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

1.1. Product identifier

Impact Filler

Further trade names

Impact-Filler
Résine de finition
Resina de acabado

UFI: R2Y6-6AM7-K9JW-SCHC

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

Use of the substance/mixture

UV Windscreen adhesive

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	PMA/TOOLS GmbH
Street:	Siemensring 42
Place:	D-47877 Willich - Germany
Telephone:	+49 2154 922230
E-mail:	info@pma-tools.de
Contact person:	Labor
E-mail:	msds@pma-tools.de (Please DO NOT use for requesting Safety Data Sheets.)
Internet:	www.pma-tools.de
Responsible Department:	Laboratory

1.4. Emergency telephone number:

Telephone number of the company in case of emergencies (24 h):
+49 (0) 700 / 24 112 112 (PMR)
+1 872 5888271 (PMR)

Emergency information services / official advisory body:
<UK> National Poisons Information Service (24 h): 0870 600 6266 (UK only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Acute Tox. 4; H302
Acute Tox. 4; H312
Skin Irrit. 2; H315
Eye Dam. 1; H318
Skin Sens. 1; H317
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

N,N-dimethyl-2-propenoic acid amide
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate (Isobornyl acrylate)
2-(phosphonooxy)ethyl methacrylate
Bis(methacryloyloxyethyl) hydrogen phosphate

Signal word: Danger

Pictograms:

Hazard statements

H302+H312	Harmful if swallowed or in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing vapour.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing and eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P312	Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of the following substances with non-hazardous additions.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
2680-03-7	N,N-dimethyl-2-propenoic acid amide			25 - < 30 %
	220-237-5			
	Acute Tox. 3, Acute Tox. 3, Eye Dam. 1; H311 H301 H318			
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate (Isobornyl acrylate)			15 - < 20 %
	227-561-6		01-2119957862-25	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1B, STOT SE 3, Aquatic Chronic 1; H315 H319 H317 H335 H410			
	Urethane acrylate resin			15 - < 20 %
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
24599-21-1	2-(phosphonooxy)ethyl methacrylate			1 - < 5 %
	246-342-6			
	Skin Irrit. 2, Eye Dam. 1; H315 H318			
32435-46-4	Bis(methacryloyloxyethyl) hydrogen phosphate			1 - < 5 %
	251-040-2			
	Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 3; H315 H319 H412			
84434-11-7	Bis(methacryloyloxyethyl) hydrogen phosphate			< 1 %
	282-810-6			
	Skin Sens. 1B, Aquatic Chronic 2; H317 H411			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
2680-03-7	220-237-5	N,N-dimethyl-2-propenoic acid amide	25 - < 30 %
	dermal: ATE = 300 mg/kg; oral: ATE = 100 mg/kg		
5888-33-5	227-561-6	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate (Isobornyl acrylate)	15 - < 20 %
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = 4890 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. Never give anything by mouth to an unconscious person or a person with cramps.
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical advice immediately. If unconscious but breathing normally, place in recovery position and seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids

apart and consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). When in doubt or if symptoms are observed, get medical advice.

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

No information available.

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

Foam. Carbon dioxide (CO2). Extinguishing powder. Water spray jet.
Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO2), Gases/vapours, toxic

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe gas/vapour/aerosol.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Wear personal protection equipment (refer to section 8).
Remove all sources of ignition.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Clear contaminated areas thoroughly. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

SECTION 7: Handling and storage
See section 8. Use personal protection equipment.
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. See section 8.
Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse. Used working clothes should not be worn outside the work area. Street clothing should be stored separately from work clothing.
Keep away from food, drink and animal feedingstuffs.

Further information on handling

See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep container dry.

Hints on joint storage

Avoid: Oxidising agent

Further information on storage conditions

Protect against: Light. UV-radiation/sunlight. Heat. Cold. Humidity

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate (Isobornyl acrylate)			
Worker DNEL, long-term		dermal	systemic	1,39 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	4,9 mg/m³
Consumer DNEL, long-term		oral	systemic	0,83 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,83 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,45 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate (Isobornyl acrylate)	
Freshwater		0,001 mg/l
Freshwater (intermittent releases)		0,007 mg/l
Marine water		0 mg/l
Freshwater sediment		0,145 mg/kg
Marine sediment		0,015 mg/kg
Soil		0,029 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles. EN 166

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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.

Wear suitable gloves. (EN 374).
Recommended material: Butyl caoutchouc (butyl rubber)
Thickness of the glove material: >= 0,5 mm
Breakthrough time:: Index No. 2, > 30 Min. / Index No. 6, > 480 Min.
Replace when worn.

