

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 11 Feb 2020

Print date: 11 Mar 2020

Version: 1



## Pluracryl Press / Xpress Flüssigkeit

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

#### 1.1. Product identifier

Trade name/designation:

**Pluracryl Press / Xpress Flüssigkeit**

Article No.:

235984 - 235986; 235989; 247228; 247229; 236000 - 236002; 236005; 247224 - 24725

Additional information:

Liquid component

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

Use of the substance/mixture:

Manufacturing of dental products.

#### 1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

**Pluradent AG & Co.KG**

Kaiserleistrasse 3  
63067 Offenbach a.M.  
Germany

**Telephone:** +49 69 82983-0

**Telefax:** +49 69 82938-271

**E-mail:** regulatory.affairs@pluradent.de

**Website:** www.pluradent.de

#### 1.4. Emergency telephone number

Poisoning Information Centre of Health Austria, 24h: +43 1 406 43 43

poison emergency call Mainz, 24h: +49 (0) 6131/19240

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids ( <i>Flam. Liq. 2</i> )	H225: Highly flammable liquid and vapour.	On basis of test data.
Skin corrosion/irritation ( <i>Skin Irrit. 2</i> )	H315: Causes skin irritation.	Calculation method.
Respiratory or skin sensitisation ( <i>Skin Sens. 1</i> )	H317: May cause an allergic skin reaction.	Calculation method.
STOT-single exposure ( <i>STOT SE 3</i> )	H335: May cause respiratory irritation.	Calculation method.

#### 2.2. Label elements

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

Hazard pictograms:



**GHS02**  
Flame



**GHS07**  
Exclamation mark

Signal word: Danger



JUJXUet p



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 11 Feb 2020

Print date: 11 Mar 2020

Version: 1



## Pluracryl Press / Xpress Flüssigkeit

### Hazard components for labelling:

methyl methacrylate

#### hazard statements for physical hazards

H225 Highly flammable liquid and vapour.

#### hazard statements for health hazards

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

#### Supplemental hazard information

EUH208 Contains tetramethylene dimethacrylate, methyl methacrylate. May produce an allergic reaction.

#### Precautionary Statements Prevention

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

#### Precautionary Statements Response

P302 + P352 IF ON SKIN: Wash with plenty of water/....

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

#### Precautionary Statements Storage

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

### 2.3. Other hazards

#### Other adverse effects:

Results of PBT and vPvB assessment :

PBT - not applicable

vPvB - not applicable

## SECTION 3: Composition / information on ingredients

### 3.2. Mixtures

#### Description:

Mixture based on methyl methacrylate.

#### Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 80-62-6 EC No.: 201-297-1	<b>methyl methacrylate</b> Flam. Liq. 2, STOT SE 3, Skin Irrit. 2, Skin Sens. 1 <b>Danger</b> H225-H315-H317-H335	90 - < 95 Wt %
CAS No.: 2082-81-7 EC No.: 218-218-1	<b>tetramethylene dimethacrylate</b> Skin Sens. 1B H317	5 - < 10 Wt %

Full text of H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information:

Remove contaminated, saturated clothing. If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended.

#### Following inhalation:

Provide fresh air. Get medical advice/attention if you feel unwell.



JUJXUet p



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

**Revision date:** 11 Feb 2020

**Print date:** 11 Mar 2020

**Version:** 1



## Pluracryl Press / Xpress Flüssigkeit

### In case of skin contact:

Wash immediately with: Polyethylene glycol 400 After contact with skin, wash immediately with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention.

Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

### After eye contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. If eye irritation persists: Get medical advice/attention.

### After ingestion:

Rinse mouth. Let water be drunk in little sips (dilution effect). Get medical advice/attention if you feel unwell. Observe risk of aspiration if vomiting occurs.

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

Skin corrosion/irritation

Allergic reactions

Irritation to respiratory tract

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media:

Carbon dioxide (CO<sub>2</sub>), alcohol resistant foam, Extinguishing powder, Water spray jet

#### Unsuitable extinguishing media:

Full water jet

### 5.2. Special hazards arising from the substance or mixture

Flammable, Vapours can form explosive mixtures with air.

Airtight containers can burst explosively when heated.

