82

Contact Person Customer Service Telephone Number 353(61)771500 353(61)471285

customerservice.shannon@itwpp.com

Emergency Phone Number 44(0) 1235 239 670 (24 hours)

1.4. Emergency telephone number

General in EU 112 (Available 24 hours a day. SDS/Product information may not be available for

the Emergency Service.)

Austria National Poisons

Information Center

+431 406 4343 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Belgium National Poisons

Control Center

070 245 245 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Bulgaria National

Toxicological Information

Center

Fmail

+359 2 9154 233 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Croatia Poisons Information Center +385 1 2348 342 (Hours of operation not provided. SDS/Product information may

not be available for the Emergency Service.)

Cyprus Poison Center

1401 (Available 24 hours a day. SDS/Product information may not be available

for the Emergency Service.)

Czech Republic National Poisons Information

Center

Control Center

+420 224 919 293, or +420 224 915 402 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Denmark National Poisons

+45 82 12 12 12 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Estonia National Poisons Information Center

16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays). SDS/Product information may not be

available for the Emergency Service.)

Finland National Poison Information Center

(09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

France National Poisons Control Center

ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

1.4. Emergency telephone number

Greece Poison Information Centre

(0030) 2107793777 (Available 24 hours a day. SDS/Product information may not

be available for the Emergency Service.)

Hungary National Emergency Phone Number +36-80-201-199 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Iceland Poison Center

(+354) 543 2222 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Latvia Emergency medical

aid

+371 67042473 (Available 24 hours a day. SDS/Product information may not be

Latvia Poison and Drug available for the Emergency Service.) Information Center

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Lithuania Neatidėliotina informacija apsinuodijus

+370 5 236 20 52 or +37068753378 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Malta Accident and **Emergency Department** 2545 4030 (Hours of operation not provided. SDS/Product information may not be

Netherlands National Poisons Information Center (NVIC)

NVIC: +31 (0)88 755 8000 (Only for the purpose of informing medical personnel

in cases of acute intoxications)

available for the Emergency Service.)

Norway Norwegian Poison Information Center

22 59 13 00 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

800 250 250 (Available 24 hours a day. SDS/Product information may not be **Portugal Poison Center**

available for the Emergency Service.)

Romania Biroul RSI si Informare Toxicologica 021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be

available for the Emergency Service.)

Slovakia National **Toxicological Information** Center

+421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

+ 34 91 562 04 20 (Available 24 hours a day. SDS/Product information may not

Spain Toxicology Information Service

be available for the Emergency Service.)

Sweden National Poison Information Center

112 - and ask for Poison Information (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Switzerland Tox Info Suisse

145 (Available 24 hours a day. SDS/Product information may not be available for

the Emergency Service.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

Flammable liquids Category 2 H225 - Highly flammable liquid and

vapor.

Health hazards

H315 - Causes skin irritation. Skin corrosion/irritation Category 2 Category 1 Serious eye damage/eye irritation

H318 - Causes serious eye

damage.

Skin sensitization Category 1 H317 - May cause an allergic skin

reaction.

Specific target organ toxicity - single Category 3 respiratory tract irritation H335 - May cause respiratory

irritation.

2.2. Label elements

exposure

Material name: PLEXUS® MA830 Adhesive IT185 Version #: 07 Revision date: 08-03-2023 Issue date: 07-17-2019

Label according to Regulation (EC) No. 1272/2008 as amended

UFI:

Austria: NQ90-10TD-500P-KAXY Belgium: NQ90-10TD-500P-KAXY Bulgaria: NQ90-10TD-500P-KAXY Croatia: NQ90-10TD-500P-KAXY Cyprus: NQ90-10TD-500P-KAXY

Czech Republic: NQ90-10TD-500P-KAXY Denmark: NQ90-10TD-500P-KAXY Estonia: NQ90-10TD-500P-KAXY EU: NQ90-10TD-500P-KAXY Finland: NQ90-10TD-500P-KAXY France: NQ90-10TD-500P-KAXY Germany: NQ90-10TD-500P-KAXY Greece: NQ90-10TD-500P-KAXY Hungary: NQ90-10TD-500P-KAXY lceland: NQ90-10TD-500P-KAXY Iceland: NQ90-10TD-500P-KAXY

Hungary: NQ90-10TD-500P-KAXY
Iceland: NQ90-10TD-500P-KAXY
Ireland: NQ90-10TD-500P-KAXY
Italy: NQ90-10TD-500P-KAXY
Latvia: NQ90-10TD-500P-KAXY
Lithuania: NQ90-10TD-500P-KAXY
Luxembourg: NQ90-10TD-500P-KAXY
Malta: NQ90-10TD-500P-KAXY
Netherlands: NQ90-10TD-500P-KAXY

Norway: NQ90-10TD-500P-KAXY Poland: NQ90-10TD-500P-KAXY Portugal: NQ90-10TD-500P-KAXY Romania: NQ90-10TD-500P-KAXY Slovakia: NQ90-10TD-500P-KAXY Slovenia: NQ90-10TD-500P-KAXY Spain: NQ90-10TD-500P-KAXY Sweden: NQ90-10TD-500P-KAXY

Contains: methacrylic acid; 2-methylpropenoic acid, methyl methacrylate; methyl 2-methylprop-2-enoate;

methyl 2-methylpropenoate, Paraffin Wax, Polychloroprene, Styrene/butadiene Copolymer

Hazard pictograms







Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Precautionary statements

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P235 Keep cool.

