



POLYBITUMENS

EMULVIA DRESS EL Premium Grade
SAFETY DATA SHEET

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1. Identification of the substance/preparation and company/undertaking

1.1 Product identifier

Product name: EMULVIA DRESS EL

Product Code: 153C410EM02

1.2 Relevant identified uses of the substance or mixture and uses advised against
Bitumen emulsion – Hydrocarbon binder used for roads building and maintenance when applied to a maximum of 75°C.

Recommended uses of the mixture:

Transfer

Spray lance implementation

Sprayer boom implementation

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer: PolyBitumens

Navigator Terminal

Oliver Road

Grays

Essex

RM20 3ED

01403 215800

www.polybitumens.co.uk

e-mail address of person responsible for this SDS: general.enquiries@polybitumens.co.uk

1.4 Emergency telephone number: **01983 828 678**

National advisory body/Poison Centre: +44 (0) 1235 239 670

Telephone number Hours of operation: 24-hour service

2. Hazards identification

2.1 Classification of the substance or mixture

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

May produce an allergic reaction (EUH208).

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

Environmental effects: no effects of this mixture known to date resulting in its classification.

Physical and chemical hazards: no effects of this mixture known to date resulting in its

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classification.

2.2 Label elements

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

Additional labelling:

EUH208 Contains AMIDES, TALL-OIL FATTY, N-[3-(DIMETHYLAMINO)PROPYL]. May produce an allergic reaction.

EUH208 Contains FATTY ACIDS C8-C22, REACTION PRODUCTS WITH AMINES. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

Precautionary statements - Prevention:

P202 Do not handle until all safety precautions have been read and understood.

Precautionary statements - Response:

P314 Get medical advice/attention if you feel unwell.

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

Vapours or fogs may irritate mucous, especially eyes when operating in semi-closed environment.

During application of the product, risk of burns due to the product temperature.

In case of accidental spill, the product can affect the environment (fauna, flora, ...) and disrupt the operation of treatment plants.

3. Composition/information on ingredients

3.2. Mixtures

Regulatory, this product is considered as a mixture. It is a cationic emulsion of hydrocarbon binder.

Composition:

Hazardous components:

| Identification | (EC) 1272/2008 | Note | % |
|---|--|------|-----------------------------|
| CAS: 68650-79-3 EC: 272-047-7 REACH: 01-2119971276-30 AMIDES, TALL-OIL FATTY, N-[3-(DIMETHYLAMINO)PROPYL] | GHS05, GHS09, GHS07 Dgr Skin Corr. 1B, H314 Skin Sens. 1B, H317 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1 | | 0.06 \leq x % < 0.1275 |

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| | | | |
|--|---|--|------------------------|
| CAS: 84082-48-4 EC: 281-995-0 | GHS05, GHS09, GHS07 Dgr Skin Corr. 1A, H314 Skin Sens. 1, H317 Aquatic Chronic 1, H410 M Chronic = 1 | | 0.06 ≤ x % < 0.1225 |
| FATTY ACIDS C8-C22, REACTION PRODUCTS WITH AMINES | | | |

4. First-aid measures

4.1 Description of first aid measures

In the event of exposure by inhalation:

In case of exposure to high concentrations of vapours, fumes or sprays, take the person outdoor, keep warm and quiet.

In case of hard breathing:

Get medical attention.

In the event of splashes or contact with eyes:

In case of hot products projection or spray projection (formation of solid bitumen particles) immediately cool down with plenty of running water, lifting the eyelids if possible. Continue to rinse for at least 5 minutes. Transport in emergency to a specialized hospital.

In the event of splashes or contact with skin:

In case of burns:

immediately cool down with plenty of running water for at least 10 minutes.

Provided there is no adhesion to the skin, remove contaminated clothing.

Do not try to remove product adhering to skin.

To remove cold product, use vegetable oil or paraffin wax.

Do not use aromatic or chlorinated solvents, or fuel.

Transport in emergency to a specialised hospital.

In the event of swallowing:

Do not drink and do not induce vomiting. Transport in emergency to a specialized hospital.

4.2 Most important symptoms and effects, both acute and delayed

Eyes irritation

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Burns

Respiratory tract irritation

4.3 Indication of any immediate medical attention and special treatment needed
No other indications than those given in 4.1.

5. Fire-fighting measures

5.1 Extinguishing media

Not concerned, as bitumen emulsion is not flammable.

5.2 Special hazards arising from the substance or mixture

Not applicable for emulsion.

