SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : H4

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

H4 Bitumen is used for the sealing and jointing of vertical asphalt faces.

1.3. Details of the supplier of the safety data sheet

Registered company name : COLAS LIMITED
Address : Unit 6210 Bishops Court, Solihull Parkway, Birmingham, West Midlands B377YB Birmingham UK
Telephone : + 44 3335773577
info@colas.co.uk
http://www.colas.co.uk

1.4. Emergency telephone number : + 44 1865407333

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.

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.

No labelling requirements for this mixture.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 59 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.

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

Contact between hot (> 100°C) product and water or aqueous products may produce a rapid vaporization of water with frothing and overflowing of hot product.

RISK OF HEAT BURNS in case of leakage or accidental splashing.

Contact with hot material can cause thermal burns which may result in permanent skin damage. Hot product may cause severe eye burns and/or blindness.

Hydrogen sulphide (H2S), an extremely flammable and toxic gas, and other hazardous vapours may evolve and collect in theheadspace of storage tanks, transport vessels and other enclosed containers.

Hydrogen sulphide is highly toxic and may be fatal if inhaled. May dull the sense of smell, so do not rely on odour as an indication of hazard.

Not classified as flammable but will burn. Do not allow molten material to contact water or liquids as this can cause violent eruptions, splatter hot material, or ignite flammable material. These deposits, (carbonaceous materials and iron sulphides), may be pyrophoric and self-ignite when brought into contact with air (opening of tank).

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

A blend of components derived from crude petroleum oil.

Composition :

Identification	Classification (EC) 1272/2008	Note	%
CAS: 8052-42-4 EC: 232-490-9 REACH: 01-2119480172-44 BITUME		[i]	100%

Information on ingredients :

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

Other data :

Preparation : Bitumens are complex hydrocarbon products with high molecular mass, derived from the processing of crude oil. Bitumens are composed of products of paraffinic, naphthenic and aromatic nature. They may contain sulphurated derivatives and organic acids. They may also contain polycyclic aromatic hydrocarbons in the amount of a few parts per million (ppm).

Contains hydrogen sulphide, CAS # 7783-06-4. Hydrogen sulphide may be present both in the liquid and the vapour. Composition is complex and varies with the source of the crude oil.

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

If there is any suspicion of inhalation of H2S. Rescuers must wear breathing apparatus, belt and safety rope, and follow rescue procedures.

In the event of exposure by inhalation :

Immediately remove to fresh air. If breathing difficulties are experienced, seek medical attention. If breathing has stopped, commence artificial resuscitation and seek medical attention immediately.

If breathing has stopped or is labored, give assisted respiration.

In case of exposure to intense concentrations of vapours, fumes or spray, transport the person away from the contaminated zone, keep warm and allow to rest. Immediately begin artificial respiration if breathing has ceased. Call a physician immediately.

In the event of splashes or contact with eyes :

In case of contact with hot bitumen, cool the eye immediately and copiously with cold water for at least 20 minutes., keeping the eye open if possible. Immediately transport to hospital.

Check for and remove any contact lenses. Do not administer eye drops or other liquidwithout medical approval.

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.

Do not attempt to remove anything from the burn area or apply burn creams or ointments. During transport do not cover the wound with dressing or sheet since these may adhere to the product. It should be noted this product contracts on cooling. Where a limb is encased, care should be taken to avoid the development of a tourniquet effect. In the event of this occurring, the adhering product must be softened and/or split to prevent restriction of blood flow.

In the event of swallowing :

Seek medical attention, showing the label.

Not an expected route of exposure.

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

Eye contact : Risk of burns (if the product is hot). May cause slight irritation.

Skin contact : Risk of burns (if the product is hot). The product is not considered to be irritating, however, condensed product vapors can lead to skin irritations.

Inhalation : The inhalation of vapours or aerosols may be irritating for the respiratory tract and for mucous menbranes. Vapors inhaled in strong concentration have a narcotic effect on the central nervous system. Risk of hydrogen sulphide intoxication (H2S).

H2S has a broad range of effects dependent on the airborne concentration and length of exposure: 0.02 ppm odour threshold, smell of rotten eggs; 10 ppm eye and respiratory tract irritation; 100 ppm coughing, headache, dizziness, nausea, eye irritation, loss of sense of smell in minutes; 200 ppm potential for pulmonary oedema after >20-30 minutes;

500 ppm loss of consciousness after short exposures, potential for respiratory arrest; >1000ppm immediate loss of consciousness, may lead rapidly to death, prompt cardiopulmonary resuscitation may be required.