Skin protection

Use personal protection equipment.
When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. (89/686/EWG).
Recommended protective clothing articles: compliant EN 14605 / EN 13982

Respiratory protection

Usually no personal respirative protection necessary. Provide adequate ventilation as well as local exhaustion at critical locations. In case of inadequate ventilation wear respiratory protection. (Combination filtering device, Filter type: A) (EN 140, EN 136), (EN 14387)

Thermal hazards

Exothermic reaction with: UV-radiation/sunlight.

Environmental exposure controls

Do not allow to enter into surface water or drains. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless
Odour:	characteristic
Odour threshold:	No data available

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flash point:	70 °C

Flammability

Solid/liquid:	No data available

Explosive properties

not explosive according to EU A.14

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value:	not applicable
Viscosity / dynamic:	7500 mPa·s
Viscosity / kinematic:	No data available
Water solubility:	practically insoluble

Solubility in other solvents

No data available

Partition coefficient n-octanol/water:	No data available
Density:	1,1 g/cm³
Particle characteristics:	not applicable

9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:	not determined

Further Information

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The substance is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.
Exothermic reaction with: UV-radiation/sunlight

10.4. Conditions to avoid

Protect against: Light. UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidising agent, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO2), Gases/vapours, toxic

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Harmful if swallowed.
Harmful in contact with skin.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
2680-03-7	N,N-dimethyl-2-propenoic acid amide					
	oral	ATE mg/kg	100			
	dermal	ATE mg/kg	300			
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate (Isobornyl acrylate)					
	oral	LD50 mg/kg	4890	Rat		
	dermal	LD50 mg/kg	> 5000	Rabbit		

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate (Isobornyl acrylate); Bis(methacryloyloxyethyl) hydrogen phosphate)

Carcinogenic/mutagenic/toxic effects for reproduction

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

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

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.

Information on likely routes of exposure

Dermal, inhalation

Specific effects in experiment on an animal

No information available.

Practical experience

No information available.

11.2. Information on other hazards

Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate (Isobornyl acrylate)						
	Acute fish toxicity	LC50	1,8 mg/l	96 h	Danio rerio (zebrafish)		
	Acute algae toxicity	ErC50	2,7 mg/l	96 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50	1,1 mg/l	48 h	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.
The waste key according to the European Waste Catalogue (EWC number) refers to the real wastes origin and therefore is not product- but use-oriented. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Recommendation: EAK 080409

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: not applicable

14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

14.1. UN number or ID number: not applicable

14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

14.1. UN number or ID number: not applicable

14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: not applicable

14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of these transport regulations.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s):
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

Abbreviations and acronyms

ADN: Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways).
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
ATE: Acute Toxicity Estimate.
AwSV: Anlagenverordnung wassergefährdender Stoffe (Regulation on facilities handling substances dangerous to water).
BGI: Berufsgenossenschaftliche Informationen (trade association information).
BGR: Berufsgenossenschaftliche Regeln (trade association regulation).

CAS: Chemical Abstracts Service.
CEN: Comité Européen de Normalisation European (Committee for Standardization).
CLP: Classification, Labelling and Packaging of substances and mixtures (REGULATION (EC) No 1272/2008).
DIN: Deutsches Institut für Normung (German institute for standardization).
DMEL: Derived Minimum Effect Level.
DNEL: Derived No Effect Level.
EC: European Community.
EC50: Half maximal effective concentration.
ECHA: European Chemicals Agency.
EG: Europäische Gemeinschaft (European Community).
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
EN: European Norms.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IATA-DGR: International Air Transport Association - Dangerous Goods Regulations.
IBC: Intermediate Bulk Container.
IC50 / ErC50: Inhibitory concentration, 50 %.
ICAO-TI: International Civil Aviation Organization - Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Code for Dangerous Goods.
ISO: International Organization for Standardization.
IUPAC: International Union for Pure and Applied Chemistry.
LC50: Lethal concentration, 50 %.
LD50: Lethal dose, 50 %.
log Kow (Pow): Partition coefficient n-octanol/water.
LQ: Limited Quantities.
MARPOL: International Convention for the Prevention of Marine Pollution from Ships.
OECD: Organisation for Economic Co-operation and Development.
PBT: persistent, bioaccumulative and toxic.
PNEC: Predicted No Effect Concentration.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006).
RID: Règlement concernant le transport International ferroviaire de marchandises Dangereuses (Regulation concerning the International Carriage of Dangerous Goods by Rail).
SVHC: Substances of Very High Concern.
STOT - RE: Specific Target Organ Toxicity - Repeated Exposure.
STOT - SE: Specific Target Organ Toxicity - Single Exposure.
TRGS: Technische Regel für Gefahrstoffe (technical guideline for the handling of hazardous materials).
UFI: Unique Formula Identifier.
UN: Untited Nations.
VOC: Volatile organic compounds.
vPvB: very persistent and very bioaccumulative.
WGK: Wassergefährdungsklasse (water hazard class).

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302+H312	Harmful if swallowed or in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)