P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing mist/vapors.
P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response

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

water/shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing

P310 Immediately call a POISON CENTER/doctor.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use appropriate media to extinguish.

Storage

Store in a well-ventilated place. Keep container tightly closed. P403 + P233

%

Store in a well-ventilated place. Keep cool. P403 + P235

Store locked up. P405

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations. P501

Supplemental label information

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation 2.3. Other hazards

(EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a

Index No

Notes

CAS-No. / FC No. REACH Registration No.

concentration equal to or greater than 0.1% by weight.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate	50 - < 60	80-62-6 201-297-1	01-2119452498-28-0000	607-035-00-6	#
Classification	: Flam. Liq. 3:H335	2;H225, Skin Irrit. 2;F	1315, Skin Sens. 1;H317, S	TOT SE	
Specific Concentration Limits	-,	3;H335: C ≥ 10 %			
Polychloroprene	5 - < 10	Mixture	-	-	
Classification	: -				
methacrylic acid; 2-methylpropenoic acid	3 - < 5	79-41-4 201-204-4	01-2119463884-26-0000	607-088-00-5	
	mg/kg bw) Corr. 1A;H	, Acute Tox. 3;H331; 314, Eye Dam. 1;H3	ng/kg bw), Acute Tox. 4;H31 (ATE: 7,100000000000000 18, STOT SE 3;H335	2;(ATE: 1100 5 mg/l), Skin	
Specific Concentration Limits	: STOT SE	3;H335: C ≥ 1 %			
Paraffin Wax	1 - < 3	8002-74-2 232-315-6	-	-	
Classification	: -				
Styrene/butadiene Copolymer	1 - < 3	9003-55-8	-	-	
Classification	: -				
N,N-dimethyl-p-toluidine; [1] N,N-dimethyl-m-toluidine; [2] N,N-dimethyl-o-toluidine [3]	< 1	99-97-8 202-805-4	-	612-056-00-9	
Classification	mg/kg bw)	3;H301;(ATE: 100 n , Acute Tox. 3;H331; quatic Chronic 3;H41	ng/kg bw), Acute Tox. 3;H31 (ATE: 3 mg/l), Carc. 2;H351 2	1;(ATE: 300 , STOT RE	
zinc oxide	< 1	1314-13-2 215-222-5	-	030-013-00-7	
Classification	: Aquatic Ac	ute 1;H400, Aquatic	Chronic 1;H410		
phosphoric acid %, orthophosphoric acid %	< 0,2	7664-38-2 231-633-2	-	015-011-00-6	#
Classification			mg/kg bw), Acute Tox. 2;H3 I4, Eye Dam. 1;H318	30;(ATE:	
Specific Concentration Limits			Skin Irrit. 2;H315: 10 % ≤ C rit. 2;H319: 10 % ≤ C < 25 %		
Other components below reportable					

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

levels

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Material name: PLEXUS® MA830 Adhesive

SDS EU

SECTION 4: First aid measures

General information

Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

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.

Skin contact

Eye contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

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

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards

Highly flammable liquid and vapor.

5.1. Extinguishing media

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

For emergency responders

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Ventilate closed spaces before entering them. Avoid breathing mist/vapors. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not get this material in contact with eyes. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances

Hazard categories in accordance with Regulation (EC) No 1272/2008

- P5a, b or c FLAMMABLE LIQUIDS (Lower-tier requirements = 50 tons; Upper-tier requirements = 200 tons)

10 mg/m3

Respirable fraction.

7.3. Specific end use(s)

Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	MAK	70 mg/m3	
		20 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	Ceiling	420 mg/m3	
		100 ppm	
	MAK	210 mg/m3	
		50 ppm	
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	MAK	1 mg/m3	
	STEL	2 mg/m3	
zinc oxide (CAS 1314-13-2)	MAK	5 mg/m3	Fume and respirable dust.
	STEL	20 mg/m3	Inhalable fraction.

Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended

Components	Type	Value Form	
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	TWA	71 mg/m3	
		20 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	416 mg/m3	
		100 ppm	
	TWA	208 mg/m3	
		50 ppm	
Paraffin Wax (CAS 8002-74-2)	TWA	2 mg/m3 Fume.	

Components	Туре	Value	Form
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.

Bulgaria. OELs. Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended

Components	Type	Value	
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	TWA	70 mg/m3	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	
	TWA	5 mg/m3	

Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended

Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	MAC	72 mg/m3	
		20 ppm	
	STEL	143 mg/m3	
		40 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	MAC	50 ppm	
	STEL	100 ppm	
Paraffin Wax (CAS 8002-74-2)	MAC	2 mg/m3	Fume.
	STEL	6 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	MAC	1 mg/m3	
	STEL	2 mg/m3	
zinc oxide (CAS 1314-13-2)	MAC	2 mg/m3	Respirable dust.
	STEL	10 mg/m3	Respirable dust.

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended Components Type Value Form TWA 5 mg/m3 Fume.

