



Respiratory Protection: Respirators should be worn if fumes are likely to be present in significant quantities to keep exposure below the Workplace Exposure Limits stated above. For respirator requirements, the Chemical Agents Directive advises the use of a particulate filter type P3 or equivalent and an inorganic type B or equivalent.



Skin Protection: Overalls or full length clothing should be worn to protect skin from burns and prevent bitumen permeating through to the skin. To protect against foot injuries, heat resistant safety boots are advised. Impervious gloves and overalls should be worn. Gloves should be removed and hands thoroughly washed before handling food or drink. Skin barrier cream can be used to reduce chances of sustaining skin burns.



Eye Protection: Goggles should be worn if there is a risk of product entering the eyes.

8. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties will vary dependent on the material source, but generic asphalt properties are described in the displayed table.

Appearance	Black coated granular solid
Odour	Strong characteristic bitumen odour
pH	Not applicable
Boiling point/range	Not determined
Melting point/range	90-100°C
Flash point	>200°C
Flammability	Not determined
Auto Flammability	>230°C
Explosive properties	Not applicable
Oxidizing properties	Not determined
Vapour pressure	Not applicable
Relative density	Above 2.00
Water solubility	Insoluble
Fat solubility	Not determined

9. STABILITY AND REACTIVITY

Asphalt is typically stable at normal temperatures (less than 230°C) and under recommended storage conditions. Toxic fumes and dark smoke will be produced in the event of a fire.

- **Conditions to Avoid:** Sources of ignition and temperatures greater than 230°C can cause the bitumen binder to thermally decompose.
- **Materials to Avoid:** Strong mineral acids and oxidising agents i.e. chlorates which may be used in agriculture.
- **Hazardous Decomposition Products:** The conditions the bitumen binder is exposed to will largely determine the substances that are produced from its decomposition. However, the following substances may be produced: Hydrogen Sulphide, Carbon Dioxide, Carbon Monoxide, Water, Particulate Matter, Sulphur Oxides, Polycyclic Aromatic Hydrocarbons, Unburnt Hydrocarbons, Nitrogen Oxides and Vanadium Pentoxide.

11. TOXICOLOGICAL INFORMATION

As the IARC classify respirable crystalline silica as a Group 1 carcinogen, long term exposure may cause cancer and prolonged periods of inhalation may lead to silicosis in the lungs.

- **Inhalation:** Respiratory system damage may be inflicted due to inhaling respirable aggregate dust from cutting or planing hardened asphalt. Inhaling asphalt fumes over a prolonged period may cause irritation of the respiratory system.
Bitumen used in asphalt may release small amounts of hydrogen sulphide gas. With good general ventilation, this is not likely to cause any problems. However, with poorly ventilated enclosed spaces, concentrations may build up to hazardous levels.
- **Skin Contact:** Burns may result from contact with hot asphalt. Prolonged contact of asphalt with the skin may cause dermatitis and malignant warts.
- **Eye Contact:** Long term contact with eyes may cause irritation and damage to the eyes.

12. ECOLOGICAL INFORMATION

The bitumen binder can pose a low environmental hazard. In order to prevent this, material should be prevented from entering and blocking watercourses. Where used and disposed of as intended, no adverse environmental effects are foreseen meaning asphalt should not pose an ecological hazard.

- **Mobility:** The hardened bituminous product will sink in water and form a solid layer on the surface of the ground, demonstrating its immobility.
- **Persistence and Degradability:** Hardened bituminous materials are resistant to degradation and will persist in the environment.
- **Ecotoxicity:** The product is not expected to be toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Hardened asphalt can be readily recycled and effort should be made to reuse the product. Failing this, hardened bituminous material is classified as inert waste and can be disposed of as normal industrial waste in accordance with waste regulations explained below.

- **Handling of any residues/waste products:** If asphalt is to be disposed via landfill, reference should be made to the relevant waste management legislation including the requirements of the Hazardous Waste Regulations and the associated Waste Acceptance Criteria. This should ensure the product is disposed of in accordance with local and national legal requirements.

14. TRANSPORT INFORMATION

Bituminous products are not classified as dangerous for transport. It is recommended that loads are kept secure and covered prior to use.

15. REGULATORY INFORMATION

Classification: Consideration of the following risk and safety phrases is recommended despite the material being classified as not dangerous:

-67/548/EEC:

Risk Phrases: R34 – May cause burns;
R36/37 – Irritation to eyes and respiratory system.

Safety Phrases: S36/37/39 – Wear suitable protective equipment; S51 – Use in well ventilated areas.

-EC1272/2008:

Hazard Statements:

H317 – May cause skin irritation.

H335 – May cause respiratory irritation.

H372 – Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements:

P261 – Avoid breathing dust/fume/vapours.

P271 – Use only outdoors or in a well ventilated area.

P281 – Use personal protective equipment as required (see section 8).

16. OTHER INFORMATION

Training and Advice – Wear and use appropriate PPE

Recommended restrictions on use – Use in accordance with manufacturer's technical instructions.

Further information – Contact the Eurovia Health & Safety Team / Contact Product Technical Support at Eurovia using the details given at the top of page 1.

Key data used to compile data sheet:

>Classification, Labelling and Packaging of Substances and Mixtures Regulations (CLP) EC1272/2008*

>EH40/2005 Workplace Exposure Limits (as amended)

>HSE Crystalline Silica EH59*

>HSE Guidance Note EH40/2007

>PPE Regulations 1992

>COSHH Regulations 2002

>Environmental Protection Act 1990

>Dangerous Substances Directive (DSD) 67/548/EEC

Legal Advice

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 herein represents the best information currently available at the time of issue. However, no warranty is expressed or implied with respect to the accuracy of such information and its use.

This safety information sheet does not constitute the user's own assessment of workplace risk, and it is the user's sole responsibility to take all necessary precautions when using this product. Because of this, users should make their own investigations to determine the suitability of the information for their purposes and against all applicable legislation.