5.3 Advice for firefighters

In case of a fire on site, cool down the emulsion storage in order to avoid boiling and overflow due to foaming.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

FOR FIRST-AID WORKERS AND NON-RESCUE WORKERS:

Avoid contact with skin and eyes.

Do not operate without a suitable protective equipment: impervious suit, boots and splash goggles.

Complete the protective equipment according to the emergency case.

6.2 Environmental precautions

All necessary measures must be taken to avoid water and soil pollution: sewer protective sheet, ...
Alert the relevant authorities when the situation cannot be quickly and efficiently controlled.

6.3 Methods and material for containment and cleaning up

COLLECTION:

Control and contain the leaks with non-combustible absorbent materials: sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Collect the spilled product then sand, if necessary, the impacted surfaces.

ELIMINATION:

Recycle or, if not possible, incinerate via a licensed disposal company

6.4 Reference to other sections

For further information, refer to sections 8 and 13.

7. Handling and storage

GENERAL MEASURES:

All containers, seams, piping, ... must be resistant to a minimum temperature of 100°C, to acids, and to hydrocarbons.

The used facilities and equipment must be designed to prevent splashing and spilling.

Hygiene:

Do not eat, drink or smoke at workplace.

Wash hands before eating and drinking (away from workplace).

Regularly change protective clothing.

Change the protective equipment when they are soiled (external and internal) or when over-worn.

In case of minimal staining of the skin, wash thoroughly with water and if necessary, remove the bitumen with vegetable oil or paraffin oil.

Do not use aromatic or chlorinated solvents, or fuel.

7.1 Precautions for safe handling

For details about individual protective equipment, refer to section 8.

TRANSFER:

Wear a protective helmet with a face mask and a neck protector, a dry suit, suitable gloves, and impervious boots or safety ankle boots. For the transfer, proceed by suction using the reception pumps. Do not discharge delivery in a flexible hose to avoid the consequences of a possible burst.

Avoid loading in rain to limit the formation of foam.

Do not charge emulsion in a tank containing a product whose temperature exceeds 100°C, and vice versa.

SPRAY LANCE IMPLEMENTATION:

Wear a dry suit, a helmet with a face mask and a neck guard, suitable gloves, and impervious boots or safety ankle boots.

SPRAYER BOOM IMPLEMENTATION:

During the monitoring phases of the spreading ramp wear a dry suit, a helmet with a face mask and a neck protector, suitable gloves, and impervious boots or safety ankle boots.

FIRE PREVENTION:

In case of obstruction of flexible pipes, (...), do not use solvents, fuel oil or diesel.

Never check the level of a tank by illuminating with an open flame or when smoking.

Never weld on a tank or empty pipes not degassed.

7.2 Conditions for safe storage, including any incompatibilities

TECHNICAL MEASURES:

The facilities receiving the emulsion must comply with the applicable regulations. All storages must be located inside impervious retention works, in order to contain spilled product. The retention area must be exclusively dedicated to the emulsion.

Avoid pumping devices that could destabilize the emulsions (long brewing using a centrifugal pump must be avoided). Favour the use of a positive displacement pump.

STORAGE:

Recommended storage conditions:

If stored for longer than 15 days, proceed to moderate agitation.

The heaters have a power flux density below $1W/cm^2$.

Storage conditions to avoid:

Do not store the emulsion at a temperature below $+5^{\circ}C$ or above $90^{\circ}C$.

Never heat a tank if the heating elements are not widely covered (minimum 15 cm); this provision may be achieved by installing an automatic heating disconnection system controlled by the control of the level.

Do not heat the pumps or pipes with open flame.

Incompatible materials:

Alkaline products or products likely to cause destabilization of the emulsion.

PACKAGING:

Suitable packaging materials:

Steels

Anticorrosive coated steel

Composite resins.

For small containers:

Already mentioned materials and plastic or glass containers

Unsuitable packaging materials:

Aluminium

Zinc and alloys

Copper and alloys

7.3 Specific end use(s)

No other uses known than mentioned in section 1.2.

8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:

Components mentioned in section 3 are not subject to WEL. In addition, under normal uses of the mixture, as described in headings 1.2 and 7.1, no air pollutant subject to WEL is likely to be released.

8.2 Exposure controls

Use clean and properly maintained personal protective equipment.

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

During the use, do not eat, drink or smoke. Remove and wash contaminated clothing before reuse.

Ensure adequate ventilation, especially in confined areas.