Cyprus. OELs. Occupational Exposure Limit Values of Chemicals at Work (Safety and Health at Work (Chem. Agents)

Reg., Ann. 1, R.A.A. 268/2001, as amended)
Components
Ty

ComponentsTypeValuemethyl methacrylate; methyl
2-methylprop-2-enoate;
methyl 2-methylpropenoateSTEL100 ppm

(CAS 80-62-6)

Components	Туре	Value	
	TWA	50 ppm	
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	

Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended)

Components	Туре	Value	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	Ceiling	150 mg/m3	
	TWA	50 mg/m3	
N,N-dimethyl-p-toluidine; [1] N,N-dimethyl-m-toluidine; [2] N,N-dimethyl-o-toluidine [3] (CAS 99-97-8)	Ceiling	10 mg/m3	
	TWA	5 mg/m3	
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	Ceiling	2 mg/m3	
	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	Ceiling	5 mg/m3	
	TWA	2 mg/m3	

Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, Annex 2

Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	TLV	70 mg/m3	
		20 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	TLV	102 mg/m3	
		25 ppm	
Paraffin Wax (CAS 8002-74-2)	TLV	2 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	TLV	1 mg/m3	
zinc oxide (CAS 1314-13-2)	TLV	4 mg/m3	

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended Components Type Value Form

Components	rype	value 1 01111	
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	STEL	100 mg/m3	
		30 ppm	
	TWA	70 mg/m3	
		20 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Paraffin Wax (CAS 8002-74-2)	TWA	2 mg/m3 Vapor.	

Components	Туре	julation No. 105/200 Value	Form
ohosphoric acid %, orthophosphoric acid % CAS 7664-38-2)	STEL	2 mg/m3	Vapor.
(ONO 1004-30-2)	TWA	1 mg/m3	Vapor.
zinc oxide (CAS 1314-13-2)	TWA	5 mg/m3	тарот.
·		-	
Finland. HTP-arvot, App 3., Binding Limit \ Components	/alues, Social Affairs and Ministry of Type	of Health Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	TWA	71 mg/m3	
		20 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	210 mg/m3	
		50 ppm	
	TWA	42 mg/m3	
		10 ppm	
Paraffin Wax (CAS 8002-74-2)	TWA	1 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
(TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Fume.
,	TWA	2 mg/m3	Fume.
France OFI a Indicative Occupational Eve		-	
France. OELs. Indicative Occupational Exp Components	Type	Value	as amended
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	VLE	2 mg/m3	
		0,5 ppm	
	VME	1 mg/m3	
		0,2 ppm	
France. OELs. Occupational Exposure Lim	nits as Prescribed by Art. R.4412-14 Type	9 of Labor Code, as Value	s amended
Components	- 71	Valuo	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate	VLE	410 mg/m3	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate		410 mg/m3	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate	VLE	410 mg/m3 100 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate		410 mg/m3 100 ppm 205 mg/m3	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	VLE	410 mg/m3 100 ppm 205 mg/m3 50 ppm	ED 984
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6) France. Threshold Limit Values (VLEP) for Components	VLE VME Occupational Exposure to Chemic Type	410 mg/m3 100 ppm 205 mg/m3 50 ppm als in France, INRS Value	ED 984 Form
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6) France. Threshold Limit Values (VLEP) for Components methacrylic acid; 2-methylpropenoic acid	VLE VME Occupational Exposure to Chemic	410 mg/m3 100 ppm 205 mg/m3 50 ppm als in France, INRS	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6) France. Threshold Limit Values (VLEP) for Components methacrylic acid; 2-methylpropenoic acid	VME Occupational Exposure to Chemic Type VME	410 mg/m3 100 ppm 205 mg/m3 50 ppm als in France, INRS Value 70 mg/m3	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6) France. Threshold Limit Values (VLEP) for Components methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4) Regulatory status: Indicative limit (VL	VLE VME Occupational Exposure to Chemic Type VME	410 mg/m3 100 ppm 205 mg/m3 50 ppm als in France, INRS Value	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6) France. Threshold Limit Values (VLEP) for Components methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4) Regulatory status: Indicative limit (VL	VLE VME Occupational Exposure to Chemic Type VME -)	410 mg/m3 100 ppm 205 mg/m3 50 ppm als in France, INRS Value 70 mg/m3	
-	VLE VME Occupational Exposure to Chemic Type VME	410 mg/m3 100 ppm 205 mg/m3 50 ppm als in France, INRS Value 70 mg/m3	

Components	Туре	Value	Form	
		100 ppm		
Regulatory status:	Regulatory binding (VRC)			
	VME	205 mg/m3		
Regulatory status:	Regulatory binding (VRC)			
		50 ppm		
Regulatory status:	Regulatory binding (VRC)			
Paraffin Wax (CAS 8002-74-2)	VME	2 mg/m3	Fume.	
Regulatory status:	Indicative limit (VL)			
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	VLE 6	2 mg/m3		
Regulatory status:	Regulatory indicative (VRI)			
		0,5 ppm		
Regulatory status:	Regulatory indicative (VRI)			
	VME	1 mg/m3		
Regulatory status:	Regulatory indicative (VRI)			
		0,2 ppm		
Regulatory status:	Regulatory indicative (VRI)			
zinc oxide (CAS 1314-13-	2) VME	5 mg/m3	Fume.	
Regulatory status:	Indicative limit (VL)			

Regulatory status: Indicative limit (VL)

Components

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as updated

Type

10 mg/m3

Value

Dust.

