



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### modell spray

Revision date: 27.04.2017

Product code: 10236

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#### Pictograms:



#### Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

#### Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

PMMA resin with mixture of solvents in propellant (liquefied butane gas)

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
141-78-6	ethyl acetate			40 - < 45 %
	205-500-4	607-022-00-5	02-2119752482-38	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
79-20-9	methyl acetate			5 - < 10 %
	201-185-2	607-021-00-X	02-2119752526-34	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
8006-64-2	turpentine, oil (see turpentine oil)			< 1 %
	232-350-7	650-002-00-6		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Asp. Tox. 1, Aquatic Chronic 2; H226 H332 H312 H302 H315 H319 H317 H304 H411			

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

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**After contact with skin**

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

**After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**After ingestion**

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Do not induce vomiting. If you feel unwell, seek 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**

Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

**Unsuitable extinguishing media**

Water.

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

Extremely flammable aerosol. Vapours can form explosive mixtures with air.

**5.3. Advice for firefighters**

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

**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**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

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

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****Advice on safe handling**

Do not pierce or burn, even after use. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

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#### Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

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

##### Requirements for storage rooms and vessels

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

##### Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances. Do not store with flammable liquids, flammable solid substances or desensitised substances, spontaneously flammable substances, substances liberating flammable gases in contact with water, combustible liquids.

##### Further information on storage conditions

Keep only in the original container in a cool, dry and well-ventilated place, away from foodstuffs.

#### 7.3. Specific end use(s)

Aerosol for the model cast technique.  
For use by trained specialist staff.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
141-78-6	Ethyl acetate	200	734		TWA (8 h)	WEL
		400	1468		STEL (15 min)	WEL
79-20-9	Methyl acetate	200	616		TWA (8 h)	WEL
		250	770		STEL (15 min)	WEL
8006-64-2	Turpentine	100	566		TWA (8 h)	WEL
		150	850		STEL (15 min)	WEL

#### 8.2. Exposure controls

##### Appropriate engineering controls

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

##### Protective and hygiene 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 or drink.

##### Eye/face protection

Suitable eye protection: goggles.

##### 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. Suitable are gloves of the following material: Butyl caoutchouc (butyl rubber), FKM

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(fluoro rubber)

**Skin protection**

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

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

**SECTION 9: Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

Physical state:	liquefied gas with liquid and solid parts, compressed
Colour:	colourless
Odour:	faintly like esters

**Test method**

pH-Value:	not determined
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**Changes in the physical state**

Melting point:	not determined
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Initial boiling point and boiling range:	not determined
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Flash point:	<-10 °C	DIN 51755
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**Flammability**

Solid:	not applicable
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Gas:	not applicable
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Lower explosion limits:	1,5 vol. %
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Upper explosion limits:	8,5 vol. %
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Ignition temperature:	365 °C	DIN 51794
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**Auto-ignition temperature**

Solid:	not applicable
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Gas:	not applicable
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Decomposition temperature:	not determined
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**Oxidizing properties**

Not oxidizing.

Vapour pressure: (at 70 °C)	9000 hPa
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Density (at 15 °C):	0,73 g/cm <sup>3</sup>	DIN 51757
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Water solubility:	insoluble
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**Solubility in other solvents**

not determined

Partition coefficient:	not determined
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Vapour density:	not determined
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Evaporation rate:	not determined
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**9.2. Other information**

Solid content:	not determined
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**SECTION 10: Stability and reactivity**
**10.1. Reactivity**

Extremely flammable aerosol.

**10.2. Chemical stability**

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The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

Reacts with : flammable, spontaneously flammable and combustible substances. Prevent any contact of the product with strong oxidising agents, such as chlorine or concentrated oxygen.

#### 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. Higher temperatures advance the formulation of explosive vapour-air mixtures, therefore don't expose the product to increased temperatures.

#### 10.5. Incompatible materials

No information available.

#### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
141-78-6	ethyl acetate				
	oral	LD50 mg/kg	5620	Rat	GESTIS
	dermal	LD50 mg/kg	>18000	Rabbit	GESTIS
79-20-9	methyl acetate				
	oral	LD50 mg/kg	>5000	Rat	GESTIS
	dermal	LD50 mg/kg	>5000	Rabbit	GESTIS
	inhalation (4 h) vapour	LC50 mg/l	49-98	Rat	
8006-64-2	turpentine, oil (see turpentine oil)				
	oral	LD50 mg/kg	5760	Rat	GESTIS
	dermal	ATE mg/kg	1100		
	inhalation vapour	ATE	11 mg/l		
	inhalation aerosol	ATE	1,5 mg/l		

##### Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

##### Sensitising effects

May cause an allergic skin reaction. (turpentine, oil (see turpentine oil))

##### Carcinogenic/mutagenic/toxic effects for reproduction

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

##### STOT-single exposure

May cause drowsiness or dizziness. (ethyl acetate)

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#### 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 on tests

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

## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
141-78-6	ethyl acetate					
	Acute fish toxicity	LC50 328 mg/l	96 h	Pimephales promelas (fathead minnow)	GESTIS	
	Acute algae toxicity	ErC50 mg/l 2500	96 h		GESTIS	
	Acute crustacea toxicity	EC50 679 mg/l	48 h	Daphnia magna (Big water flea)	GESTIS	
79-20-9	methyl acetate					
	Acute fish toxicity	LC50 320 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 mg/l >120	72 h	Desmodesmus subspicatus.	OECD 201	
	Acute crustacea toxicity	EC50 mg/l 1027	48 h	Daphnia magna (Big water flea)	OECD 202	

### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
141-78-6	ethyl acetate			
	OECD 301D/ EEC 92/69/V, C.4-E	>70%	28	

### 12.3. Bioaccumulative potential

The product has not been tested.

### 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

Not identified as PBT/ vPvB substances

### 12.6. Other adverse effects

No information available.

### Further information

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.

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**Contaminated packaging**

Completely emptied packages can be recycled.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

<b>14.1. UN number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS
<b>14.3. Transport hazard class(es):</b>	2
<b>14.4. Packing group:</b>	-
Hazard label:	2.1
Classification code:	5F
Limited quantity:	1 L/ 30 kg
Transport category:	2
Tunnel restriction code:	D

**Other applicable information (land transport)**

Flammable gas

**Marine transport (IMDG)**

<b>14.1. UN number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS
<b>14.3. Transport hazard class(es):</b>	2.1
<b>14.4. Packing group:</b>	-
Hazard label:	2.1
Marine pollutant:	-
Limited quantity:	1000 mL/ 30 kg
Excepted quantity:	E0
EmS:	F-D, S-U

**Other applicable information (marine transport)**

Flash point: <-10°C c.c.

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS, flammable
<b>14.3. Transport hazard class(es):</b>	2.1
<b>14.4. Packing group:</b>	-
Hazard label:	2.1
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

**Other applicable information (air transport)**

Flammable gas

**14.6. Special precautions for user**

Warning: Flammable gases.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable



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## 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 28: butane

#### Additional information

Aerosol directive (75/324/EEC).

#### National regulatory information

Employment restrictions:

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

Water hazard class (D):

1 - slightly hazardous to water

Skin resorption/Sensitization:

Causes allergic hypersensitivity reactions.

### 15.2. Chemical safety assessment

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

## SECTION 16: Other information

### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally 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%

### Relevant H and EUH statements (number and full text)

H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

### Further Information

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.

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