

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

1.1. Product identifier

FLAMRO BMA, FLAMRO BMS, FLAMRO BMK with film preservation **1.2. Relevant identified uses of the substance or mixture and uses advised against**

Use of the substance/mixture

FLAMRO BMA: brush-on and spray-on ablative coating FLAMRO BMS: fire protection filler material FLAMRO BMK: fire protection filler material filled in cartridges

1.3. Details of the supplier of the safety data sheet

Company name:	FLAMRO Brandschutz-Systeme GmbH
Street:	Am Sportplatz 2
Place:	D-56291 Leiningen
Telephone	+49 (0) 6746 9410-0
Telefax	+49 (0) 6746 9410-10
e-mail:	info@flamro.de

Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone number: +49 (0) 6132 / 84463 (GBK GmbH)

Further Information

License number: Z-19.11-1299 License number: Z-19.11-1300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

R phrases: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

Hazard categories: Hazardous to the aquatic environment: Aquatic Chronic 3 Hazard Statements: Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard statements

H412

Harmful to aquatic life with long lasting effects.

Precautionary statements P273 Avoi

Avoid release to the environment.

2.3. Other hazards

Do not rub eyes - contains inorganic fillers, which irritate the eyes mechanically like other inert materials.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Complex mixture based on: aqueous plastic dispersion having an inorganic filler and flame retardants. The product contains: dry-film preservative



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Hazardous components

EC No	Chemical name	Quantity	
CAS No	Classification according to Directive 67/548/EEC		
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No			
911-815-4	Reaction mass of propylene oxide and phosphorus oxychloride	1 - < 5 %	
1244733-77-4	Xn - Harmful R22		
	Acute Tox. 4; H302		
01-2119486772-26			
212-950-5	Terbutryn	< 0,025 %	
886-50-0	N - Dangerous for the environment R50-53		
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410		

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothes and wash before re-use.

After inhalation

Take affected person into fresh air. Consult a physician.

After contact with skin

In case of contact with skin wash off immediately with plenty of water.

After contact with eyes

Do not rub eyes - contains inorganic fillers, which irritate the eyes mechanically like other inert materials. Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

After ingestion

Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Consult a physician.

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

Not known.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product itself does not burn. Use fire fighting measures that suit the environment and products stored.

5.2. Special hazards arising from the substance or mixture

None

5.3. Advice for firefighters

In case of fire, wear suitable respiratory equipment with positive air supply.

Additional information

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes, skin or mucous membrane.

6.2. Environmental precautions

Do not discharge large amounts into the drains or bodies of water.



6.3. Methods and material for containment and cleaning up

Pick up mechanically, avoiding dust, and provide disposal in suitable recipients.

6.4. Reference to other sections

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. No special measures necessary if used correctly.

Advice on protection against fire and explosion

No special precautions required.

Further information on handling

Take the usual precautions when handling with chemicals.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Advice on storage compatibility

No special storage conditions required.

Further information on storage conditions

Keep from freezing. Aqueous composition.

7.3. Specific end use(s)

FLAMRO BMA: brush-on and spray-on ablative coating FLAMRO BMS: fire protection filler material FLAMRO BMK: fire protection filler material filled in cartridges

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
1317-65-3	Calcium carbonate, respirable	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
9004-34-6	Cellulose (pure), respirable	-	4		TWA (8 h)	WEL
1		-	-		STEL (15 min)	WEL
13463-67-7	Titanium dioxide, respirable	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Protective and hygiene measures

Take the usual precautions when handling with chemicals. Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke.

Eye/face protection

Tightly fitting goggles (EN 166).

Hand protection

Chemical-resistant gloves (EN 374). Safety gloves for the site (EN420, Cat. 1 or 2).

Follow the recommendations of the glove manufacturer for breakthrough properties especially for workplace conditions involving mechanical stress and contact duration.



Not required under normal use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	BMS,BMK=Putties, BMA=Coatable and sprayable compound		
Colour:	White		
Odour:	Odourless		
pH-Value (at 20 °C):	approx. 8		
Density (at 20 °C):	1,55 +/- 0,07 g/cm³	DIN EN ISO 2811-1	
Water solubility:	Completely miscible		
Explosive properties:	The product is not explosive. Aqueous composition.		
Oxidizing properties:	normally flammable, Construc	normally flammable, Construction material class: DIN 4102-B2	

9.2. Other information

Non-volatile components: 66,0 - 76,0 % (DIN EN ISO 3251, 3h, 105°C) Mass loss by heating: 31,0 % </= MVdE </= 41,0% (400°C, 0,5h) Critical oxygen index (LOI): 65,0 % < LOI < 68,0 % (ca. 1,5 mm dicke Probe) Flexibility: >/= 6 mm Dorndurchmesser (Dornbigeversuch, ca. 1,5 mm dicke Probe) FLAMRO BMA: Viscosity: approx. 200 dPas (Haake Viscotester VT-02, 20 - 22°C) FLAMRO BMS, FLAMRO BMK: Viscosity: 800dPas, 20 - 22°C (Putties)

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat. Keep from freezing.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

Health injuries are not known or expected under normal use.

Acute toxicity

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

Irritation and corrosivity

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

Contact with eyes may cause irritation. Do not rub eyes - contains inorganic fillers, which irritate the eyes mechanically like other inert materials.

Sensitising effects

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

Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons.

STOT-single exposure

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

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Severe effects after repeated or prolonged exposure

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Aspiration hazard

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

Further information

Classification in compliance with the assessment procedure specified in the EC guidelines 1999/45/EC.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

12.2. Persistence and degradability

Not determined

12.3. Bioaccumulative potential

Not determined

12.4. Mobility in soil

Negligible

12.5. Results of PBT and vPvB assessment

Not determined

12.6. Other adverse effects

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information

Do not flush into surface water or sanitary sewer system. Low hazard to waters.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

080409

Do not discharge into the drains/surface waters/ground water. The waste code number must be agreed with the disposer / manufacturer / competent authority. Waste disposal according to local regulations.

Waste disposal number of waste from residues/unused products

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 dangerous substances Classified as hazardous waste.

Contaminated packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

Land transport (ADR/RID); Marine transport (IMDG); Air transport (ICAO); Inland waterways transport (ADN)

14.1. UN number:

Not applicable. No hazardous material as defined by the transport regulations.

14.2. UN proper shipping name:

Not applicable. No hazardous material as defined by the transport regulations.

14.3. Transport hazard class(es):

Not applicable. No hazardous material as defined by the transport regulations.

14.4. Packing group:

Not applicable. No hazardous material as defined by the transport regulations.

14.5. Environmental hazards

Not applicable. No hazardous material as defined by the transport regulations.

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14.6. Special precautions for user

Not applicable. No hazardous material as defined by the transport regulations. 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable. No hazardous material as defined by the transport regulations.

SECTION 15: Regulatory information

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

EU regulatory information

1999/13/EC (VOC):

0 %

National regulatory information

Employment restrictions:

Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Additional information

Switzerland-Customs tariff number: 3206.1900 - Pigment Titanium dioxide (approx. 6%) 3907.2090 - Polyether (approx. 0,1%) 3901.3000 - Ethylene / vinylacetate copolymer (approx. 23,5%)

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

Changes in chapter: 2, 3, 15, 16

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant R-phrases (Number and full text)

- Harmful if swallowed. 22
- 50 Very toxic to aquatic organisms.
- 53 May cause long-term adverse effects in the aquatic environment.

Relevant H- and EUH-phrases (Number and full text)

- Harmful if swallowed. H302
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- Harmful to aquatic life with long lasting effects. H412

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

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The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)