Form

methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	TWA	180 mg/m3	
		50 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	TWA	210 mg/m3	
		50 ppm	
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	TWA	2 mg/m3	Inhalable fraction.
Germany. TRGS 900, Limit Values i	n the Ambient Air at the Workplace		
Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	AGW	180 mg/m3	
		50 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	AGW	210 mg/m3	
		50 ppm	
phosphoric acid %, orthophosphoric acid %	AGW	2 mg/m3	Inhalable fraction.
(CAS 7664-38-2)			
	AGW	10 mg/m3	Inhalable fraction.

Greece. OELs, Presidential Decree Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid	STEL	140 mg/m3	
(CAS 79-41-4)		40 nnm	
	TWA	40 ppm	
	IWA	70 mg/m3	
and the state of the state of the state of	OTEL	20 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Paraffin Wax (CAS 8002-74-2)	STEL	6 mg/m3	Fume.
	TWA	2 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	3 mg/m3	
,	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.
Hungary. OELs. Decree on protecti Components	on of workers exposed to ch Type	emical agents (5/2020. (II.6)), Ann Value	nex 1&2, as amended Form
methyl methacrylate; methyl	STEL	415 mg/m3	
2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	-,	g	
	TWA	208 mg/m3	
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	TWA	5 mg/m3	Fume.
		5 mg/m3	Dust.
celand. OELs. Regulation 390/2009 Components	on Pollution Limits and Mea Type	asures to Reduce Pollution at the Value	Workplace, as amende Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	TWA	70 mg/m3	
,		20 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	100 ppm	
(0.10 00 02 0)	TWA	50 ppm	
Paraffin Wax (CAS 8002-74-2)	TWA	2 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
/	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	TWA	4 mg/m3	Fume.
Ireland. OELVs, Schedules 1 & 2, C Components	ode of Practice for Chemical Type	Agents and Carcinogens Regula Value	ations Form
methacrylic acid;	STEL	140 mg/m3	
2-methylpropenoic acid (CAS 79-41-4)	5.22	Ç	

lreland. OELVs, Schedules 1 & 2, C Components	Type	Value	Form
	TWA	70 mg/m3	
		20 ppm	
nethyl methacrylate; methyl 2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6)	STEL	100 ppm	
ONG 00 02 0)	TWA	50 ppm	
Paraffin Wax (CAS 3002-74-2)	STEL	6 mg/m3	Fume.
	TWA	2 mg/m3	Fume.
hosphoric acid %, rthophosphoric acid % CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
inc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction and fume.
	TWA	2 mg/m3	Respirable fraction and fume.
taly. OELs (Legislative Decree n.8 [.] Components	1, 9 April 2008), as amended Type	Value	Form
nethacrylic acid; 2-methylpropenoic acid CAS 79-41-4)	TWA	20 ppm	
nethyl methacrylate; methyl -methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6)	STEL	100 ppm	
,	TWA	50 ppm	
Paraffin Wax (CAS 002-74-2)	TWA	2 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
inc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.
atvia. OELs. Occupational Exposi	ure Limits of Chemical Subst	ances at Workplace (Reg. No	. 325/ 2007, L.V. 80, Annex
), as amended Components	Туре	Value	
•			
nethacrylic acid; 2-methylpropenoic acid CAS 79-41-4)	TWA	10 mg/m3	
nethyl methacrylate; methyl 2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6)	TWA	10 mg/m3	
ohosphoric acid %, orthophosphoric acid % CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
inc oxide (CAS 1314-13-2)	TWA	0,5 mg/m3	
.ithuania. OELs. Occupational Exp /-824/A1-389), as amended	osure Limit Values for Chem	nical Substances (Hygiene No	orm HN 23:2011; Order No.
Components	Type	Value	
nethacrylic acid; ?-methylpropenoic acid CAS 79-41-4)	STEL	100 mg/m3	
		30 ppm	

