



This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the consumer and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. Under Article 31 of REACH, a SDS is not required for this product. Therefore, this SDS has been created on a voluntary basis to pass on potentially relevant information and follows the formatting described in the REACH Regulation (EC) No 1907/2006

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

1.1 Product identifier

Easymelt Bonding Bitumen
CAS No. : 64742-93-4
REACH Registration No. : 01-2119498270-36-0004

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

Bitumen for roofing applications

1.3 Details of the supplier of the safety data sheet

IKO PLC
Appley Lane North
Appley Bridge, Wigan
Lancashire WN6 9AB
Tel: 01257 255 771

www.ikogroup.co.uk

1.4 Emergency telephone number

Tel: +44 (0)1257 256864
Opening Times: 0900 - 1700 Monday to Friday

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008

Not classified as hazardous/

2.2 Label elements

Labelling in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008
None required.

2.3 Other hazards

Health hazards:

Hydrogen sulphide (H₂S), an extremely flammable and toxic gas, and other hazardous vapours may evolve and collect in the headspace of storage tanks, transport vessels and other enclosed containers when the material is stored in a molten state. Hydrogen sulfide is highly toxic and may be fatal if inhaled. **Do not depend on sense of smell for warning.** H₂S causes rapid olfactory fatigue (deadens sense of smell).

Contact with hot material can cause thermal burns which may result in permanent skin damage. Hot product may cause severe eye burns and/or blindness.

Safety Hazards :

Not classified as flammable but will burn. Typically stored and handled above 100°C. Contact with water will result in violent expansion and splashing or boil-over may occur.

Environmental Hazards :

Not classified as dangerous for the environment. The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

SECTION 3: Composition / Information on Ingredients

3.1 Substances

A blend of components derived from crude petroleum oil.

EC Name: Asphalt, oxidized
EC Number: 265-196-4
CAS Number: 64742-93-4

3.2 Mixtures

Not applicable, product is a substance under REACH.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General Information DO NOT DELAY. Keep victim calm. Obtain medical treatment immediately.

EYE CONTACT: Hot product - If contact with hot product, cool the burn area by flushing with large amounts of water. Do not attempt to remove anything from the burn area or apply burn creams or ointments. During transport do not cover the wound with dressing or sheet since these may adhere to the product. Transport to the nearest medical facility for additional treatment. All burns should receive medical attention.

Cold product - Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

SKIN CONTACT: If contact with hot product, cool the burn area by flushing with large amounts of water. Do not attempt to remove anything from the burn area or apply burn creams or ointments. During transport do not cover the wound with dressing or sheet since these may adhere to the product. It should be noted this product contracts on cooling. Where a limb is encased, care should be taken to avoid the development of a tourniquet effect. In the event of this occurring the adhering product must be softened and/or split to prevent restriction of blood flow. All burns should receive medical attention.

INHALATION: If inhalation of mists, fumes or vapour causes irritation to the nose or throat, remove to fresh air. If rapid recovery does not occur, obtain medical attention. Casualties suffering ill effects as a result of exposure to hydrogen sulphide should be removed to fresh air. Do not attempt to rescue the victim unless proper respiratory protection is worn. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting, or unresponsive, give 100% oxygen with rescue breathing or Cardiopulmonary Resuscitation (CPR) as required and transport to the nearest medical facility.

INGESTION: Under normal conditions of use, this is not expected to be a primary route of exposure. If swallowed, rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

H₂S has a broad range of effects dependent on the airborne concentration and length of exposure:

- 0.02 ppm odour threshold, smell of rotten eggs;
- 10 ppm eye and respiratory tract irritation;
- 100 ppm coughing, headache, dizziness, nausea, eye irritation, loss of sense of smell in minutes;

- 200 ppm potential for pulmonary oedema after >20-30 minutes;
- 500 ppm loss of consciousness after short exposures, potential for respiratory arrest;
- >1000ppm immediate loss of consciousness, may lead rapidly to death, prompt cardiopulmonary resuscitation may be required.

There is no evidence that H₂S will accumulate in the body tissue after repeated exposure.

4.3 Indication of any immediate medical attention and special treatments needed

Do not attempt to remove the product from the skin as it provides an airtight sterile covering, which will eventually fall away with the scab as the burn heals. If removal is attempted, mineral oil (not mineral spirits) or a mineral oil based ointment may be applied to help soften the product to facilitate removal.