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit

### 5.4. Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

##### Personal precautions:

Remove persons to safety.

Remove all sources of ignition. Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Avoid contact with skin, eyes and clothes.

##### Protective equipment:

Use personal protection equipment.

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

Flame-retardant protective clothing. Wear anti-static footwear and clothing

#### 6.1.2. For emergency responders

##### Personal protection equipment:

Personal protection equipment: see section 8

### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

Do not allow to enter into surface water or drains.



JUJXUet p



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 11 Feb 2020

Print date: 11 Mar 2020

Version: 1



## Pluracryl Press / Xpress Flüssigkeit

### 6.3. Methods and material for containment and cleaning up

#### For containment:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).  
Treat the recovered material as prescribed in the section on waste disposal.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Protective measures

##### Advices on safe handling:

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.  
Do not breathe gas/fumes/vapour/spray.

##### Fire prevent measures:

Keep away from sources of ignition - No smoking.  
Take precautionary measures against static discharges.  
Vapours can form explosive mixtures with air.

##### Advices on general occupational hygiene

When using do not eat, drink or smoke.  
Avoid contact with eyes and skin.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### Hints on storage assembly:

Do not store together with: Oxidizing agent, Pyrophoric or self-heating substances

**Storage class:** 3 - Flammable liquids

### 7.3. Specific end use(s)

#### Recommendation:

Manufacturing of dental products.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① long-term occupational exposure limit value ② short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
IOELV (EU)	methyl methacrylate CAS No.: 80-62-6	① 50 ppm ② 100 ppm
MAK (AT)	methyl methacrylate CAS No.: 80-62-6	② 100 ppm (420 mg/m <sup>3</sup> ) ⑤ (max. 8x5 min./Schicht, Momentanwert)
MAK (AT)	methyl methacrylate CAS No.: 80-62-6	① 50 ppm (210 mg/m <sup>3</sup> )
TRGS 900 (DE)	methyl methacrylate CAS No.: 80-62-6	① 50 ppm (210 mg/m <sup>3</sup> ) ② 100 ppm (420 mg/m <sup>3</sup> )



JUJXUref p



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 11 Feb 2020

Print date: 11 Mar 2020

Version: 1



## Pluracryl Press / Xpress Flüssigkeit

### 8.1.2. Biological limit values

No data available

### 8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
methyl methacrylate CAS No.: 80-62-6	208 mg/m <sup>3</sup>	① DNEL worker ② inhalative, long-term, systemic
methyl methacrylate CAS No.: 80-62-6	17 mg/kg bw/day	① DNEL worker ② dermal, long-term, systemic

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Do not breathe gas/fumes/vapour/spray.

#### 8.2.2. Personal protection equipment

##### Eye/face protection:

Wear eye protection/face protection.

##### Skin protection:

Tested protective gloves must be worn EN ISO 374

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

As splash protection gloves made of the following materials are suitable: Butyl caoutchouc (butyl rubber) 0,7 mm

##### Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

##### Other protection measures:

Remove contaminated, saturated clothing immediately.

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

When using do not eat, drink, smoke, sniff.

#### 8.2.3. Environmental exposure controls

Do not allow to enter into surface water or drains.

### 8.3. Additional information

No further relevant information available.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

Physical state: Liquid

Colour: colourless

Odour: characteristic

#### Safety relevant basis data

parameter		at °C	Method	Remark
pH	<i>not determined</i>			
Melting point	-48 °C			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	100.5 °C			
Decomposition temperature	<i>not determined</i>			
Flash point	10 °C			
Evaporation rate	<i>not determined</i>			



JUJXUet p



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 11 Feb 2020

Print date: 11 Mar 2020

Version: 1



## Pluracryl Press / Xpress Flüssigkeit

parameter		at °C	Method	Remark
Auto-ignition temperature	421 °C			
Upper/lower flammability or explosive limits	2.1 - 12.5 Vol-%			
Vapour pressure	36 hPa	20 °C		
Vapour density	3.5	20 °C		
Density	0.949 g/cm <sup>3</sup>	15.5 °C		
Bulk density	<i>not determined</i>			
Water solubility	12.5 g/l	20 °C		
Partition coefficient: n-octanol/water	1.38			
Dynamic viscosity	0.53 mPa*s	20 °C		
Kinematic viscosity	<i>not determined</i>			