	Туре	Value
		20 ppm
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	416 mg/m3
		100 ppm
	TWA	208 mg/m3
		50 ppm
shosphoric acid %, orthophosphoric acid % CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3
inc oxide (CAS 1314-13-2)	TWA	5 mg/m3
n ° 235/2016, as amended	pational Exposure Limit Valu	es (Annex I), G.D.R. of 14 November 2016, OJ Memoria
Components	Туре	Value
methyl methacrylate; methyl 2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6)	STEL	100 ppm
	TWA	50 ppm
ohosphoric acid %, orthophosphoric acid % CAS 7664-38-2)	STEL	2 mg/m3
J. 12 1 22 2,	TWA	1 mg/m3
Malta. OELs. Protection of Health a Schedules I and V), as amended Components	nd Safety of Workers from R Type	isks related to Chemical Agents at Work (L.N 227/2003 Value
•	STEL	100 ppm
nethyl methacrylate; methyl	SIEL	тоо ррпп
2-methylprop-2-enoate; nethyl 2-methylpropenoate		
2-methylprop-2-enoate; nethyl 2-methylpropenoate	TWA	50 ppm
2-methylprop-2-enoate; methyl 2-methylpropenoate CAS 80-62-6) phosphoric acid %, prthophosphoric acid % CAS 7664-38-2)	TWA STEL	50 ppm 2 mg/m3
2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) phosphoric acid %, orthophosphoric acid %		
2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) phosphoric acid %, prthophosphoric acid % CAS 7664-38-2) Netherlands. OELs per Annex XIII camended	STEL TWA of Working Conditions Regula	2 mg/m3 1 mg/m3 ation (Staatscourant no. 252, 29 December 2006), as
2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) phosphoric acid %, orthophosphoric acid % CAS 7664-38-2)	STEL	2 mg/m3 1 mg/m3
2-methylprop-2-enoate; methyl 2-methylpropenoate CAS 80-62-6) phosphoric acid %, prthophosphoric acid % CAS 7664-38-2) Netherlands. OELs per Annex XIII camended	STEL TWA of Working Conditions Regula	2 mg/m3 1 mg/m3 ation (Staatscourant no. 252, 29 December 2006), as
e-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) shosphoric acid %, orthophosphoric acid % CAS 7664-38-2) letherlands. OELs per Annex XIII of mended components nethyl methacrylate; methyl e-methylprop-2-enoate; nethyl 2-methylpropenoate	STEL TWA of Working Conditions Regula Type	2 mg/m3 1 mg/m3 ation (Staatscourant no. 252, 29 December 2006), as Value
2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) chosphoric acid %, orthophosphoric acid % CAS 7664-38-2) Netherlands. OELs per Annex XIII camended Components methyl methacrylate; methyl 2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) chosphoric acid %, orthophosphoric acid %	STEL TWA of Working Conditions Regula Type STEL	2 mg/m3 1 mg/m3 ation (Staatscourant no. 252, 29 December 2006), as Value 410 mg/m3
e-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) chosphoric acid %, orthophosphoric acid % CAS 7664-38-2) Metherlands. OELs per Annex XIII of the components methyl methacrylate; methyl e-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) chosphoric acid %, orthophosphoric acid %	STEL TWA of Working Conditions Regula Type STEL TWA	2 mg/m3 1 mg/m3 ation (Staatscourant no. 252, 29 December 2006), as Value 410 mg/m3 205 mg/m3
2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) chosphoric acid %, orthophosphoric acid % CAS 7664-38-2) Netherlands. OELs per Annex XIII components methyl methacrylate; methyl 2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) chosphoric acid %, orthophosphoric acid % CAS 7664-38-2)	TWA of Working Conditions Regula Type STEL TWA STEL TWA STEL TWA STEL	2 mg/m3 1 mg/m3 ation (Staatscourant no. 252, 29 December 2006), as Value 410 mg/m3 205 mg/m3 2 mg/m3
2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) phosphoric acid %, prthophosphoric acid % CAS 7664-38-2) Netherlands. OELs per Annex XIII of amended Components nethyl methacrylate; methyl 2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) phosphoric acid %, prthophosphoric acid % CAS 7664-38-2) Norway. Regulation No. 1358 on Methyl 2-methylprop-2-enoate	TWA of Working Conditions Regula Type STEL TWA STEL TWA STEL TWA STEL	2 mg/m3 1 mg/m3 ation (Staatscourant no. 252, 29 December 2006), as Value 410 mg/m3 205 mg/m3 2 mg/m3 1 mg/m3
e-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) chosphoric acid %, orthophosphoric acid % CAS 7664-38-2) detherlands. OELs per Annex XIII of mended components nethyl methacrylate; methyl e-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6) chosphoric acid %, orthophosphoric acid % CAS 7664-38-2) dorway. Regulation No. 1358 on Monfection Groups for Biological Fac	TWA of Working Conditions Regula Type STEL TWA STEL TWA STEL TWA easures and Limit Values for ctors, as amended	2 mg/m3 1 mg/m3 ation (Staatscourant no. 252, 29 December 2006), as Value 410 mg/m3 205 mg/m3 2 mg/m3 1 mg/m3 Physical and Chemical Factors in Work Environment a

Components	Туре	Value	Form
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	400 mg/m3	
,		100 ppm	
	TLV	100 mg/m3	
		25 ppm	
Paraffin Wax (CAS 8002-74-2)	TLV	2 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	TLV	1 mg/m3	
zinc oxide (CAS 1314-13-2)	TLV	5 mg/m3	Respirable dust.
		5 mg/m3	Dust.
		10 mg/m3	Total dust.
Poland. Maximum permissible con	centrations and intensities o	of harmful factors in the work	environment (Dz.U.Poz.
1286/2018, Annex 1)			
Components	Туре	Value	Form
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	300 mg/m3	
	TWA	100 mg/m3	
Paraffin Wax (CAS 8002-74-2)	TWA	2 mg/m3	Inhalable fraction.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Inhalable fraction.
	TWA	5 mg/m3	Inhalable fraction.
Portugal. Decree-Law No. 24/2012, Components	Occupational Exposure Limi Type	it Values, Annex II, as amende Value	ed
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
Portugal. VLEs. Norm on occupati	-		_
Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	TWA	20 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Paraffin Wax (CAS 8002-74-2)	TWA	2 mg/m3	Fume.
ll	OTEL	0 / 0	

phosphoric acid ... %,

(CAS 7664-38-2)

orthophosphoric acid ... %

zinc oxide (CAS 1314-13-2)

STEL

TWA

STEL

TWA

3 mg/m3

1 mg/m3

10 mg/m3

2 mg/m3

Respirable fraction.

Respirable fraction.

Romania. OELs. Limit Values of Chemical Agents at Workplace (Regulation 1.218/2006, M.O 845, Annex 1, 3&4, as amended)

Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	STEL	45 mg/m3	
		13 ppm	
	TWA	30 mg/m3	
		8,5 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	410 mg/m3	
		100 ppm	
	TWA	205 mg/m3	
		50 ppm	
Paraffin Wax (CAS 8002-74-2)	STEL	6 mg/m3	Fume.
	TWA	2 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
•	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.

