SAFETY DATA SHEET
InfraRoad Coldasphalt

1. NAME OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ENTERPRISE

1.1 Product description: InfraRoad Coldasphalt

1.2 Relevant identified uses of the substance or mixture and uses advised against:
Cold asphalt for asphalt repair.

1.3 Details of the supplier of the safety data sheet:
InfraCare Sweden AB
Övre Kvarngatan 30
503 36 Borås
Contact person: Erik Sandberg
Erik@infracare.se

1.4 Telephone number in the event of emergency: 112, ask for the Poison Information Centre
08-33 12 31 (not acute)

For answers to questions bout the product, ring:
Erik Sandberg, +46 (0)708 – 23 10 50

2. HAZARDOUS PROPERTIES

2.1 Classification of substance or mixture
The mixture is not classified as dangerous according to Regulation (EC) No. 1272/2008.

2.2 Labelling information
Hazard pictograms: None
Signal words: None
Hazard statements: None
Precautionary statements: None

2.3 Other hazards
Hydrogen sulphide can accumulate in tanks and confined areas
and can reach potentially dangerous concentrations.

3. COMPOSITION/INFORMATION ABOUT INGREDIENTS

3.2 Mixtures

The product does not contain any hazardous substances in relevant quantities in accordance with (EC) No 1272/2008.

Substance's identification	Substance Classification	Content (%)
CAS-no: 8052-42-4 *EG-No:* 232-490-9 *Reach-no:* 01-2119480172-44	Bitumen -	4.2

The product contains for the most part (> 95% by weight) aggregate/crushed rock.

Bitumen, CAS 8052-42-4: The substance is a UVCB substance and does not contain any components that are PBT in concentrations above 0.1%.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General comments: Change contaminated clothing.

In case of inhalation: If bitumen fumes or vapours inhaled, and where symptoms occur: Move the person to a well-ventilated area. Seek medical attention

In case of skin contact: Wash thoroughly with soap and water. If skin irritation occurs, consult a doctor.

In case of eye contact: Remove contact lenses. Hold eyelids well apart and roll eyes. Rinse with copious amounts of temperate 20°C - 30°C water under low pressure for several minutes. In case of irritation, blurred vision or if swelling occurs, consult a doctor.

In case of ingestion: Do not induce vomiting. Rinse mouth thoroughly with water. In case of nausea or other discomfort, consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation of oil mist or vapours at higher temperatures may cause respiratory irritation. Minimal redness and irritation may occur upon eye contact. Few or no symptoms expected when swallowing; some may experience mild nausea

4.3 Indication of necessity for any immediate medical attention and special treatment

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Water mist, powder, carbon dioxide or alcohol-resistant foam.

Unsuitable extinguishing media: Water in concentrated jet

5.2 Special hazards arising from the substance or mixture

Breathing difficulties or nausea owing to excessive exposure to smoke from hot product.

Hazardous products from combustion: Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particles, gases including carbon monoxide, H2S (hydrogen sulphide), SOx (sulphur oxides), NOx (nitrogen oxides), sulfuric acid and unidentified organic and inorganic compounds.

Contact between hot product and water can lead to expansion when the water evaporates. This can cause splashes of hot product.

5.3 Advice for firefighters

Firefighters must wear appropriate full-coverage protective equipment and compressed air apparatus with overpressure and full-face mask.

In the event of a fire, immediately isolate the area by getting all persons in the vicinity of the accident site to leave the area.

Extinguishing measures to be adapted to the immediate surroundings. Do not allow the extinguishing water to drain into the ground/drain/water/watercourse.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use suitable protective equipment. Avoid contact with skin, eyes and clothing. In confined spaces, breathing apparatus must be used.

6.2 Environmental precautions

Do not allow the product to enter in to the ground/drain/water/watercourse. In case of spillage, dilute with plenty of water.

Notify the Swedish Rescue Services Agency in the event of major discharges.

6.3 Methods and material for containment and cleaning up

Provide adequate ventilation in buildings or confined spaces. Limit and absorb spillage with suitable non-combustible material (e.g. sand or dry soil). Transfer the waste to a waste container for recycling or disposal according to local regulations.