### 9.2. Other information

No further relevant information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Highly flammable liquid and vapour.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

### 10.5. Incompatible materials

Polymerisation catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidising agents. Oxides and salts of transition metals.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
80-62-6	methyl methacrylate	<b>LD<sub>50</sub> oral:</b> >5,000 mg/kg (Rat) OECD 401 <b>LD<sub>50</sub> dermal:</b> >5,000 mg/kg (Rabbit) <b>LC<sub>50</sub> Acute inhalation toxicity (vapour):</b> >29.8 mg/l (Rat)
2082-81-7	tetramethylene dimethacrylate	<b>LD<sub>50</sub> oral:</b> >5,000 mg/kg (Rat) <b>LD<sub>50</sub> dermal:</b> >3,000 mg/kg (Rabbit)

#### Acute oral toxicity:

Based on available data, the classification criteria are not met.

#### Acute dermal toxicity:

Based on available data, the classification criteria are not met.



JUJXUet p



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

**Revision date:** 11 Feb 2020

**Print date:** 11 Mar 2020

**Version:** 1



## Pluracryl Press / Xpress Flüssigkeit

### Acute inhalation toxicity:

Based on available data, the classification criteria are not met.

### Skin corrosion/irritation:

Causes skin irritation.

Based on available data, the classification criteria are not met.

### Serious eye damage/irritation:

Causes serious eye damage.

Causes serious eye irritation.

Based on available data, the classification criteria are not met.

### Respiratory or skin sensitisation:

May cause an allergic skin reaction. Contains tetramethylene dimethacrylate, methyl methacrylate. May produce an allergic reaction.

### Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

### Carcinogenicity:

Based on available data, the classification criteria are not met.

### Reproductive toxicity:

Based on available data, the classification criteria are not met.

### STOT-single exposure:

May cause respiratory irritation.

### STOT-repeated exposure:

Based on available data, the classification criteria are not met.

### Aspiration hazard:

Based on available data, the classification criteria are not met.

### Additional information:

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

## SECTION 12: Ecological information

### 12.1. Toxicity

CAS No.	Substance name	Toxicological information
80-62-6	methyl methacrylate	<b>LC<sub>50</sub>:</b> >79 mg/l 4 d (Oncorhynchus mykiss (Rain bow trout)) OECD 203 <b>EC<sub>50</sub>:</b> >69 mg/l 2 d (Daphnia magna (Big water flea)) OECD 202 <b>NOEC:</b> 37 mg/l 21 d (Daphnia magna (Big water flea)) OECD 202 <b>ErC<sub>50</sub>:</b> >110 mg/l 3 d (Selenastrum capricornutum) OECD 201
2082-81-7	tetramethylene dimethacrylate	<b>LC<sub>50</sub>:</b> 32.5 mg/l 4 d (Oncorhynchus mykiss (Rain bow trout)) <b>EC<sub>50</sub>:</b> 7.51 mg/l 2 d (Daphnia magna (Big water flea)) OECD 211 <b>NOEC:</b> 7.51 mg/l (Selenastrum capricornutum)

### Aquatic toxicity:

Acute (short-term) fish toxicity

### 12.2. Persistence and degradability

#### Biodegradation:

Biodegradable.



JUJXUaf p





# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 11 Feb 2020

Print date: 11 Mar 2020

Version: 1



## Pluracryl Press / Xpress Flüssigkeit

### 12.3. Bioaccumulative potential

CAS No.	Substance name	Log K <sub>OW</sub>	Bioconcentration factor (BCF)
80-62-6	methyl methacrylate	1.38	
2082-81-7	tetramethylene dimethacrylate	3.1	

#### Partition coefficient: n-octanol/water:

1.38

#### Accumulation / Evaluation:

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment is unlikely.

### 12.4. Mobility in soil

No adsorption in soil or sediment.

### 12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
80-62-6	methyl methacrylate	—
2082-81-7	tetramethylene dimethacrylate	—

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Other adverse effects

No further relevant information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

#### 13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

#### Waste code product:

07 02 08 \* other still bottoms and reaction residues





\*: Evidence for disposal must be provided.

