

# Material Safety Data Sheet

## PM Xeramic Radiator Flush

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product name** : PM Xeramic Radiator Flush  
**Article number** : 20201  
**Manufacturer / Supplier** : Petromark Automotive Chemicals BV  
 Lijndenweg 25a  
 PO Box 294  
 1940 AG Beverwijk  
 The Netherlands  
 +31 (0)251 211397

**Further information obtainable from** : Research & Development / r.tetteroo@petromark.nl  
**Information in case of Emergency** : Tel: +31(0)251-211397 (only at office hours 9:00 - 17:30)

### 2. HAZARDS IDENTIFICATION

**Health and Safety** : According to EU-directive 99/45/EC not classified.  
**Environment** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredient	CAS-nr	EINECS	w/w %	symbol	R-phrases
Amines, tallow alkyl, ethoxylated	61791-26-2 (polymer)	500-153-8 (NLP)	<2.5	Xn,N	22-38-41-50/53

(\* Explanation risk-phrases: see chapter 16)

### 4. FIRST AID MEASURES

**General Advice** : The usual precautions for handling chemicals should be observed. If any symptoms should occur, seek medical advice.  
**Contact with eyes** : If substance has got into eyes, immediately wash out with plenty of water.  
**Contact with skin** : Wash with water and soap.  
**Inhalation** : Inhalation is unlikely to occur.  
**Ingestion** : If swallowed accidentally, do not induce vomiting and seek medical advice.

### 5. FIRE-FIGHTING MEASURES

**Flash point without propellant** : none.  
**Explosion limits** : upper limit: not available.  
 lower limit: not available.  
**Extinguishing media** : not applicable.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions** : It is advisable to take precautions to avoid contact with skin and eyes when handling the product.  
**Environmental precautions** : Do not allow to enter public sewers and watercourses.  
**Cleaning methods** : Wash spill site with water and detergent.

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#### 7. HANDLING AND STORAGE

- Handling procedures** : The usual precautions for handling chemicals should be observed.  
Avoid contact with skin and eyes.
- Storage procedures** : Store frost free.  
Keep out of reach of children.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Personal protection** : It is advisable to take precautions to avoid contact with skin and eyes when handling the product.
- Hands and skin** : Wear suitable protective gloves.
- Eyes** : Wear safety goggles.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Apperance:**
- physical state** : liquid
  - colour** : colourless
  - odour** : odourless
  - Melting point/range** : 0 °C
  - Boiling point/range** : 100 °C
  - Relative density** : 1.00 g/cm<sup>3</sup> (@ 20°C)
  - pH** : 9.5 – 10.5
  - Vapour pressure** : not available
  - Relative vapour density** : not available
  - Solubility in water** : Soluble in water
  - Flash point** : none
  - Auto-ignition** : not available
  - Viscosity** : not available
  - Evaporation rate** : not applicable

#### 10. STABILITY AND REACTIVITY

- Conditions to be avoided** : Reacts with acids.
- Materials to be avoided** : None.
- Hazardous decomposition compounds** : No hazardous decomposition products known.

#### 11. TOXICOLOGICAL INFORMATION

- Skin contact** : Mildly irritant.
- Eye contact** : Mildly irritating to eyes.
- Other information** : No experimental data available.

#### 12. ECOLOGICAL INFORMATION

- Degradability** : The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC)No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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<b>Hazardous ingredient</b>	CAS-nr	method	
amines, tallow alkyl, ethoxylated	61791-26-2 (polymer)	LC50 fish	0.13 mg/l
		EC50 daphnia	0.17 mg/l

**Other adverse effects** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Do not allow to enter public sewers and watercourses.

#### 13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation

#### 14. TRANSPORT INFORMATION

**Road/Rail - ADR/RID** : Not classified.  
**Sea - IMDG** : Not classified.  
**Air - IATA/ICAO** : Not classified.

#### 15. REGULATORY INFORMATION

**Risk-phrase(s)** : R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
**Safety-phrase(s)** : S2: Keep out of the reach of children.  
S24/25: Avoid contact with skin and eyes.  
S35: This material and its container must be disposed of in a safe way.  
**Regulation (EC) No 648/2004 on Detergents** : cationic surfactants < 5 % benzisothiazolinone

#### 16. OTHER INFORMATION

**Relevant R-Phrases listed in Heading 2 & 3** : R22: Harmful if swallowed.  
R38: Irritating to skin.  
R41: Risk of serious damage to eyes.  
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
**Further information** : r.tetteroo@petromark.nl  
**Revision Indicators** : None.

The contents and format of this MSDS are in accordance with Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

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