6.4 Reference to other sections

See section 13 for waste disposal. See Section 7 for handling and Section 8 for personal protective equipment.

6.5. Further information
No further information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Concentrations of H2S in tanks and confined areas can reach hazardous values, especially during long-term storage. This situation is particularly relevant when work is to be carried out in the vicinity of the tank or in the event of direct exposure to vapours in the tank. A special assessment of the inhalation risks from the presence of H2S in tanks' gas spaces, confined spaces, product residues, tank waste and wastewater as well as unintentional discharges must be made to determine which controls are appropriate based on local circumstances.

Protective measures:
Ensure good industrial hygiene. Ensure good ventilation. Do not inhale dust/fumes/gas/mist/vapour/spray. Do not eat, drink or smoke during handling. Avoid contact with skin, eyes and clothing. Always wash hands and skin after use. Wash contaminated clothing before reuse. Do not store ignition sources near the storage tank.

7.2 Conditions for safe storage, including any incompatibilities
Recommended packaging material: Mild steel, stainless steel.
Unsuitable packaging material: Some synthetic materials may be unsuitable; check with the manufacturer before use.

The storage container must be tight so that water cannot penetrate. If thermal insulation has become contaminated with bitumen or oil, it must be replaced owing to the risk of self-ignition. Store separately from oxidizing agents.

7.3 Specific end use(s)
No information.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Hygienic limit values according to the Swedish Work Environment Authority's collection of statutes AFS 2018:1.

CAS-no:	Substance:	Threshold limit value (TLV):		Short term exposure limit (STEL):	
		ppm	mg/m³	ppm	mg/m³
7783-06-4	Hydrogen sulphide	5	7	10	14
50-32-8	Benso(a)pyren[C,H,R,V]		0.002		0.02

[C] The substance is carcinogenic

[H] The substance can be easily absorbed through the skin
[R] The substance is disruptive to reproduction
[V] Indicative short-term limit value

8.2 Exposure controls

Appropriate technical control measures:

Ventilation: Ensure good ventilation. Keep the temperature as low as possible. Minimize exposure to bitumen fumes.

Respiratory protection: In normal use, no personal respiratory protection is required. In areas where hydrogen sulphide can accumulate, use SCBA respirator or full face mask with filter type B, colour code grey (for inorganic vapours and H2S). If exposure levels cannot be determined or estimated with sufficient certainty or if oxygen deficiency is possible, only SCBA devices should be used.

Hand protection: Protective gloves. If in doubt, contact the glove manufacturer's representatives for advice on choosing appropriate protective gloves.

Protective goggles: If there is a risk of splashing, safety goggles with side protection should be used.

Special equipment in the workplace: Washbasin/sink must be available. Possibility of eye flushing must be available in connection with the handling site.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General characteristics:

Colour: Dark brown to black
Odour: Bitumen

Physical/chemical properties relevant to health, safety and environment:

PH value (20°)	Not applicable
Melting point	Not determined
Freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Decomposition temperature	>350°C
Flash-point	230°C
Evaporation rate	Not determined
Ignition temperature	>300°C
Upper/lower explosion limits	Not determined
Vapour pressure	Not determined.
Relative vapour density at 20°C (air = 1)	Not determined
Density at 20°C	Not determined
Bulk density	Not determined
Water solubility (g/l)	Not soluble
Partition coefficient n-octanol/water (log K_{ow})	Not determined

Viscosity, dynamic	Not applicable
Viscosity, kinematic	Not applicable

9.2 Other information
No information.

10. STABILITY AND REACTIVITY

10.1 Reactivity: Contact between hot product and water can lead to considerable expansion when the water evaporates.

10.2 Chemical stability: The product is chemically stable at normal ambient temperatures and under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions: Under the intended conditions of use and handling, there are no known hazardous reactions that can occur.

10.4 Conditions to avoid: Heating above the recommended maximum temperature for handling and storage may cause product degradation and the development of irritating fumes and smoke.