#### Waste treatment options

#### Appropriate disposal / Package:

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1. UN-No.</b>			
UN 1247	UN 1247	UN 1247	UN 1247
<b>14.2. UN proper shipping name</b>			
METHYL METHACRYLATE MONOMER, STABILIZED	METHYL METHACRYLATE MONOMER, STABILIZED	METHYL METHACRYLATE MONOMER, STABILIZED	METHYL METHACRYLATE MONOMER, STABILIZED
<b>14.3. Transport hazard class(es)</b>			
 3	 3	 3	 3



JUJXUet p





# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 11 Feb 2020

Print date: 11 Mar 2020

Version: 1



## Pluracryl Press / Xpress Flüssigkeit

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.4. Packing group</b>			
II	II	II	II
<b>14.5. Environmental hazards</b>			
No	No	No	No
<b>14.6. Special precautions for user</b>			
<b>Special provisions:</b> 386 <b>Limited quantity (LQ):</b> 1 L <b>Excepted Quantities (EQ):</b> E2 <b>Hazard identification number (Kemler No.):</b> 339 <b>Classification code:</b> F1 <b>tunnel restriction code:</b> (D/E) <b>Remark:</b>	<b>Special provisions:</b> 386 <b>Limited quantity (LQ):</b> 1 L <b>Excepted Quantities (EQ):</b> E2 <b>Classification code:</b> F1 <b>Remark:</b>	<b>Special provisions:</b> 386 <b>Limited quantity (LQ):</b> 1 L <b>Excepted Quantities (EQ):</b> E2 <b>EmS-No.:</b> F-E, S-D <b>Remark:</b>	<b>Special provisions:</b> A209 <b>Excepted Quantities (EQ):</b> E2 <b>Remark:</b>

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
No data available

## SECTION 15: Regulatory information

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

#### 15.1.1. EU legislation

##### Authorisations:

Information on VOC Directive 2004/42/EC: + Directive 2010/75/EU on industrial emissions : 90% (854,1 g/l)

##### Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:

- P5c Flammable liquids of Categories 2 or 3, not covered by P5a and P5b

#### 15.1.2. National regulations

##### [DE] National regulations

##### Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

##### Störfallverordnung

##### for substances contained in the product:

Hazard categories:

- P5c Flammable liquids of Categories 2 or 3, not covered by P5a and P5b

##### Water hazard class (WGK)

##### WGK:

1 - schwach wassergefährdend



JUJXUet p .....\$



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 11 Feb 2020

Print date: 11 Mar 2020

Version: 1



## Pluracryl Press / Xpress Flüssigkeit

### Relevante arbeitsmedizinische Vorschriften

May cause an allergic skin reaction.

### 15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### 16.1. Indication of changes

No data available

### 16.2. Abbreviations and acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road)

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

IMDG - International Maritime Dangerous Goods

IATA - International Air Transport Association

IATA-DGR - Dangerous Goods Regulations for the Transport of Dangerous Goods by IATA.

ICAO - International Civil Aviation Organization

ICAO-TI - Technical Instructions For The Safe Transport of Dangerous Goods by Air

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

EINECS - European Inventory of Existing Commercial Chemical Substances

ELINCS - European List of Notified Chemical Substances

CAS - Chemical Abstracts Service

LC50 - Lethal concentration, 50 %

LD50 - Lethal Dose, 50 %

EC50 - Effective Concentration 50%

### 16.3. Key literature references and sources for data

No data available

### 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids ( <i>Flam. Liq. 2</i> )	H225: Highly flammable liquid and vapour.	On basis of test data.
Skin corrosion/irritation ( <i>Skin Irrit. 2</i> )	H315: Causes skin irritation.	Calculation method.
Respiratory or skin sensitisation ( <i>Skin Sens. 1</i> )	H317: May cause an allergic skin reaction.	Calculation method.
STOT-single exposure ( <i>STOT SE 3</i> )	H335: May cause respiratory irritation.	Calculation method.

### 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

### 16.6. Training advice

No data available

### 16.7. Additional information

The information is based on the current state of our knowledge, but they do not constitute an assurance of product properties and do not establish a contractual relationship.

The information only describes the safety requirements of the product (s) and is based on our current state of knowledge.



JUJXUet p