Slovakia. OELs. Maximum permissible exposure limits for chemical factors in workplace air (Regulation No 355/2006, Annex 1, Table 1, as amended)

Components	Туре	Value	Form
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Paraffin Wax (CAS 8002-74-2)	STEL	6 mg/m3	Fume.
	TWA	2 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	STEL	1 mg/m3	Respirable fume.
	TWA	1 mg/m3	Respirable fume.

Slovenia. OELs. Occupational Exposure Limits of Chemicals at Workplace (Reg. on Protection of Workers from Risks due to Exp. to Chemicals at Work, Annex I), as amended

Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	TWA	180 mg/m3	
		50 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	TWA	210 mg/m3	
		50 ppm	
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	TWA	10 mg/m3 1,25 mg/m3	Inhalable fraction. Respirable fraction.

Spain. OELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 1-Valores Límites Ambientales (VLAs)

Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	TWA	72 mg/m3	
		20 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Paraffin Wax (CAS 8002-74-2)	TWA	2 mg/m3	Fume.
ohosphoric acid %, orthophosphoric acid % CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.

Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	STEL	100 mg/m3	
		30 ppm	
	TWA	70 mg/m3	
		20 ppm	
nethyl methacrylate; methyl 2-methylprop-2-enoate; nethyl 2-methylpropenoate CAS 80-62-6)	Ceiling	400 mg/m3	
,		100 ppm	
	TWA	200 mg/m3	
		50 ppm	
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	Ceiling	2 mg/m3	
•	TWA	1 mg/m3	
rinc oxide (CAS 1314-13-2)	TWA	5 mg/m3	Total dust.
Switzerland. SUVA Grenzwerte an	n Arbeitsplatz: Aktuelle MAK-W	Verte	
Components	Туре	Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	STEL	360 mg/m3	
,		100 ppm	
	TWA	180 mg/m3	
		50 ppm	
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	420 mg/m3	
,		100 ppm	
	TWA	210 mg/m3	
		50 ppm	
Paraffin Wax (CAS	TWA	2 mg/m3	Respirable fume.

8002-74-2)

Components	erte am Arbeitsplatz: Aktuelle MA Type	Value	Form
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	4 mg/m3	Inhalable fraction.
,	TWA	2 mg/m3	Inhalable fraction.
zinc oxide (CAS 1314-13-2)	STEL	3 mg/m3	Respirable fume.
,	TWA	3 mg/m3	Respirable fume.
UK. OELs. Workplace Expos	sure Limits (WELs) (EH40/2005 (F Type	Fourth Edition 2020)), Table 1 Value	Form
methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)	STEL	143 mg/m3	
(6/16/10/11/1)		40 ppm	
	TWA	72 mg/m3	
		20 ppm	
methyl methacrylate; methyl	STEL	416 mg/m3	
2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	OTEL	TTO IIIg/IIIO	
		100 ppm	
	TWA	208 mg/m3	
		50 ppm	
Paraffin Wax (CAS 8002-74-2)	STEL	6 mg/m3	Fume.
	TWA	2 mg/m3	Fume.
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
zinc oxide (CAS 1314-13-2)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
EU. Indicative Exposure Lim Components	nit Values in Directives 91/322/EE Type	C, 2000/39/EC, 2006/15/EC, 2009/ Value	/161/EU, 2017/164/EU
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
phosphoric acid %, orthophosphoric acid % (CAS 7664-38-2)	STEL	2 mg/m3	
(0.10 1007-00-2)	TWA	1 mg/m3	
ogical limit values	No biological exposure limits note	ed for the ingredient(s).	
ommended monitoring cedures	Follow standard monitoring proce		
ved no effect levels ELs)	Not available.		
dicted no effect centrations (PNECs)	Not available.		
osure guidelines			
Croatia ELVs: Skin designat	tion		
methyl methacrylate; met methyl 2-methylpropenoa Denmark GV: Skin designat	te (CAS 80-62-6)	can be absorbed through the skin.	

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)

Can be absorbed through the skin.

Germany DFG MAK (advisory): Skin designation

N,N-dimethyl-p-toluidine; [1] N,N-dimethyl-m-toluidine; [2] Can be absorbed through the skin.

N,N-dimethyl-o-toluidine [3] (CAS 99-97-8)

Hungary OELs: Skin designation

methyl methacrylate; methyl 2-methylprop-2-enoate;

methyl 2-methylpropenoate (CAS 80-62-6)

Can be absorbed through the skin.

Iceland OELs: Skin designation

methyl methacrylate; methyl 2-methylprop-2-enoate;

methyl 2-methylpropenoate (CAS 80-62-6)

Can be absorbed through the skin.

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4) Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering

controls

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Use personal protective equipment as required. Personal protection equipment should be chosen **General information**

according to the CEN standards and in discussion with the supplier of the personal protective

equipment.

Eye/face protection

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection - Hand protection

Wear appropriate chemical resistant gloves.

Wear appropriate chemical resistant clothing.

Respiratory protection Thermal hazards

Chemical respirator with organic vapor cartridge and full facepiece. Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

When using do not smoke, Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

Environmental exposure

controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or

engineering modifications to the process equipment may be necessary to reduce emissions to

acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid. **Form** Paste. Off-white. Color Odor Fragrant

Melting point/freezing point

-54,4 °F (-48 °C) estimated

Boiling point or initial boiling point and boiling range

212,9 °F (100,5 °C) estimated

Not applicable. **Flammability** Upper/lower flammability or explosive limits

Explosive limit - lower (%) 2,1 % estimated 8,2 % estimated Explosive limit - upper (%)

50,0 °F (10,0 °C) estimated Flash point **Auto-ignition temperature** 815 °F (435 °C) estimated

Decomposition temperature Not available. Not available. pН Not available. Kinematic viscosity

Solubility

Not available. Solubility (water) Partition coefficient Not available.