10.5 Incompatible materials: Store away from oxidizing substances

10.6 Hazardous decomposition products: None known under recommended conditions of use.
Combustion (incomplete) is likely to generate oxides of carbon, sulphur and nitrogen, as well as further undetermined organic compounds of the same element.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

The product has no known acute toxicity.

Bitumen, CAS 8052-42-4:
LD_{50} (oral, rat):> 5000 mg/kg body weight. Method OECD 401.
LD_{50} (dermal, rat):> 2000 mg/kg body weight. Method OECD 402.
LC_{50} (inhalation, rat): > 94,4 mg/m^3. Method OECD 403.

Prolonged or repeated exposure may cause irritation/burning and sores on the skin.

Other
PAH: Bitumen is not classified as hazardous according to EC criteria, but contains very low concentrations of polycyclic aromatic hydrocarbons (PAH). In undiluted product, PAHs are not considered to be bioavailable. If, however, the bitumen is mixed with a solvent, certain components of the mixture becoming bioavailable if the product has a low viscosity at ambient temperature cannot be ruled out. Despite the presence of PAHs, there is no evidence that exposure to bitumen or its smoke is hazardous.

Benzo(a)pyrene can be present among other polycyclic aromatic hydrocarbons (PAH) in smoke, dust or mist from e.g. tar and asphalt.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
According to current criteria, the product is not environmentally hazardous.

Bitumen, CAS 8052-42-4:
The acute toxicity has been assessed using the PETROTOX computer model. The results from the modelling show
- no acute toxicity to freshwater fish.
- no acute toxicity to algae.
- no acute toxicity to crustaceans in fresh water.
- no chronic toxicity for freshwater fish (28 d), algae and crustaceans (in fresh water).

12.2 Persistence and degradability
The product is not readily biodegradable.

12.3 Bio-accumulative potential
Bio-accumulation is unlikely.

12.4 Mobility in soil
The product is considered to have low mobility in the ground.

12.5 Results of the PBT and vPvB assessment
Not applicable. This mixture does not contain any substances that are considered to be PBT or vPvB.

12.6 Other adverse effects
Bitumen normally sinks to sediment, but can float in certain cases. Water solubility is so low that it can be considered negligible.

13. WASTE DISPOSAL

13.1 Waste treatment methods

General: According to SFS 2011:927, the waste is not hazardous waste. Disposal, transport, storage and handling shall take place in accordance with Waste Regulation SFS 2011: 927. Waste from the product must not be allowed to contaminate soil, water or the environment.

No EWC code can be established for this product as the user's handling of the product may result in a different classification. An appropriate EWC code for the circumstances should be set in consultation with the local responsible authority/administration. The codes given below are only suggestions of codes that can be used.

Product EWC code suggestions: 17 03 02 Bituminous mixtures other than those mentioned in 17 03 01.
Proposed EWC code for contaminated packaging: 17 03 02 Bituminous mixtures other than those mentioned in 17 03 01.

Other information:
Clean and completely emptied packaging can be left for recycling. Contaminated packaging must be treated in accordance with the Waste Regulation.

14. TRANSPORT INFORMATION

Not Classified as dangerous goods according to ADR/RID/IMO/DGR.

14.1 UN-number: -

14.2 Official transport name: -

14.3 Hazard class for transport: -

14.4 Packing group: -

14.5 Environmental hazards: -

14.6 Special precautions: -

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

15. APPLICABLE REGULATIONS

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

EU nr 453/2010
EG nr 1907/2006 (REACH)
EG nr 1272/2008 (CLP)
KIFS 2017: 7 The Swedish Chemicals Agency's regulations on chemical products and biotechnological organisms
SFS 2011: 927 Waste Regulations
AFS 2018: 1 Hygienic limit values

15.2 Chemical Safety Assessment

Not performed for constituent substances.

16. OTHER INFORMATION

History:
2018-12-15: This safety data sheet produced from a German original dated 2016-01-27.
2020-04-14: This safety data sheet updated from a German original dated 2020-04-07.
2020-12-06: This safety data sheet updated from an original dated 2020-09-17.