

BITUMINOUS ROAD MATERIALS

Conforms to Regulation (EC) No. 1907/2006
(REACH), Annex II and SI 2019:758 (UK REACH)

Version 5 Revision Date 14.6.2021

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

1.1 Product identifiers

Product name: Bituminous Road Materials
UFI:

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Hot and cold road surfacing,
resurfacing and top dressing material

1.3 Details of the supplier of the safety data sheet

Company: Aggregate Industries UK Ltd.
Bardon Hall
Copt Oak Road
Markfield
Leicestershire
LE67 9PJ
United Kingdom

Telephone: 01530 510006 (General Technical Enquiries)

1.4 Emergency phone number:

UK National Poisons Information Service 0344 892 0111
(Health professionals only)
Ireland National Poisons Information Centre (01) 809 2566

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not classified as hazardous according to Regulation (EC)
No.1272/2008:

This product may contain low levels of respirable crystalline silica within the aggregates present in the material but the bituminous binder will prevent these from being an inhalation hazard. If the product is drilled, cut, sawn, crushed or broken up this may release dust which may contain respirable crystalline silica. When used as heated material the main hazards will be due to the elevated temperatures of products. Fumes from heated materials may contain traces of hydrogen sulphide from the bitumen binder.

2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Blended material containing natural and recycled aggregates, filler, sand, performance additives and a viscous bituminous binder.

| Component | Classification | Concentration |
|--|------------------------------------|---------------|
| Asphalt | | |
| CAS-No. 8052-42-4 | [-] | <10% |
| EC-No. 232-490-9 | | |
| Registration No. 01-2119480172-44--xxxx | | |
| Crystalline Silica (respirable fraction) | | |
| CAS-No. 14808-60-7 | STOT-RE 1, H372i | <5% |
| EC-No. 238-878-4 | | |
| Registration No. [-] | | |
| Hydrogen sulphide | | |
| CAS-No. 7783-06-4 | Flam Gas 1, H220 Acute tox.2, H330 | Trace amounts |
| EC-No. 231-977-3 | Aquatic Acute 1, H400 | |
| Registration No. 01-2119445737-29-xxxx | | |

For the full text of the H-Statements mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled: Product at ambient temperatures will not cause an inhalation risk. If vapours from heated material are breathed in, move person into fresh air. If not breathing, give artificial respiration. If recovery is not rapid call for prompt medical attention. Show this safety data sheet to medical personnel.

In case of skin contact: In case of exposure remove contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. If irritation persists, obtain prompt medical attention. In case of thermal burns do not attempt to peel set material from skin, treat symptomatically and obtain prompt medical attention.

In case of eye contact: If molten material enters the eye obtain immediate medical attention. For cool material, irrigate with water for at least 15 minutes; take care not to wash material from one eye to another. If irritation persists, obtain medical attention.

If swallowed: Ingestion of significant quantities of material that could cause harm is very unlikely. If material enters the mouth, do not induce vomiting. Give plenty of water to drink. Seek medical attention if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

The product when properly handled is not dangerous for the human health. Harmful effects are expected only in case of misuse. The main danger will be from thermal burns from hot molten material.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media - Suitable extinguishing media

Use media such as alcohol/aqueous foam, dry chemical, or water fog. Do not use direct water jets or carbon dioxide as extinguishers. Cool affected containers with flooding quantities of water if it is safe to do so.

5.2 Special hazards arising from the substance or mixture

Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Inclusion of water into molten material may allow pockets of superheated steam to form which may cause an explosion.

5.3 Advice for firefighters

Do not breathe decomposition products and fumes. Use approved self-contained breathing apparatus. Wear fire retardant clothing. Do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus. Use water spray to cool containers. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

5.4 Further information

No data available.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, dusts or fumes and excessive skin contamination. Ensure adequate ventilation. Take care to avoid contact with hot or molten material. Use suitable personal protective equipment (refer to Section 8 for details).

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses. Discharge into the environment must be avoided. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

6.3 Methods and materials for containment and cleaning up

Spray with water to prevent the generation of dust. Do not dry sweep residues. Contain so as to avoid the generation of dust (i.e., cover or enclose). If hot allow material to cool. Scrape up and place in container to await transfer. Recycle and reuse material where possible.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use heavy duty gloves. Avoid skin contact and inhalation of dusts. For heated material avoid inhalation of vapour, or fumes. Thermal burns can result from accidental contact of heated material with skin or eyes. Wear appropriate heat resistant personal protective equipment if engineering controls or work practices are not adequate to prevent contact. Hot material may release vapours or fumes that are unpleasant and produce nausea and irritation of the eyes and respiratory tract. Use in a well ventilated area.

7.2 Conditions for safe storage, including any incompatibilities

Not applicable.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with occupational exposure limits

| Component | CAS No. | Reference period | Exposure Limit | Basis |
|-------------------|------------|----------------------|---|--------------|
| Respirable Silica | 14808-60-7 | 8hr TWA | 0.1mg/m ³ | UK. EH40 WEL |
| Asphalt Fume | 8052-42-4 | 8hr TWA 15minSTEL | 5mg/m ³ 10mg/m ³ | UK. EH40 WEL |

8.2 Exposure controls

Appropriate engineering controls

Use in well ventilated areas. Use mechanical ventilation in poorly ventilated areas. Heated material may release traces of Hydrogen sulphide: a specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residues, etc., and unintentional releases should be made to help determine controls appropriate to local circumstances.

