

MATERIAL SAFETY DATA SHEET

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1. Chemical Product Identification

Product name: Forestacryl Powder
Product code: 401-0010, 401-0020, 403-0010, 403-0011,
403-0030, 404-0010
Chemical family:
Chemical name: Polymer, based on methyl metacrylate

2. Composition / Information on Ingredients

Chemical Identifier	CAS-Nr.	%	MAC (mg/m ³)
Polymethyl -methacrylat	9011-14-7	> 99	Na.
Accelerator	94-36-0	<1	5
Colour agents :			
- organic pigments			
- ferro oxide	1309-37-1		
- titan oxide	13463-67-7		

3. Hazards Identification

Routes of entry: Methyl methacrylate is absorbed into body by inhalation and swallowing of the powder
Carcinogenicity : Non listed by IARC, OSHA, ACIGH, NTP as carcinogens
Maximum concentration at workplace (MAC) The accelerator has a MAC value 5 mg/ m³, in case of dust formation MAC value is 10mg/m³
Effects short term Non of the components is hazardous to health or environment. Avoid dust formation because of the mechanical irritation of the eyes and respiratory system.
Effects long term, repeat exposure Repeat and prolonged overexposure may cause permanent allergic skin rashes.

4. First Aid Measures

Effects and Symptoms
Inhalation : Remove to fresh air, rest , sit half way up . Get medical help if discomfort persist.
Ingestion : Wash out the mouth and give water drink
Skin Contact: Wash thoroughly with soap and water
Eye contact: Flush thouroughly with water 15 minutes

5. Fire Fighting Measures

Flash point	n.a.
Explosion limits: air vol. %	Lower : not determined upper : not determined
Decomposition temperature :	>240 °C
Extinguisher method :	Useful: Water- mist , foam, powder and carbon dioxide Not useful : Direct jet of water
Hazardous decomposition products:	On thermal treatment irritating acrylic monomers like methyl methacrylate max be formed. Maximum concentrations at workplace for methyl methacrylate: 50 mg/m ³
Hazardous reactions:	Polymethyl methacrylate does not react, so far known, with other kinds of chemical products. Avoid build up of dust as there can be risk of dust explosion.

6. Accidental Release Measures

Leakage / spillage:	Sweep up the powder and transfer to a container for disposal or recovery. Spillage's present a slipping hazard. See point 13 for disposal of the powder.
Personal precautions:	See point 8. personal protection.
Environmental precautions	See point 12 for information concerning the environment.

7. Handling and Storage

<u>Handling precautions:</u>	Work in a well ventilated place. Avoid dust formation. Keep the powder away from sources of ignition, no open fire.
Safe storage conditions:	Store in fireproof location. In a cool dark place.
Protection against fire and explosion.	Avoid dust formation. Take measures against build- up of electrostatic charges. Keep away from sources of ignition, no open fire.

8. Exposure control / Personal protection

Respiratory system	In case of dust formation; local exhaust ventilation or an adequate mask with a filter useful for small dust particles.
Hands	Wear suitable gloves polyvinyl alcohol or latex gloves. (PVA is soluble in water!)
Eyes	Protecting glasses
Industrial hygiene:	If dust formation is out of question, no special procedures are necessary. Just follow the standards of good industrial hygiene.

9. Physical and chemical properties

Appearance:	Powder
Colour:	Clear or pink
Odor :	Faint ester like
pH-Wert: (20°C)	n.a.
Boiling point/range:	n.a.
Melting point/range:	>240°C
Flash point:	n.a.
Decomposition temperature:	>240°C
Lower explosive limits in air:	not determined
Upper explosive limits in air:	not determined
Oxidizing properties:	n.a.
Vapor pressure:	n.a.
Vapor density: (Air =1)	1.10-1.18 g /cm ³ (at 20°C)
Solubility in water:	insoluble (at 20°C)
Viscosity:	n.a.
Other Data:	n.a.

10. Stability and Reactivity

Stability:	Stable under normal conditions. Powder decomposes at temperature higher than 240°C
Hazardous reactions:	Polymethyl metacrylate does not react ,so far known, with other kinds of chemical products. Avoid build up of dust as there can be a risk of dust explosion. Keep away from: open flame and sources of ignition.
Hazardous decomposition Products:	On thermal treatment irritating acrylic monomers, like methacrylate may be formed. Maximum concentrations at workplace for methyl methacrylate : 50 mg/ cm ³ ..

11. Toxicological information

According to literature: The powder has a very low oral toxicity. However dust may cause physical abrasion or irritation to skin and eyes.

Accelerator

Acute toxicity - Oral :	LD50 (rat): 5000 mg/kg
Acute toxicity - Inhalation	LD50 (rat): 24,3 mg /l/ 4 hours
Skin irritation :	Non irritating.
Eye irritation:	Irritating. On thermal treatment irritating acrylic monomers like methyl methacrylate , may be formed.

Methyl Methacrylate :

Acute toxicity - Oral :	LD50 (rat): 7872 mg/kg
Acute toxicity – Dermal:	LD50 (rabbit): > 9400 mg/kg
Acute toxicity – Inhalation	LC50 (rat, 4 hour): 7093 ppm/ 4 hours
Human patch test :	Approximate one third of subjects developed mild redness at site of application. Twenty person show sensitivity when tested 10 days later.

12. Ecological information

The product should not be allowed to drain into sewers.

13. Disposal considerations

Methods of disposal	Disposal according to the local legislation.
Contaminated packaging	Keep waste packaging separate. Because of possible pollution, remove as industrial waste or hazardous waste.

14. Transportation information

UN no.:	n.a.
Transport by land :	n.a.
Un no. rail / road	n.a.
GGVS:	n.a.
ADR:	n.a.
GGVE:	n.a.
RID:	n.a.
GGVS:/ ADR note:	n.a.
GGVE / RID-Note	n.a.
Tank lorry RN 10500:	n.a.
Packing group land:	n.a.

Transport through the air :	
UN no./ ID no.	n.a.
ICAO /IATA	n.a.
Technical name :	n.a.
Packing group air :	n.a.

Transport by sea:	
UN no. Sea	n.a.
IMDG / GGV See code:	n.a.
EmS:	n.a.
MFAG:	n.a.
Technical name:	n.a.
Packing group sea :	n.a.

Transport by inland waterways:	
ADNR:	n.a.
ADNR category	n.a.
Note inland waterways :	n.a.

Further information :

EC registration list hazardous material : Accelerator 617-008-00-0

15. Regulatory information / Labels:

Polymers are not hazardous to health or environment and does not fall under special labelling classification for dangerous and hazardous products.

Hazard category : n.a.
Risk phrases: n.a.
Safety phrases : n.a.

National regulations No additional national regulations are known to the supplier

16. Other information

When the powder is repacked in smaller containers , make sure that all containers shall be clearly marked with following information :

- Type , Class and Colour of material
- Batch reference number
- Expire date

All information is based on the present state of knowledge and experience

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