



1. IDENTIFICATION OF SUBSTANCE

Product name : Coltack.
Product identifier/synonyms : Coltack L; Coltack HL; Modified Bitumen Emulsion.
Product description : A dispersion of bitumen droplets in a water phase in the presence of cationic emulsifiers and rubber latex.
Intended use : Used as a bond coat during hot-mix asphalt applications.

2. HAZARDS IDENTIFICATION

Health hazards : Avoid skin contact with hot emulsion. Prolonged exposure to emulsion fumes can lead to nausea and irritation to skin, eyes and upper respiratory tract.
Environmental hazards : Emulsions are highly dispersible in water and should thus be kept away from natural resources, e.g. rivers, dams, etc.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation description : Bitumen emulsions are dispersions of bitumen droplets in water, in the presence of a small quantity of chemical emulsifiers.

INDEX	CAS	EC	NAME	CLASSIFICATION	%
649-422-00-2	64742-47-8	265-149-8	Distillates - hydrocarbon	GHS08, Dgr, Xn, H:304, R65	0 <= % < 4,0
	84082-43-9	281-990-3	Amides, C8-22,N-[3-(dimethylamino)propyl]	GHS05, Dgr, C, H:314, 1B-317, R: 43-34	0 <= % < 1,0

Additional information : Not classified as dangerous under EC criteria.

4. FIRST AID MEASURES

Skin burns : Apply cold running water to burn area (10-15 minutes).
Eye burns : Rinse eyes with cold water for 10 minutes and seek medical attention.
Inhalation : Remove victim to fresh air. Apply artificial respiration and seek medical assistance if rapid breathing stops and/or remains difficult.
Ingestion : Do not induce vomiting. Protect airways if vomiting starts. Seek medical assistance if rapid recovery does not occur.

Head Office

Cape Town PO Box 82 Eppindust 7475 **Tel** +27 (0)21 531 6406 **Fax** +27 (0)21 531 5514 **Email** colas@colas.co.za **Website** www.colas.co.za

Colas provides the above data sheet in good faith and it is provided without warranty, representation, inducement or licence of any kind; as such Colas shall not be liable for cost, damages or losses incurred as a result of reliance on the abovementioned information.

5. FIRE-FIGHTING MEASURES

Emulsions do not burn because they contain 40% or more water. In the event that all the water has evaporated and the residual bitumen has caught alight, the following can be used:

Dry chemical powder.
Carbon dioxide.
Foam.
Sand or earth may be used for small fires only.
Water may be used to cool the surrounding areas.

Protective equipment for fire-fighters : Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Evacuate area of non-essential personnel and public. Shut off leaks and remove ignition source.

Personal protection : Wear protective clothing specified for normal operations.

Environmental precautions : Spillages should be prevented from entering drains, ditches or rivers.

Clean-up methods : Use sand and spill control material to contain and/or absorb spills. Allow product to cool and solidify. Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

Additional advice : Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

General precautions : Avoid contact with hot liquid to prevent burns.

Handling : Handled from ambient to 90°C. Safety footwear should be worn and proper handling equipment should be used.

Storage : Store in cool, dry, well ventilated place. Do not mix the different types and grades of emulsions. Emulsions stored in tanks must be circulated and drums must be rolled prior to application.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls : The level of protection and types of control necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Where material is heated, sprayed or mist formed, there is a greater potential for airborne concentrations to be generated. Eye wash and showers for emergency use.

Personal protective equipment : Heat-resistant gloves with close-fitting cuffs. Heat-resistant, close-fitting safety boots. Overalls with close-fitting cuffs. Goggles or safety visor. Respirators if fume exposure is likely to exceed occupational standards. Avoid breathing bitumen fumes and avoid skin contact with product.

Respiratory protection : No respiratory protection is ordinarily required under normal conditions of use. Use self-contained breathing apparatus in places where hydrogen sulphide vapours may accumulate.

Eye protection : Goggles or safety visor.

Protective clothing : For normal operations with hot material, wear heat-resistant coveralls and heavy-duty boots.

Environmental exposure controls : Minimise release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Brown liquid
Odour	: Mild
Viscosity at 50°C	: 20-100 SFs
Viscosity at 100°C	: N/A
Relative density (g/cm ³)	: 1,01-1,02
Solubility in water at 20°C	: Water dispersible
pH	: 3-5
Melting point °C	: N/A
Pour point °C	: N/A
Boiling point °C	: 100
Flash point °C	: N/A
Vapour pressure @ 20°C	: < 0,1
Solids content % m/m	: 65-68
Softening point °C	: ≥ 48°C

10. STABILITY AND REACTIVITY DATA

Stability	: Stable.
Conditions to avoid	: Cationic and Anionic Emulsions are not compatible. Emulsions are incompatible with bitumen.
Hazardous decomposition products	: None expected under normal use conditions.

11. TOXICOLOGICAL INFORMATION

Basis of assessment	: Toxicological data has not been determined specially for this product. Information given is based on data on the components and toxicology of similar products.
Acute oral toxicity	: Expected to be low toxicity: LD50 > 2000 mg/kg.
Acute dermal toxicity	: Expected to be low toxicity: LD50 > 2000 mg/kg.
Acute inhalation toxicity	: Not considered to be an inhalation hazard under normal conditions of use. Avoid vapours from heated materials to prevent exposure to potentially toxic/irritating fumes.
Skin irritation	: Expected to be slightly irritating.
Eye irritation	: Expected to be slightly irritating.
Sensitisation	: Not expected to be a skin sensitiser.
Repeated dose toxicity	: Not expected to be a hazard.
Mutagenicity	: Not expected to be a mutagenicity hazard.
Carcinogenicity	: There is no evidence that undiluted bitumens are carcinogenic, but there is evidence from animal skin painting studies that some bitumens when diluted with solvents may be weakly carcinogenic.
Reproductive and developmental toxicity	: Does not impair fertility. Not a development toxicant.
Human effects	: There is no evidence that exposure to bitumen or its fumes causes cancer in man.

12. ECOLOGICAL INFORMATION

Acute toxicity	: Cationic emulsions are dispersible in water.
Mobility	: They are mobile because they are liquid at ambient temperature. Once the water has evaporated off, they become a solid, reverting to the bitumen state.
Persistence/degradability	: Expected to be not inherently biodegradable.
Bioaccumulation	: Emulsions do not bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Material disposal	: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the materials 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.

14. TRANSPORT INFORMATION

Environmentally Hazardous Substance

UN Classification	: UN 3082
Class	: 9
Packaging group	: 3

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

National legislation	: SABS 0229 - 1990 Code of practice for packaging of dangerous goods for road and rail transportation in SA.
Classification by	: So-called 'all preparations' Directive 1999/45/EC and its adaptations. EC regulation 1272/2008 (CLP) and its adaptations. (EC regulation 790/2009).

Preparation classification



Irritant

Contains	: 281-990-3 Amides, C8-22,N-[3-(Dimethylamino)propyl].
Particular hazards associated with the product and safety recommendations	: R43 - May cause sensitisation by skin contact. R36/38 - Irritating to eyes and skin. S 24 - Avoid contact with skin. S 37 - Wear suitable gloves. S 26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 60 - This material and its container must be disposed of as hazardous waste.

16. OTHER INFORMATION

Other information : No specific notes on this product.

To the best of our knowledge, the information contained herein is correct. We do not assume any liability for the consequences of its use, since the information may be applied under conditions beyond our control and with which we may not be familiar, and since data made available following the issuance of this document could suggest modification of this information. Final determination of the suitability of any material is the responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. All materials may present unknown hazards and should be used with caution.