

Health & Safety Data Sheet for: Cationic Slurry Seal

Data Sheet No: 02S

Revision: 26/06/15

Replaces: -

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

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

1.1. Product identifier

Product name: CATIONIC SLURRY SEAL

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 LIMITED

Address : Wallage Lane, Rowfant, Crawley, West Sussex RH10 4NF UK

Telephone : +44 1342711000 Fax : +44 1342 711199

info@colas.co.uk

http://www.colas.co.uk

1.4. Emergency telephone number : +44 1342718346.

Association/Organisation :

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

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.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Aquatic environmental hazard, chronic toxicity: harmful (R 52/53).

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.

2.2. Label elements

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

Hazard statements :

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P273 Avoid release to the environment.

Precautionary statements - Disposal :

P501 Dispose of contents/container to a collection centre for hazardous or special waste.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Risk phrase :

R 52/53

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.3. Other hazards

Specific hazard :

- burns, splashing, inhalation, irritant dermal action

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances**

No substances fulfil the criteria set forth in annexe II section A of the REACH regulation (EC) n° 1907/2006.

3.2. Mixtures**Composition :**

Identification	Name	Classification	%
CAS: 8008-20-6 EC: 232-366-4	KEROSINE (PETROLEUM)	GHS07, GHS08, Dgr Xn H:304-315-412 R: 65-10-38-52/53	1 <= x % < 2.5
CAS: 68607-29-4 EC: 271-762-1	QUATERNARY AMMONIUM COMPOUNDS, PENTAMETHYLTALLOW ALKYLTRIMETHYLENEDI- , DICHLORIDES	GHS07, GHS05, GHS09, Dgr C,N H:302-314.1B-410 R: 50/53-34-22	0 <= x % < 1

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

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 exposition to important vapors, fumes or aerosols concentration, bring the person to fresh air.

In the event of splashes or contact with eyes :

Wash immediately in 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 AND COPIOUSLY WITH 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 and copiously cold water for at least 20 minutes

Never remove the product adhering to the skin.

Immediately transport to hospital.

In the event of swallowing :

Seek medical attention, showing the label.

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

Transport 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.

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 fire-fighters

Fire-fighters will be equipped with suitable personal protective equipment (See section 8).

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.

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 equipments 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 :

Prevent access by unauthorised personnel.

- never use solvent to help the process in case of 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.

Precautions :

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

During product transfer :

- always transfer the product by drawing up. Never reverse in a flexible tubing to avoid any bursting.
- never decant with a flexible tubing through a manhole or unsuitable mouth.
- do not use free-fall or spray methods when filling containers to prevent foaming.
- do not fill the emulsion into any containers holding a product whose temperature exceeds 100°C.

ADVICES :

- 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

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).

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

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

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

Packaging

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 mg/m ³	-	-	-	-

- 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)
- Butyl Rubber (Isobutylene-isoprene copolymer)

- 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. slightly acidic.
Boiling point/boiling range :	not relevant.
Flash point interval :	not relevant.
Vapour pressure :	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

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 (2 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 storage, handling and use temperatures

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

No data available.

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**

No data available.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12 : ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity**12.1.1. Substances**

No aquatic toxicity data available for the substances.

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.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2011 - IMDG 2010 - ICAO/IATA 2012).

SECTION 15 : REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****- Particular provisions :**

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Title for H, EUH and R indications mentioned in section 3 :

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
R 10	Flammable.
R 22	Harmful if swallowed.
R 34	Causes burns.
R 38	Irritating to skin.
R 50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 65	Harmful: may cause lung damage if swallowed.

Abbreviations :

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

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