

POLYMER MODIFIED EMULSION



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : POLYMER MODIFIED EMULSION

Products : Polymer 70, Polymer 80, Super 80, Intermediate Polymer Emulsion & Premium Polymer Emulsion

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

Hydrocarbon binder used for road building and maintenance.

1.3. Details of the supplier of the safety data sheet

Registered company name : Colas Bitumen Emulsions
Address : Oranmore Galway Ireland
Telephone : + 353 91 484800 Fax : + 353 91 794675
info@colas.ie
http://www.colas.ie

1.4. Emergency telephone number : + 353 91 484800

Association/Organisation : + 353 1 4564244 +44 7775952675

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Additional labeling :
EUH210 Safety data sheet available on request.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) \geq 0.1% published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

Specific hazard :

- burns, splashing, inhalation, irritant dermal action

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: 649-404-00-4 CAS: 8008-20-6 EC: 232-366-4 Kerosine (Petroleum)	GHS08 Dgr Asp. Tox. 1, H304	[1]	x % < 10

(Full text of H-phrases: see section 16)

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

Other data :

Chemical nature

Cationic aqueous emulsion of bituminous binder

The continuous phase is made of bitumen. The phase separation obtained during use or occurring unintentionally is called breaking

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SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In case of exposure to important vapours, fumes or aerosols concentration, bring the person to fresh air.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Wash immediately with copious amounts of water, keeping eyelids apart for at least 15 minutes and consult a specialist.

In case of contact with the hot product, COOL THE EYE IMMEDIATELY WITH COPIOUS AMOUNTS OF COLD WATER for 10 minutes, keeping the eye open if possible. Take the person to a specialised medical centre.

In the event of splashes or contact with skin :

In case of burns :

Apply immediately copious amounts of cold water for at least 20 minutes

Never remove the product adhering to the skin.

Immediately go to hospital.

In the event of swallowing :

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

Rinse out one's mouth with milk or water to relieve affected area. Do not induce vomiting to avoid any heartburn.

Go to a specialized hospital immediately for emergency care.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Bituminous emulsions are non-flammable products.

5.1. Extinguishing media

Suitable methods of extinction

Cool containers with water spray.

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)

- carbon dioxide (CO₂)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

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6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

- recovery : contain and collect the spilled product, sand the surfaces concerned if necessary.

- elimination : recover all wastes and dispose in compliance with current regulations.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Ensure that there is adequate ventilation, especially in confined areas.

Engineering / preventive measures

- Workers exposure :

- if the product is sprayed with a hose, it is recommended to wear protective mask and clothes.

- Wear the protective equipment given in §8 before handling the product.

Reduce the risk of accidents by arranging machinery and equipment so as to prevent the hot product from spilling or leaking.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

- never use solvent to free blockage.

- never weld or cut if tanks or pipes are still containing gases.

In general, do not use an open flame in the proximity of hot bitumen without taking all necessary precautions.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Precautions :

- avoid breathing vapours.

- do not eat, drink and smoke when the product is moved or used.

During product transfer :

- always transfer the product under suction. Never reverse in a flexible tubing to avoid any bursting.

- do not transfer with a flexible hose through an opening, not provided for the purpose

- do not fill from height or use spray methods when filling containers to prevent foaming.

- do not fill the emulsion into any containers holding a product whose temperature exceeds 100°C.

ADVICE :

- Use only containers, pipes and joints resistant to hot bitumen and hydrocarbons.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Tanks and facilities must comply with applicable regulations.

Avoid the use of any pumping devices likely to destabilise the emulsion.

- to be avoided : storage temperatures below 5°C or above 90°C.

NEVER heat a reservoir or tank if the heating elements are not adequately immersed (minimum 15 cm over top).

If the storage time exceeds 15 days, mix the emulsion moderately.

Do not heat the pumps or pipes using an open flame.

- The heating elements should have a surface power below 1 W/cm².

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Always keep in packaging made of an identical material to the original.

Suitable packaging materials :

Recommended : Steel, plastic

- for lab, use plastic or glass containers

Unsuitable packaging materials :

Avoid copper or aluminium alloys.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limits :**

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
8008-20-6	200 (P) mg/m ³			Skin; A3	

- USA / NIOSH REL (National Institute for Occupational Safety and Health, Recommended exposure limits) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
8008-20-6	100 mg/m ³	-	-	-	-

8.2. Exposure controls**Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Type of gloves recommended :

- Natural latex

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- PVC (polyvinyl chloride)

- PVA (Polyvinyl alcohol)

- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties****General information :**

Physical state :

Viscous liquid.

Important health, safety and environmental information

pH :

Not stated.

Strongly acidic.

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Boiling point/boiling range :	Not relevant.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	= 1
Water solubility :	Dilutable.
Melting point/melting range :	0 °C.
Self-ignition temperature :	Not relevant.
Decomposition point/decomposition range :	Not relevant.

9.2. Other information

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Aspect :

- physical state : more or less viscous liquid depending on the temperature and the grade

- colour : black or brownish-black

- odour : characteristics

Physicochemical features

- ph : acid (1.5 to 5)

Specific temperatures

- boiling : 100°C

- solidification : < 0°C

Explosivity : not applicable

Density : 1000+/- 5 kg/m³ @25°C

Solubility in water : dilutable

SECTION 10 : STABILITY AND REACTIVITY

limited stability at usual temperatures of storage, handling and use

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Avoid :

- frost

Emulsion stability is limited. If emulsion has been stored for more than a few days, it should be circulated before use.

10.5. Incompatible materials

Products likely to destabilise the emulsion. Avoid all alkalis.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Splashes in the eyes may cause irritation and reversible damage

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

No toxicological data available for the mixture.

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SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

The emulsion is a product used for construction and the binder, after breaking, has a long life span.

12.3. Bioaccumulative potential

No data available on cationic emulsions. Bioaccumulation of binder compounds is very unlikely because of insolubility and high molecular weight.

12.4. Mobility in soil

The product has no soil mobility.

Water : as the emulsion is dilutable and mobile in water, the binder could be conveyed on long distances.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

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14.6. Special precautions for user

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SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2018/669 (ATP 11)

