

# Safety Data Sheet



according to Regulation (EC) No 1907/2006

## FLAMRO BMA, FLAMRO BMS, FLAMRO BMK

Revision date: 05.01.2018

Product code: 00150-0006

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

#### **1.1. Product identifier**

FLAMRO BMA, FLAMRO BMS, FLAMRO BMK

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

#### **1.4. Emergency telephone**

INTERNATIONAL: +49 (0) 6132 / 84463 (GBK GmbH, Ingelheim)

##### **number:**

NATIONAL: In England and Wales: 111, In Scotland: 111

#### **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**

##### **Regulation (EC) No. 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

#### **2.2. Label elements**

##### **Additional advice on labelling**

The product does not require a hazard warning label in accordance with EC directives.

#### **2.3. Other hazards**

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

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.



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### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
1244733-77-4	Phosphorous oxychloride, reaction products with propylene oxide			1 - < 5 %
	911-815-4			
	Acute Tox. 4; H302			

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

### Further Information

Biocidal-Regulation (EC) No. 528/2012 :

„Contains the biocidal active substance for product preservation purposes (BIT, MIT)“

## 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

Health injuries are not known or expected under normal use.

### 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.



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### 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.

##### **Hints on joint storage**

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/m <sup>3</sup>	fibres/ml	Category	Origin
1317-65-3	Calcium carbonate, respirable	-	4		TWA (8 h)	WEL
9004-34-6	Cellulose (pure), respirable	-	4		TWA (8 h)	WEL
13463-67-7	Titanium dioxide, respirable	-	4		TWA (8 h)	WEL



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### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
1317-65-3	calcium carbonate			
Worker DNEL, long-term		inhalation	systemic	10 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	10 mg/m <sup>3</sup>
Consumer DNEL, acute		dermal	systemic	6,1 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	6,1 mg/kg bw/day

### PNEC values

CAS No	Substance	Value
1317-65-3	calcium carbonate	
Micro-organisms in sewage treatment plants (STP)		100 mg/l

## 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.

### Skin protection

Protective clothing

### Respiratory protection

Not required under normal use.

## SECTION 9: Physical and chemical properties

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

Physical state: according to product specification

Colour: White

Odour: Odourless

pH-Value (at 20 °C): approx. 8

### Changes in the physical state

Melting point: Not applicable

Initial boiling point and boiling range: No data available

Sublimation point: No data available

### Test method



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Softening point: Not applicable

Flash point: Not applicable

Sustaining combustion: Not sustaining combustion

### Flammability

Solid: Not applicable

### Explosive properties

The product is not explosive. Aqueous composition.

Lower explosion limits: Not applicable

Upper explosion limits: Not applicable

Ignition temperature: Not applicable

### Auto-ignition temperature

Solid: No data available

Decomposition temperature: No data available

### Oxidizing properties

normally flammable, Construction material class: DIN 4102-B2

Vapour pressure: No data available

Density (at 20 °C): 1,55 +/- 0,07 g/cm<sup>3</sup> DIN EN ISO 2811-1

Water solubility: Completely miscible

### Solubility in other solvents

No data available

Partition coefficient: No data available

Viscosity / dynamic: No data available

Viscosity / kinematic: No data available

Flow time: No data available

Vapour density: No data available

## 9.2. Other information

Physical state:

FLAMRO BMA: brush-on and spray-on ablative coating

FLAMRO BMS: fire protection filler material

FLAMRO BMK: fire protection filler material filled in cartridges

Non-volatile components: 66,0 - 76,0 % (DIN EN ISO 3251, 3h, 105°C)

Mass loss by heating: 31,0 % <math>\leq</math> MVdE <math>\leq</math> 41,0% (400°C, 0,5h)

Critical oxygen index (LOI): 65,0 % <math><</math> LOI <math><</math> 68,0 % (ca. 1,5 mm thick sample)

Flexibility: >= 6 mm Mandrel diameter (Bend test, ca. 1,5 mm thick sample)

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.



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**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****Toxicokinetics, 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.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1244733-77-4	Phosphorous oxychloride, reaction products with propylene oxide				
	oral	LD50 500 - 2000 mg/kg	Rat (male)		
	dermal	LD50 > 2000 mg/kg	Rat (male)	OECD 402 / EU B.3	
	inhalation (4 h) aerosol	LC50 > 7 mg/l	Rat	OECD 403 / 433	

**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.

**Carcinogenic/mutagenic/toxic effects for reproduction**

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.

**SECTION 12: Ecological information**

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**12.1. Toxicity**

Ecological data are not available.

CAS No	Chemical name						
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method	
1244733-77-4	Phosphorous oxychloride, reaction products with propylene oxide						
	Acute fish toxicity	LC50	51 mg/l	96 h	Pimephales promelas		
	Acute crustacea toxicity	EC50	131 mg/l	48 h	Daphnia magna	OECD 202	

**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**

Low hazard to waters.

**Further information**

Do not flush into surface water or sanitary sewer system.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

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**

080410 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 other than those mentioned in 08 04 09

**Waste disposal number of contaminated packaging**

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

**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.

Cleaning agent: Water

**SECTION 14: Transport information****Land transport (ADR/RID)****14.1. UN number:** No dangerous good in sense of this transport regulation.**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

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**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN)

**14.1. UN number:** No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)

**14.1. UN number:** No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

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

**14.1. UN number:** No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

## SECTION 15: Regulatory information

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

#### EU regulatory information

2010/75/EU (VOC): 0 g/l

2004/42/EC (VOC): 0 g/l

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

#### Additional information

Switzerland-Customs tariff number (AS 2008 1765, SR 814.01 (VOCV)):

3206.1900 - Pigment Titanium dioxide (approx. 60 g/kg)

3907.2090 - Polyether (approx. 1 g/kg)

3901.3000 - ethylene / vinylacetate copolymer (approx. 235 g/kg)

France: Information on the level of the emission of volatile substances in the ambient air that pose a toxic risk when inhaled, on a scale from A + (very low emissions) to C (high emissions). (Décret n° 2011-321): A+

#### National regulatory information

Employment restrictions: 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.

Water contaminating class (D): 1 - slightly water contaminating





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### 15.2. Chemical safety assessment

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

## SECTION 16: Other information

### Changes

Update 2018

### Abbreviations and acronyms

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (Agreement concerning the international carriage of Dangerous goods by Road)

IMDG-Code: International Maritime Code for Dangerous Goods

ICAO: International Civil Aviation Organisation (IATA: The International Air Transport Association)

GHS: Globally Harmonized System of Classification, Labelling and Packaging of Chemicals

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

H302 Harmful if swallowed.

### 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.

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)

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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.)*

