

1. Identification of the substance / preparation and the company

Identification of the product: Adocoat C40B4 Bitumen Emulsion / Formerly Adocoat K1-40

Product description: Cationic bitumen in water emulsion for use in highways maintenance and construction: tack coat process

Supplier: Adomast Manufacturing Ltd
 Barkston Road,
 Carlton Industrial Estate
 Barnsley S71 3HU
 Tel : 01226 707863
 Fax : 01226 718051

Emergency phone number: 07887 416399 (24 hours)

2. Hazards identification

The following classification and labelling is required by the Classification, Labelling and Packaging of Substances and Mixtures Regulation EC 1272/2008:

Pictogram: None

Signal word: None

Classification: None

Hazard statements: None

Precautionary statements: P273 Avoid release to the environment - refer to special instructions / safety data sheet

3. Composition / information on ingredients

Adocoat C40B4 bitumen emulsion comprises mainly of bitumen emulsified in water. Emulsifying agents and other additives are also present in small quantities

The following components are present in significant concentrations:

| <i>Chemical Name</i> | <i>EC No</i> | <i>Hazard Classification EC 1272/2008</i> | <i>Hazard statement</i> | <i>Concentration</i> |
|--|--------------|--|--|----------------------|
| Bitumen | 232-490-9 | Not classified | None | 38 - 42 % |
| Water | 231-791-2 | Not classified | None | 58 - 62 % |
| Alkyldiamine ethoxylate | - | Acute Tox. 4 Skin Corr. 1B STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1 | H302 Harmful if swallowed H314 Causes severe skin burns and eye damage H372 Causes damage to organs through prolonged or repeated exposure H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects | < 0.25 % |
| Hydrochloric acid (as dilute aqueous solution) | 231-595-7 | Met. Corr. 1 Skin Irrit. 2 Eye Irrit. 2 STOT SE 3 | H290 May be corrosive to metals H315 Causes skin irritation H319 Causes serious eye irritation H335 May cause respiratory irritation | < 0.50 % |

4. First-aid measures

Inhalation: No known hazard

Skin: Cold emulsion: wash with water, if irritation persists seek medical advice
 Hot emulsion: rinse affected area with cold water, do not attempt to remove bitumen, seek medical advice

Eyes: Irrigate thoroughly with water, seek medical advice

Ingestion Do not induce vomiting, give water to drink, seek medical advice

5. Fire-fighting measures

Non-flammable water based emulsion
 Dried film supports combustion
 Use carbon dioxide, dry powder or foam extinguishers

6. Accidental release measures

Contain/absorb spillage with proprietary absorbent material, sand or earth
 Transfer to waste site in sealed containers
 Prevent entry into water courses or drains
 Inform authorities if material enters drains or water courses

7. Handling and storage

Storage of bitumen emulsion should be in accordance with the Oil Storage Regulations:

- 200lt drum in drip tray with a capacity of 25% of the drum
- Storage tank: within impermeable bund with a capacity of not less than 110% of the volume of the storage tank

Protect from freezing conditions

Roll / invert containers before use and at regular intervals to prevent settlement

Bulk stores should be circulated / agitated before use

Hot emulsion must not be heated above 90°C (boiling / frothing hazard)

8. Exposure controls and personal protection

Workplace Exposure Limits are listed in EH40 for bitumen (asphalt, petroleum fumes and hydrogen sulfide) and hydrochloric acid (gas / aerosol mists only)

Wear rubber / PVC gloves, eye protection and protective clothing, use barrier cream on hands

9. Physical and chemical properties

| | | | |
|-------------|----------------------|---------------------|---|
| Formula: | n/a | Flammability: | non-flammable, dried film will support combustion |
| Appearance: | brown / black liquid | Flash point: | n/a |
| Density: | 0.95-1.05 | Boiling point: | ~100 °C |
| Odour: | characteristic | Acidity/alkalinity: | pH 2 to 5 |

10. Stability and reactivity

Conditions to avoid: Do not heat above 90°C as boiling/frothing will result
 Do not store below 2°C to avoid freezing

Materials to avoid: alkalis (will cause emulsion to coagulate)

11. Toxicological information

Inhalation: not considered hazardous
Skin contact: due to small quantities of emulsifying agents and emulsion pH, frequent or prolonged skin contact may cause skin sensitisation, hot emulsion can cause scalding
Eye contact: may irritate eyes
Ingestion: minimal toxicity

12. Ecological information

Ayton C40B4 bitumen emulsion contains components classified as dangerous for the environment:

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Air: water component will evaporate to air leaving a residual solid layer of bituminous binder

Water: emulsion will disperse in water and bituminous binder components will persist in environment for considerable period of time

Soil: will form a residual solid layer of bituminous binder on adsorption / evaporation of water component

13. Disposal considerations

Waste Adocoat C40B4 bitumen emulsion should be disposed of by a Registered Waste Disposal Contractor using EWC Code 08 04 16

14. Transport information

Adocoat C40B4 bitumen emulsion is not classified as hazardous for road transport

Bulk supplies are to be labelled in accordance with Chemical Industries Association Black and White Marking Scheme:

Cold emulsion (< 55 °C): 2Z BITUMEN EMULSION LOW HAZARD

Hot emulsion (55 – 100 °C): 2X BITUMEN EMULSION HOT LIQUID

15. Regulatory information

Users are advised to refer to the following legislation for further information:

CLP EC 1272 / 2008

REACH EC 1907 / 2006

Control of Substances Hazardous to Health Regulations 2002

EH40 (UK) Workplace Exposure Limits 2005 (Amended 2011)

Control of Pollution (Oil Storage) Regulations 2001

Environmental Permitting Regulations 2010

The Carriage of Dangerous Goods by Road Regulations (ADR) 2015

Chemical Industries Association Road Tankers Black and White Marking Scheme 2001

16. Other information

The above information is compiled on the basis of our best available knowledge in accordance with legislative requirements. It does not imply it is complete or accurate in all cases. It is the user's responsibility to satisfy themselves as to the application of this information / recommendations given for their own particular use.