Eye / face protection

Transfer: protective helmet with polycarbonate face shield (compliant to EN 166 standard)

Spray lance implementation: protective helmet with polycarbonate face shield (compliant to EN 166 standard)

Sprayer boom supervision: protective helmet with polycarbonate face shield (compliant to EN 166 standard)

Hand protection

Transfer: CE protective gloves, compliant to EN 407 standard, and level 2 heat-resistant's

Spray lance implementation: CE protective gloves, compliant to EN 407 standard, and level 2 heat-resistant's

Sprayer boom supervision: CE protective gloves, compliant to EN 407 standard, and level 2 heat-resistant's

Body protection

Transfer: neck protector, dry suit Class III type 6 compliant to NF EN 13982, safety ankle shoes or boots compliant to EN ISO 20345

Spray lance implementation: neck protector, dry suit Class III type 6 compliant to NF EN 13982, safety ankle shoes or boots compliant to EN ISO 20345

Sprayer boom supervision: neck protector, dry suit Class III type 6 compliant to NF EN 13982, safety ankle shoes or boots compliant to EN ISO 20345

Respiratory protection

Not necessary for a normal use

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

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General information:

| | |
|------------------|---|
| Physical state: | Viscous liquid. (Liquid more or less viscous depending on its temperature) |
| Colour: | Brown to black |
| Odour: | Slight, at the application temperature (maximum 75°C) |
| Odour threshold: | Not determined |

Important health, safety and environmental information

| | |
|------------------------|----------------------------------|
| pH (aqueous solution): | selon la norme EN 12850 |
| pH: | 2.00 à 7.00. Slightly acidic. |
| Flash point interval: | Not relevant. |
| Vapor pressure (50°C): | Not relevant. |
| Density: | 1+/-0.04 (25°C) |
| Water solubility: | Dilutable. |
| Partition coefficient: | |
| n-octanol/water: | Non-applicable |
| Dynamic viscosity: | To be translated (XML) |

CHARACTERISTIC TEMPERATURES:

| | |
|--------------------------|----------------|
| Boiling point/gap: | >100°C |
| Melting temperature: | not applicable |
| Decomposition point/gap: | N/A |

FLAMMABILITY DATA:

| | |
|------------------------|--|
| Auto-ignition point: | not applicable |
| Evaporation rate: | not applicable |
| Vapor pressure: | Not applicable (water-based mixture) |
| To be translated (XML) | Not applicable (water-based mixture) |
| Explosive properties: | not applicable |
| Oxydising properties: | Not oxydising according to EC criteria |

9.2 Other information

| | |
|--------------------------|----------------------------------|
| Freezing point: | < 0°C |
| Electrical conductivity: | conductive (water-based mixture) |

10. Stability and reactivity**10.1 Reactivity**

At usual storage and handling temperatures, the bitumen emulsion presents no particular reactivity.

10.2 Chemical stability

At the usual temperatures of storage and handling, a bitumen emulsion is stable, but this stability is limited in time (settling) and variable according to the formulation of the aqueous phase. If the storage is longer than 15 days, it is recommended to periodically check the stability and, where necessary, to proceed to moderate stirring in order to bring the emulsion in suspension again.

10.3 Possibility of hazardous reactions

To our knowledge, the emulsion does not give rise to dangerous reactions under normal conditions of storage and handling.

10.4 Conditions to avoid

Avoid:

- freezing
- temperatures above 90°C

10.5 Incompatible materials

Keep away from:

- Bases
- Aluminium
- Copper and alloys
- Zinc and alloys

10.6 Hazardous decomposition products

In case of a fire in the vicinity of a storage of emulsion, the evaporation of the aqueous phase can result in incomplete combustion and thermal decomposition of the residual bituminous binder. This can produce more or less toxic gases such as CO, CO₂, H₂S, various hydrocarbons, aldehydes, etc ... and soot. Inhalation is extremely dangerous.

11. Toxicological information

11.1 Information on toxicological effects

11.1.1 Substances

No toxicological data available for the substances.

11.1.2 Mixture

Given the available data, the classification criteria are not met.

Skin corrosion/skin irritation:

Given the available data, the classification criteria are not met.
The emulsion, vapours and aerosols can be irritating to the respiratory system, eyes and skin.

Serious damage to eyes/eye irritation:

Given the available data, the classification criteria are not met.

| | |
|--|---|
| | The emulsion, vapours and aerosols can be irritating to the respiratory system, eyes and skin. |
| Respiratory or skin sensitisation: | Contains at least one sensitising substance. May cause an allergic reaction. |
| Germ cell mutagenicity: | Given the available data, the classification criteria are not met. |
| Carcinogenicity: | Given the available data, the classification criteria are not met. |
| Reproductive toxicant: | Given the available data, the classification criteria are not met. |
| Specific target organ systemic toxicity - repeated exposure: | Given the available data, the classification criteria are not met. Frequent and prolonged contacts may lead to a skin irritation. |
| Aspiration hazard: | Given the available data, the classification criteria are not met. |

12. Ecological information

12.1 Toxicity

12.1.2 Mixtures

Presents no particular risk to the environment, provided to comply with the recommendations of Section 13 Disposal, and national or local regulations that may apply.