(n-octanol/water) (log value)

Vapor pressure 51,33 hPa estimated

Density and/or relative density

Density 0,94 g/cm3 estimated

Not available. Vapor density Not available **Particle characteristics**

9.2. Other information

No relevant additional information available. 9.2.1. Information with regard

to physical hazard classes

9.2.2. Other safety characteristics 0,94 estimated Specific gravity

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials. Strong oxidizing agents. Nitrates. Peroxides.

10.5. Incompatible materials

10.6. Hazardous

No hazardous decomposition products are known.

decomposition products

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

May cause irritation to the respiratory system. Prolonged inhalation may be harmful. Inhalation

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of

occupational exposure.

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred **Symptoms**

> vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Not known.

Components **Species Test Results**

methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4)

Inhalation

LC50 Rat 7,1000000000000005 mg/l, 4 Hours

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (CAS 80-62-6)

Acute

Oral

LD50 7800 mg/kg Rat

phosphoric acid ... %, orthophosphoric acid ... % (CAS 7664-38-2)

Acute

Dermal

LD50 Rabbit 2740 mg/kg

Inhalation

LC50 Rabbit 1,6890000000000001 mg/l, 1 Hours

Oral

LD50 Rat 1530 mg/kg

zinc oxide (CAS 1314-13-2)

Acute

Inhalation

LC50 Mouse > 5,7000000000000000 mg/l, 4 Hours

Components **Species Test Results**

Oral

LD50 Rat > 5 g/kg

Causes skin irritation. Skin corrosion/irritation

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory sensitization Due to partial or complete lack of data the classification is not possible.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible.

Risk of cancer cannot be excluded with prolonged exposure. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

methyl methacrylate; methyl 2-methylprop-2-enoate;

3 Not classifiable as to carcinogenicity to humans.

methyl 2-methylpropenoate (CAS 80-62-6)

N,N-dimethyl-p-toluidine; [1] N,N-dimethyl-m-toluidine; [2] 2B Possibly carcinogenic to humans.

N,N-dimethyl-o-toluidine [3] (CAS 99-97-8)

Styrene/butadiene Copolymer (CAS 9003-55-8) 3 Not classifiable as to carcinogenicity to humans.

Due to partial or complete lack of data the classification is not possible. Reproductive toxicity

Specific target organ toxicity -

single exposure

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

Not applicable.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Mixture versus substance

information

No information available.

11.2. Information on other hazards

Endocrine disrupting

properties

This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than

0.1% by weight.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity Based on available data, the classification criteria are not met for hazardous to the aquatic

environment.

12.2. Persistence and

degradability

No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

methacrylic acid; 2-methylpropenoic acid 0.93 methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 1,38

2-methylpropenoate

Not available. **Bioconcentration factor (BCF)** 12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB

assessment

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation

(EC) No 1907/2006, Annex XIII.

12.6. Endocrine disrupting

properties

This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than

0.1% by weight.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation 12.7. Other adverse effects potential, endocrine disruption, global warming potential) are expected from this component.

12.8. Additional information

Estonia Dangerous substances in soil Data

phosphoric acid ... %, orthophosphoric acid ... %

(CAS 7664-38-2)

Chemical pesticides (As the total sum of the active substances)

0,5 MG/KG

Chemical pesticides (As the total sum of the active substances) 20

MG/KG

Chemical pesticides (As the total sum of the active substances) 5

MG/KG

Zinc (Zn) 1000 MG/KG

zinc oxide (CAS 1314-13-2) Material name: PLEXUS® MA830 Adhesive

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Dispose in accordance with all applicable regulations. Special precautions

SECTION 14: Transport information

ADR

14.1. UN number **UN1133**

ADHESIVES containing flammable liquid 14.2. UN proper shipping

name

14.3. Transport hazard class(es)

Class Subsidiary risk 3 Label(s) 30 Hazard No. (ADR) Tunnel restriction code D/E Ш 14.4. Packing group 14.5. Environmental hazards No.

14.6. Special precautions

Read safety instructions, SDS and emergency procedures before handling.

for user

RID

14.1. UN number **UN1133**

ADHESIVES containing flammable liquid 14.2. UN proper shipping

name

14.3. Transport hazard class(es)

3 Subsidiary risk 3 Label(s) 14.4. Packing group Ш 14.5. Environmental hazards No.

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

ADN

14.1. UN number **UN1133**

14.2. UN proper shipping ADHESIVES containing flammable liquid

14.3. Transport hazard class(es)

Class 3 Subsidiary risk 3 Label(s) Ш 14.4. Packing group 14.5. Environmental hazards No.