Hydrogen sulphide (H₂S) -CNS asphyxiant. May cause rhinitis, bronchitis and occasionally pulmonary oedema after severe exposure. CONSIDER: Oxygen therapy. Consult a Poison Control Centre for guidance.

SECTION 5: Firefighting Measures

5.1 Extinguishing media

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Unsuitable Extinguishing Media: Do not use water in a jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Boil-over of tanks and violent eruptions may occur in the presence of water.

5.3 Advice for fire fighters

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Hot product should be handled so that there is no risk of burns. Use compressed air or fresh air respiratory equipment in confined spaces.

6.2 Environmental precautions

Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. Local authorities (Environment Agency/water authorities) should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and clearing up

Small spillage: Allow product to cool and solidify. Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

Large spillage: Prevent from spreading by making a barrier with sand, earth or other containment material. Treat residues as for small spillage.

6.4 References to other sections

See sections 8 and 13 for further advice on protective clothing and disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

General Precautions : Avoid contact with hot liquid to prevent thermal burns. Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking.

Handling : For quality, health and safety reasons do not exceed the recommended handling temperature.



Handling Temperature: Temperature should be kept at least 30°C below flash point and should never exceed the industry recommended maximum safe working temperature of 200°C.

7.2 Conditions for safe storage, including any incompatibilities

Store in the cold state. Do not store in the molten state.

Recommended Materials : For containers or container linings, use steel.

Unsuitable Materials : For containers or container linings avoid PVC, polyethylene or high density polyethylene.

7.3 Specific end uses(s)

Exposure to this product should be reduced as low as reasonably practicable. Reference should be made to the Health and Safety Executive's publication "COSHH Essentials".

SECTION 8. Exposure Controls/Personal Protection

8.1 Control parameters

Occupational Exposure Limits

Material	Source	Type	ppm	mg/m ³
Hydrogen Sulphide	EH40 WEL	TWA (8hr)	5	7
Hydrogen Sulphide	EH40 WEL	STEL (15 min)	10	14
Asphalt, fumes	EH40 WEL	TWA (8hr)		5
Asphalt, fumes	EH40 WEL	STEL (15 min)		10

Derived No Effect Levels: No DNEL value has been established.

PNEC related information: Substance is a hydrocarbon with a complex, unknown or variable composition. Conventional methods of deriving PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.

8.2 Exposure controls

Engineering Controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

Product has a low volatility and at ambient temperature fume formation will be low. Avoid vapours from heated materials to prevent exposure to potentially toxic/irritating fumes. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Personal Protective Equipment:

Eyes/Face: Where there is a risk of damage to the eyes/face from splashing of hot product or impact, wear eye/face protection to EN166. For normal operations with hot material wear safety hat with visor.

Hand: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: Heat resistant gloves and PVC or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced

Skin: For normal operations with hot material wear heat resistant coveralls, (with cuffs over gloves and legs over boots), and heavy-duty boots, e.g. leather for heat resistance. The use of a neck apron is recommended. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Respiratory: No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of

material. Use self contained breathing apparatus in places where hydrogen sulphide vapours may accumulate.

Environmental Exposure Controls: Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Brown-black blocks. Liquid at high temperature.
Odour:	Characteristic
Odour threshold:	No data available
pH:	Not Applicable
Boiling Point:	> 320°C
Softening Point:	80-90°C
Flash Point:	>230°C (Cleveland Open Cup)
Evaporation rate:	Not Applicable
Flammability(gas, solids):	Not classified as flammable, but will burn.
Upper/lower flammability limits:	No data available
Vapour Pressure:	< 1 hPa
Vapour Density:	Not Applicable
Density :	ca. 0.990 - 1.300 g/cm ³ at 25 °C / 77 °F
Solubility (H₂O):	Negligible
Solubility in other solvents:	Soluble
Auto Ignition Temp.:	> 300°C
Decomposition temperature:	No data available
Viscosity:	No data available
Explosive properties:	Not classified as explosive
Oxidising properties:	Not classified as oxidising

9.2 Other information

Penetration :	20 - 30 dmm at 25 °C / 77 °F
Hygroscopicity :	Negligible.

SECTION 10: Chemical Stability and Reactivity

10.1 Reactivity

The product does not pose any further reactivity hazards in addition to those listed below.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None expected.

