



1. IDENTIFICATION OF SUBSTANCE

- Product name** : Colseal.
- Product identifier/synonyms** : CC-E1; Mineral Filled, Polymer Modified, Anionic Bitumen Emulsion.
- Product description** : A dispersion of bitumen droplets in a water phase in the presence of anionic emulsifiers and rubber latex that has been chemically thickened.
- Intended use** : Used to improve permeability of asphalt surfaces; sealing of joints; in conjunction with textile membranes for waterproofing roofs, dams, etc.

2. HAZARDS IDENTIFICATION

- Health hazards** : Avoid prolonged skin contact. Some minor skin irritation may occur.
- 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

Hazardous substances present on their own:

(present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state).

INDEX	CAS	EC	NAME	SYMBOL	R:	%
650-015-00-7	8050-09-07	232-475-7	Rosin	Xi	Xi:R43	0 < = % < 2,5

Other substances representing a hazard:

INDEX	CAS	EC	NAME	SYMBOL	R:	%
011-002-00-6	130-73-2	215-185-5	Sodium hydroxide	C	C:R35	0 < = % < 2,5

- Preparation description** : Colseal is a dispersion of bitumen droplets in water, in the presence of a small quantity of chemical emulsifiers, mineral fillers and rubber latex.
- Additional information** : Not classified as dangerous under EC criteria.

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

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4. FIRST AID MEASURES

Skin burns	: The product is used cold. Skin burns are thus unlikely to occur.
Eye contact	: Rinse eyes with cold water for 10 minutes and seek medical attention.
Inhalation	: Not considered to be a problem.
Ingestion	: Ingestion is unlikely. Do not induce vomiting. Protect airways if vomiting starts. Seek medical assistance if rapid recovery does not occur.

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.
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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	: No general precautions required.
Handling	: Handled at ambient temperature. Safety footwear should be worn and proper handling equipment should be used.
Storage	: Store in cool, dry, well ventilated place. Do not mix with other emulsions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure 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. Eye wash and showers for emergency use.
Personal protective equipment	: Chemical-resistant plastic gloves with close-fitting cuffs. Close-fitting safety boots. Overalls with close-fitting cuffs. Goggles or safety visor.
Respiratory protection	: No respiratory protection is ordinarily required under normal conditions of use.
Eye protection	: Goggles or safety visor.
Environmental exposure controls	: Minimise release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Brown liquid
Odour	: Mild
Viscosity at 50°C	: < 1000 cSt
Viscosity at 100°C	: N/A
Relative density (g/cm ³)	: 1,05-1,10
Solubility in water at 20°C	: Water dispersible
pH	: 10-12
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	: ≥ 55
Softening point °C	: ≥ 80
Elastic recovery of residue %	: ≥ 60

10. STABILITY AND REACTIVITY DATA

Stability	: Stable.
Conditions to avoid	: Cationic and Anionic Emulsions are not compatible.
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 humans.

12. ECOLOGICAL INFORMATION

Acute toxicity	: Bitumen 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

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	: 215-185-5 Sodium hydroxide. 232-475-7 Rosin.
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.