

# Safety data sheet

according to 1907/2006/EC, Article 31





Printing date 22.06.2011

Revision: 21.06.2011

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

- **Product identifier**
- **Trade name: BITUAL**
- **Relevant identified uses of the substance or mixture and uses advised against**  
No relevant identified uses-mixture of substances.
- **Application of the substance / the preparation** Bituminous aluminium paint.
- **Details of the supplier of the safety data sheet**  
BM BITOUMINOUS MIXTURES A.E.  
PRODUCTION OF BITOUMINOUS MIXTURES  
15th km. Old National Road. Thessaloniki – Veria  
AG.ATHANASIOS THESSALONIKI  
Adress: P.O.BOX: 1715, 570 08 IONIA THESSALONIKI  
tel: +302310 710017  
FAX: 2310 710016  
e-mail: info@bitumix.gr
- **Further information obtainable from:** BM BITOUMINOUS MIXTURES A.E.
- **Emergency telephone number:** National Poisoning Centre

## 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
 Xn; Harmful  
 R63-65: Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed.  
 N; Dangerous for the environment  
 R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R10-67: Flammable. Vapours may cause drowsiness and dizziness.
- **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**  
  Xn Harmful  
 N Dangerous for the environment
- **Hazard-determining components of labelling:**  
naphtha (petroleum), hydrodesulfurized  
heavy toluene
- **Risk phrases:**  
10 Flammable.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
63 Possible risk of harm to the unborn child. 65 Harmful: may cause lung damage if swallowed.  
67 Vapours may cause drowsiness and dizziness.

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- **Safety phrases:**

- 2 Keep out of the reach of children.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 36/37 Wear suitable protective clothing and gloves.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

- **Other hazards**

- **Results of PBT and vPvB assessment**













- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture: consisting of the following components.

- **Dangerous components:**

CAS: 64742-82-1	naphtha (petroleum), hydrodesulfurized heavy  Xn R65;  N R51/53 R10-66-67	15-30%
	 Flam. Liq. 3, H226;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  STOT SE 3, H336	
CAS: 108-88-3 EINECS:203-625-9	toluene  Xn R48/20-63-65;  Xi R38;  F R11 R67 Repr. Cat. 3	13-23%
	 Flam. Liq. 2, H225;  Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304;  Skin Irrit. 2, H315; STOT SE 3, H336	

### 4 First aid measures

- **Description of first aid measures**

- **General information:**

Take affected persons out into the fresh air. Seek immediate medical advice.

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:**

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Seek immediate medical advice.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Firefighting measures

- **Suitable extinguishing agents:** CO<sub>2</sub>, extinguishing powder, sand, foam

- **For safety reasons unsuitable extinguishing agents:**

Water with full jet

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- Water spray
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**  
Fireproof suit with helmet ( EN 469,533,1486) and self breathing apparatus( EN 137)
- **Additional information**  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water.  
Do not allow to penetrate the ground/soil.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Do not flush with water or aqueous cleansing agents
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Prevent any seepage into the ground.  
Provide ventilation for receptacles.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

<b>Ingredients with limit values that require monitoring at the workplace:</b>	
<b>108-88-3toluene</b>	WEL Short-term value: 384 mg/m <sup>3</sup> , 100 ppm Long-term value: 191 mg/m <sup>3</sup> , 50 ppm Sk

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- **Additional Occupational Exposure Limit Values for possible hazards during processing:**

- cas 64742-82-1 naphtha hydrodesulfurised heavy TWA 500 ppm

- cas 64742-93-4 asphalt oxidized TWA 5mg/m<sup>3</sup>

- **Additional information:** The lists valid during the making were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.

- Wash hands before breaks and at the end of work.

- **Respiratory protection:**



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **Protection of hands:**

- Wear suitable gloves ( EN 374, 388, 407, 420)

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

- The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

- **Eye protection:**



Safety glasses

- **Body protection:**

- Wear suitable protective clothing and chemicals proof boots ( EN 340, 365, 466, 467)



Use protective suit.

In case of release wear PVC apron( EN 345)

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- Form:** Liquid

- Colour:** Black

- **Odour:** like organic solvents

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Melting point/Melting range:** Undetermined.

- **Boiling point/Boiling range:**
- **Flash point:** 22°C

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· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	>300°C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b> Lower: Upper:	Not determined. Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density at 25°C:</b>	0.94 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Insoluble.
· <b>Segregation coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b> Dynamic: Kinematic:	Not determined. Not determined.
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Stable at environment temperature.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

#### 64742-82-1naphtha (petroleum), hydrodesulfurized heavy

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5.5/ 4h mg/l (rat)

#### 108-88-3toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

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- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

### 12 Ecological information

- **Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:** The product contains materials that are harmful to the environment.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**



Smaller quantities can be disposed of with household waste.



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact manufacturer for recycling information.

- **Uncleaned packaging:**
- **Recommendation:**  
Disposal must be made according to official regulations.  
Packaging may be reused or recycled after cleaning.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 30
- **UN-Number:** 1999
- **Packaging group:** III
- **Hazard label:** 3
- **Special marking:** Symbol (fish and tree)
- **UN proper shipping name:** 1999 TARS, LIQUID, ENVIRONMENTALLY HAZARDOUS

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· Tunnel restriction code D/E

· Maritime transport IMDG:



- IMDG Class: 3
- UN Number: 1999
- Label 3 · Packaging group: III
- EMS Number: F-E, S-E
- Marine pollutant: Yes Symbol (fish and tree)
- Proper shipping name: TARS, LIQUID

· Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 3
- UN Number: 1999
- Label 3
- Packaging group: III
- Proper shipping name: TARS, LIQUID

· Environmental hazards:

Product contains environmentally hazardous substances: naphtha (petroleum), hydrodesulfurized heavy

· Special precautions for user Warning: Flammable liquids.

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

## 15 Regulatory information

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

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:



Xn Harmful  
N Dangerous for the environment

· Hazard-determining components of labelling:

naphtha (petroleum), hydrodesulfurized heavy toluene

· Risk phrases:

- 10 Flammable.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 63 Possible risk of harm to the unborn child.
- 65 Harmful: may cause lung damage if swallowed.
- 67 Vapours may cause drowsiness and dizziness.

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- **Safety phrases:**

- 2 Keep out of the reach of children.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 36/37 Wear suitable protective clothing and gloves.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- H361d Suspected of damaging the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.
- R10 Flammable.
- R11 Highly flammable.
- R38 Irritating to skin.
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R63 Possible risk of harm to the unborn child.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

- **Department issuing MSDS:**

Sustchem Engineering LTD  
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 11251  
 Athens Greece  
 Tel: +302108252510-14  
 e-mail: [info@suschem.gr](mailto:info@suschem.gr)

- **Contact:** BM BITOUMINOUS MIXTURES A.E.

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