10.4 Conditions to avoid

Heating above the maximum recommended storage and handling temperature, will cause degradation and evolution of flammable vapours.

10.5 Incompatible materials

Do not allow molten material to contact water or liquids as this can cause violent eruptions, splatter hot material, or ignite flammable material. Reacts with strong oxidising agents. Avoid contamination of thermal insulation near hot surfaces by oil and bitumen and replace lagging where necessary, with a non-absorbent type of insulation. Self-heating, leading to auto-ignition at the surfaces of porous or fibrous materials impregnated with bitumen or condensates from bituminous fumes, can occur at temperatures below 100°C.

10.6 Hazardous decomposition products

Hydrogen sulphide.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

- (a) acute toxicity** Not expected to present an acute toxicity hazard. Inhalation of fumes may result in irritation, especially if the product is overheated above recommended temperatures
Acute Oral Toxicity: Low toxicity: LD50 > 5000 mg/kg
Acute Dermal Toxicity: Low toxicity: LD50 >2000 mg/kg, Rabbit
Acute Inhalation Toxicity: Low toxicity by inhalation.
- (b) skin corrosion/irritation** Expected to be slightly irritating. Contact with hot material can cause thermal burns which may result in permanent skin damage.
- (c) serious eye damage/irritation** Expected to be slightly irritating. Hot product may cause severe eye burns and/or blindness.
- (d) respiratory/skin sensitisation** Not expected to be a skin or respiratory sensitiser.
- (e) germ cell mutagenicity** Not considered a mutagenic hazard.
- (f) carcinogenicity** Bitumens contain low concentrations of Polycyclic Aromatic Compounds (PACs). At ambient temperatures and in undiluted bitumens these PACs are not considered to be bio-available. However, if bitumens are mixed with diluents to obtain a low viscosity at ambient temperatures, or heated it is believed that such materials may become bio-available. A two-year inhalation study that exposed rats to fumes collected from an air-rectified asphalt was negative. Skin tumours developed following life-time exposure to fume condensate representative of fumes from a severely oxidised asphalt (Type III Built Up Roofing Asphalt) that would be found at field conditions above 230°C. The response was considered to reflect weak carcinogenic activity. The significance of these data for human health is uncertain.
- (g) reproductive toxicity** Not expected to impair fertility. Not expected to be a developmental toxicant.
- (h) STOT-single exposure** Inhalation of vapours or mists may cause irritation to the respiratory system, especially if the product is overheated above recommended temperatures.
- (i) STOT-repeated exposure** No chronic health effects are expected from the normal use of this product.
- (j) aspiration hazard** Not considered an aspiration hazard.

SECTION 12: Ecological Information

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

12.1 Toxicity

Poorly soluble mixture. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract).

12.2 Persistence and degradability

Expected to be not inherently biodegradable.

12.3 Bioaccumulative potential

Has the potential to bioaccumulate. Log Kow > =4

In practice, the very low water solubilities and high molecular weights of these substances are such that their bioavailability to aquatic organisms is limited and therefore bioaccumulation is unlikely.

12.4 Mobility in soil

Adsorbs to soil and has low mobility. In water will either float or sink, showing little tendency to disperse, the product will adsorb to the sediment.

12.5 Results of PBT and vPvB assessment

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

12.6 Other adverse effects

May cause physical fouling of aquatic organisms.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Material Disposal: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.

Container Disposal: Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Local Legislation: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

EU Waste Disposal Code (EWC): 05 01 17 bitumen

Classification of waste is always the responsibility of the end user.

SECTION 14: Transport Information

Not considered to be dangerous goods for transport if transported at ambient temperature.

SECTION 15: Regulatory Information

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

All components are listed as existing substances in Europe

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance. This product is not classified for human health or environmental hazards. An exposure scenario is not required.

SECTION 16: Other Information

Revision information: Reformatted in accordance with the formatting described in Regulation 1907/2006/EC as amended by Regulation (EU) 453/2010.

List of Abbreviations used in this SDS:

CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging Regulation (EC) no 1272/2008
EC European Community/Commission
PBT Persistent, Bioaccumulative and Toxic

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) no 1907/2006
vPvB very Persistent, very Bioaccumulative

Disclaimer: Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

IKO PLC

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Version History

V3 - December 2014 - Changes made to bring in line with CLP Regulations

V4 - May 2017 - Removal of DPD references