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

IATA

14.1. UN number **UN1133**

14.2. UN proper shipping Adhesives containing flammable liquid

name

14.3. Transport hazard class(es)

3 Class Subsidiary risk Ш 14.4. Packing group 14.5. Environmental hazards No. ERG Code 3L

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

Other information

Passenger and cargo A

aircraft

Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN1133

14.2. UN proper shipping ADHESIVES containing flammable liquid

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk 14.4. Packing group III
14.5. Environmental hazards

Marine pollutant No. EmS F-E, S-D

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

14.7. Maritime transport in bulk Not established.

according to IMO instruments



SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended zinc oxide (CAS 1314-13-2)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

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UFI:

Austria: NQ90-10TD-500P-KAXY Belgium: NQ90-10TD-500P-KAXY Bulgaria: NQ90-10TD-500P-KAXY Croatia: NQ90-10TD-500P-KAXY Cyprus: NQ90-10TD-500P-KAXY

Czech Republic: NQ90-10TD-500P-KAXY Denmark: NQ90-10TD-500P-KAXY Estonia: NQ90-10TD-500P-KAXY EU: NQ90-10TD-500P-KAXY Finland: NQ90-10TD-500P-KAXY France: NQ90-10TD-500P-KAXY Germany: NQ90-10TD-500P-KAXY Greece: NQ90-10TD-500P-KAXY Hungary: NQ90-10TD-500P-KAXY Iceland: NQ90-10TD-500P-KAXY Ireland: NQ90-10TD-500P-KAXY Italy: NQ90-10TD-500P-KAXY Latvia: NQ90-10TD-500P-KAXY Lithuania: NQ90-10TD-500P-KAXY Luxembourg: NQ90-10TD-500P-KAXY Malta: NQ90-10TD-500P-KAXY Netherlands: NQ90-10TD-500P-KAXY Norway: NQ90-10TD-500P-KAXY Poland: NQ90-10TD-500P-KAXY Portugal: NQ90-10TD-500P-KAXY Romania: NQ90-10TD-500P-KAXY

Slovakia: NQ90-10TD-500P-KAXY Slovenia: NQ90-10TD-500P-KAXY Spain: NQ90-10TD-500P-KAXY

Sweden: NQ90-10TD-500P-KAXY

Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered

methacrylic acid; 2-methylpropenoic acid (CAS 79-41-4) 75 Paraffin Wax (CAS 8002-74-2) phosphoric acid ... %, orthophosphoric acid ... % 75 (CAS 7664-38-2)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed

Other EU regulations Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances

Hazard categories in accordance with Regulation (EC) No 1272/2008

- P5a, b or c FLAMMABLE LIQUIDS

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Other regulations

Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation

(EC) No 1907/2006, as amended.

Young people under 18 years old are not allowed to work with this product according to EU **National regulations**

Directive 94/33/EC on the protection of young people at work, as amended. Follow national

regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

Contains a substance which is included on the TRGS 905 list of carcinogenic, germ cell mutagenic and reproductive toxic substances

zinc oxide (CAS 1314-13-2) Anorganische Faserstäube, soweit nicht erwähnt (ausgenommen

Gipsfasernund Wollastonitfasern)

France regulations

France INRS Table of Occupational Diseases

methyl methacrylate; methyl 2-methylprop-2-enoate;

methyl 2-methylpropenoate (CAS 80-62-6)

Paraffin Wax (CAS 8002-74-2)

Affections provoquées par le méthacrylate de méthyle 82

Affections provoquées par les huiles et graisses d'origine minérale

ou de synthèse 36

Product registration number

Austria UFI: NQ90-10TD-500P-KAXY **Belgium** UFI: NQ90-10TD-500P-KAXY

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SDS FIL

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Czech Republic UFI: NQ90-10TD-500P-KAXY **Denmark** UFI: NQ90-10TD-500P-KAXY **European Union** UFI: NQ90-10TD-500P-KAXY **Finland** UFI: NQ90-10TD-500P-KAXY UFI: NQ90-10TD-500P-KAXY France Germany UFI: NQ90-10TD-500P-KAXY Greece UFI: NQ90-10TD-500P-KAXY UFI: NQ90-10TD-500P-KAXY Hungary UFI: NQ90-10TD-500P-KAXY Italy UFI: NQ90-10TD-500P-KAXY Netherlands UFI: NQ90-10TD-500P-KAXY Norway **Poland** UFI: NQ90-10TD-500P-KAXY **Portugal** UFI: NQ90-10TD-500P-KAXY UFI: NQ90-10TD-500P-KAXY Slovakia UFI: NQ90-10TD-500P-KAXY Slovenia **Spain** UFI: NQ90-10TD-500P-KAXY UFI: NQ90-10TD-500P-KAXY Sweden **Switzerland** UFI: NQ90-10TD-500P-KAXY

15.2. Chemical safety

assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).

CAS: Chemical Abstract Service.

CEN: European Committee for Standardization. IATA: International Air Transport Association.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous

Chemicals in Bulk.

Not available

IMDG: International Maritime Dangerous Goods.

MAC: Maximum Allowed Concentration.

MARPOL: International Convention for the Prevention of Pollution from Ships.

PBT: Persistent, bioaccumulative and toxic.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short term exposure limit. TLV: Threshold Limit Value. TWA: Time Weighted Average. VLE: Exposure Limit Value. VME: Exposure Average Value.

vPvB: Very persistent and very bioaccumulative.

References

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements, which are not written out in full under sections 2 to 15

H225 Highly flammable liquid and vapor.

H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

H330 Fatal if inhaled. H331 Toxic if inhaled.

H335 May cause respiratory irritation. H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Revision information

Vone

Training information Disclaimer

Follow training instructions when handling this material.

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

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