12.2 Persistence and degradability

12.2.2 Mixtures

The emulsion is a construction product consisting of bitumen that, after rupture, is substantially unalterable in the environment.

12.3 Bioaccumulative potential

No data on cationic bitumen emulsions are available.

Bioaccumulation of the constituents of the bitumen is very unlikely due to its insolubility and high molecular weights of its constituents. Its bioavailability to aquatic organisms is very limited.

12.4 Mobility in soil

Given its physical and chemical characteristics, the product is not mobile in soil.

12.5 Results of PBT and vPvB assessment

Given the available data, the classification criteria are not met.

12.6 Other adverse effects

In case of accidental spillage, the product may bog down higher organisms and disrupt the operation of treatment plants

13. Disposal considerations

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

13.1 Waste treatment methods

WASTE:

Destruction / Disposal: Recycle or failing incineration in a licensed facility.

SOILED PACKAGING:

Destruction / Disposal: Eliminate in a licensed facility.

WASTE CODE (Decision 2001/573/EC, EC Directive 2006/12/EEC; Directive 94/31/EEC on hazardous waste):

05 01 17 bituminous mixtures
European waste catalogue (EWC): Decree No. 2002-540 of
18/04/2002 (OG 20 April 2002)

14. Transport information

Exempt from transport classification and labelling.

Not Regulated for Transportation to the extent that transportation is made at a temperature <80°C

Note:

Regulatory prescriptions mentioned above are those in effect on the day of the SDS update. But given the possible evolution of transport regulations for dangerous goods and in case the present Safety Data Sheet is dating back to more than 12 months, it is advisable to check their validity with your provider.

14.1 UN number

Not regulated

14.2 UN proper shipping name

Not regulated

14.3 Transport hazard class(es)

Not regulated in so far as the carriage is at a temperature < 80°C

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14.4 Packing group

Not regulated

14.5 Environmental hazards

Not regulated

14.6 Special precautions for user

Maintain out of frost

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. 487/2013.

EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.

EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.

EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

Container information:

No data available.

Particular provisions:

No data available.

15.2 Chemical safety assessment

No Chemical safety assessment made for this mixture.

16. Other information

This SDS is required by Article 31 of Regulation 1907/2006 (REACH). The SDS was prepared in accordance with Regulation (EC) No 453/2010.

This SDS complements the user's technical sheets but does not replace them. The information it contains is based on the state of our knowledge of the product, at the date of update. They are given in good faith.

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The user's attention is drawn to the possible risks incurred when a product is used for purposes other than those for which it is designed.

In any case it does exempt the user from knowing and applying all the regulations governing his activity. He takes in his sole responsibility the precautions related to the use of the product he knows.

The regulatory requirements are mentioned in order to assist the recipient to fulfil its obligations when using a hazardous product. This list should not be considered as exhaustive. It does not exempt the user from ensuring that other obligations apply as texts may apply, other than those mentioned, relating to the detention and use of the product, for which he alone is responsible.

Safety Data Sheet established by: general.enquiries@polybitumens.co.uk

Wording of the phrases mentioned in section 3:

| | |
|------|---|
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

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.

SVHC: Substances of very high concern.

REACH EU Regulation n°1907/2009, related to the Registration, Authorization, and Restriction of Chemicals, entered into force on 1 June 2007.

CLP: EU Regulation No. 1272/2008 "Classification Labelling Packaging" , related to the classification, the labelling and the packaging of substances and mixtures, entered into force on 20 January 2009.

GHS: Globally Harmonised System: classification and labelling regulation drafted by the European Commission based on the recommendations of the Global Harmonized System of the United Nations.

WEL: Working Exposure Limite

CE50: Efficient concentration 50%

LC50: Lethal Concentration 50%

NOEC: No Observed Effect Concentration

NOAEL: No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

bw: body weight

food: in food

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dw: dry weight

PNEC: Predictable No Effect

Concentration PBT: Persistent,
bioaccumulable and toxic.

To be translated (XML)

OECD: Organisation for Economic Co-operation and Development

Dgr: Danger

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

History

Date of revision: 10.10.2023

Date of next review: 101.10.2028