Personal protective equipment

Eye/face Protection: Use equipment for eye protection tested and approved under appropriate standards such as EN 166 if eye contact likely.

Skin Protection: Wear heavy duty impervious Nitrile, Polythene, PVC or PVA gloves to Standard EN 374.

Body Protection: Wear suitable overalls and change if contaminated. Selection of workwear will need to take account of the elevated temperature of heated material if appropriate. After contact with skin wash off immediately.

Wash hands before breaks and immediately after using the product.

Respiratory Protection: No respiratory protection required for handling and using material at ambient temperatures. For heated material where risk assessment in accordance with the hierarchy of controls established within the Chemical Agents Directive shows a requirement for respirators as a means of control use filter type AP or equivalent apparatus.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | | |
|----|--|-----------------------------|
| a) | Appearance | Black coated granular solid |
| b) | Odour | Bitumen |
| c) | Odour Threshold | no data available |
| d) | pH | not applicable |
| e) | Melting point/freezing point | 90-100°C (softening point) |
| f) | Initial boiling point and boiling range | not applicable |
| g) | Flash point | >200°C |
| h) | Evaporation rate | no data available |
| i) | Flammability (solid, gas) | Non flammable |
| j) | Upper/lower flammability or explosive limits | Non-explosive |
| k) | Vapour pressure | no data available |
| l) | Vapour density | no data available |
| m) | Relative density | no data available |
| n) | Water solubility | Insoluble in water |
| o) | Partition coefficient: (n- octanol/water) | no data available |
| p) | Auto-ignition temperature | >230°C |
| q) | Decomposition temperature | no data available |
| r) | Viscosity | no data available |
| s) | Explosive properties | None |
| t) | Oxidizing properties | None |

9.2 Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available on article.

10.2 Chemical stability

Stable at normal temperatures and under recommended storage conditions.

10.3 Possibility of hazardous reactions

None expected under normal conditions.

10.4 Conditions to avoid

Temperatures in excess of 230°C cause thermal decomposition of bitumen binder.

10.5 Incompatible materials

Strong mineral acids and oxidising agents.

10.6 Hazardous decomposition products

No hazardous decomposition products when stored and handled correctly.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not applicable

Skin corrosion/irritation

Excessive contact may cause skin lesions, warts and other irreversible non tumerogenic effects.

Serious eye damage/eye irritation

Contact particles may cause transient mechanical irritation

Respiratory or skin sensitisation

Not applicable

Germ cell mutagenicity

Not applicable

Carcinogenicity

Although respirable silica is classified as a Group 1 carcinogen the potential for hazardous exposure in this product is negligible as the respirable silica is not available in a free form. Bitumen in its free non-oxidised form is not classified as carcinogenic.

Reproductive toxicity

Not applicable

Specific target organ toxicity - single exposure

Not applicable

Specific target organ toxicity - repeated exposure

Not applicable

Aspiration hazard

Not applicable

Potential health effects - Inhalation, ingestion, skin and eyes

Inhalation of fumes from heated material may cause transient respiratory irritation. Chronic inhalation of large amounts of heated bitumen fumes may cause irreversible effects. Will not pose a realistic inhalation hazard at ambient temperatures. May be harmful if swallowed and can cause severe nausea and gastric pain.

Signs and Symptoms of Exposure

Contact with skin may cause skin irritation and possible dermatitis. Chronic skin exposure may cause warts and other irreversible skin effects.

Additional Information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Bituminous binder may be hazardous to the aquatic environment.

12.2 Persistence and degradability

Persistent

12.3 Bioaccumulative potential

Not applicable.

12.4 Mobility in soil

Immobile.

12.5 Results of PBT and vPvB assessment

Will not meet PBT or vPvB criteria.

12.6 Other adverse effects

Avoid release to the environment. Do not empty into drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Material is not classified as hazardous waste under the Hazardous Waste Regulations 2005. Follow supplier's instructions regarding safe methods of disposal. Do not discharge into drains or watercourses without prior approval.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine Pollutant: no IATA: no

14.6 Special precautions for user

No data available

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

Not applicable

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 (as amended) and SI 2019:758 (UK REACH)

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

Health & Safety at Work etc. Act 1974
Control of Substances Hazardous to Health Regulations 2002 (as amended)
Chemicals (Hazard Information and Packaging for Supply) Regulations 2009
Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)
EH40/2005 Workplace Exposure Limits (as amended)
Environmental Protection Act 1990
Hazardous Waste Regulations 2005 (as amended)

15.2 Chemical Safety Assessment

No data available.

SECTION 16: Other information

Further information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

| | |
|-------|--|
| H220 | Extremely flammable gas |
| H330 | Fatal if inhaled |
| H372i | Causes damage to organs through prolonged or repeated exposure by inhalation |
| H400 | Very toxic to aquatic life |

Revision History

Revision to version 4 of November 2017 in line with legislative updates and changes.

Recommended restrictions on use

Use in accordance with manufacturer's technical instructions.

The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and for people working with or handling these products. This information is believed to be reliable and updated at Revision Date and represents the best information currently available and known by Aggregate Industries UK Limited. (Aggregate). However, Aggregate makes no guarantee or warranty, express or implied, with respect to such information and we assume no liability resulting from its use. The information related herein is based on proper handling and anticipated uses and is for the material without chemical additions or alterations. Users should make their own investigations to determine the suitability of the information for their particular purposes. It is the responsibility of the user to undertake a suitable risk assessment/COSHH assessment prior to using this material.