Do not depend on sense of smell for warning. H2S causes rapid olfactory fatigue (deadens sense of smell). There is no evidence that H2S will accumulate in the body tissue after repeated exposure.

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

Do not attempt to remove the product from the skin as it provides an airtight sterile covering, which will eventually fall away with the scab as the burn heals. If removal is attempted, mineral oil (not mineral spirits) or a mineral oil based ointment may be applied to help soften the product to facilitate removal.

Hydrogen sulphide (H2S) - CNS asphyxiant. May cause rhinitis, bronchitis and occasionally pulmonary oedema after severe exposure. CONSIDER: Oxygen therapy. Consult a Poison Control Center for guidance.

Information for the doctor :

In case of incident, treat it symptomatically.

SECTION 5 : FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

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)

Contact between hot (> 100°C) product and water or aqueous products may produce a rapid vaporization of water with frothing and overflowing of hot product.

Respiratory problems or nausea may be caused by excessive exposure to hot product fumes.

5.3. Advice for firefighters

Do no breathe decomposition products and fumes. Use approved self-contained breathing apparatus. Wear fire retardant clothing. Use water spray to cool containers. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

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 non first aid worker

For personal protection see section 8.

Avoid contact with skin, eyes and clothing. Hot product should be handled so that there is no risk of burns. Use compressed air or fresh air respiratory equipment in confined spaces.

For first aid worker

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

Avoid contact with skin, eyes and clothing. Hot product should be handled so that there is no risk of burns. Use compressed air or fresh air respiratory equipment in confined spaces.

Small spillages: normal antistatic working clothes are usually adequate.

Large spillages: full body suit of chemically resistant and thermal resistant material should be used.

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

- recovery : contain the spread of the product, allow to solidify and recover; spread sand on concerned surfaces if necessary

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

6.4. Reference to other sections

For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Material Safety Data Sheet.

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 equipment given in §8 before handling the product.

Keep the temperature of the product as low as possible to minimise the release of fumes.

Hydrogen sulphide may accumulate in tanks during prolonged storage at high temperature.

Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Bulk storage tanks should be diked (bunded).

Take precautionary measures against static electricity.

Fire prevention :

Prevent access by unauthorised personnel.

- never use solvent to free blockage.
- never check the tank level with flame or when smoking.
- 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.

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 load a tank which has contained an aqueous preparation if water has not been properly and totally removed
- avoid standing on the top or very close to the tanks to reduce fumes inhalation.
- to prevent risks related to static electricity, ensure that the machinery, equipement and tanks are properly earthed.

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

Adjust the storage temperature to the lowest level possible and, as a general rule, do not exceed 200°C or a temperature 100°C higher than the softening point.

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

The tanks destined to hold the hot bitumen must be designed and adapted for that purpose, in particular, lines used for the product and pump devices are to be insulated and equipped with a heating device.

- The power of heating elements shoud be compatible with product in order to reduce coking.

Do not heat the bitumen to temperatures ranging from 90°C to 120°C without taking special precautions (risk of vaporisation or foaming related to the accidental presence of water).

- Use only containers, joints, pipes etc... made in a material suitable for use with hot binders and hydrocarbons.

Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content, hydrogen sulphide (H2S) and flammability. If sulphur compounds are suspected to be present in the product, check the atmosphere for H2S content.

Storage

Storage Temperature: Temperature should be kept at least 30°C below flash point and should never exceed the industry recommended maximum safe working temperature of 200°C.

Packaging

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

Suitable packaging materials :

Unlined steel, Stainless steel.

Unsuitable packaging materials :

For containers or container linings avoid PVC, polyethylene or high density polyethylene.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
8052-42-4	5 mg/m3	10 mg/m3			

Biological limits :

No biological limit allocated.

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

DNEL Worker (Industrial/Professional) : 2.9 mg/m3/8h (aerosol - inhalation)

DNEL Consumer : 0.6 mg/m3/24h (aerosol - inhalation)

Predicted no effect concentration (PNEC):

Substance is a hydrocarbon with a complex, unknown or variable composition. Conventional methods of deriving PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.

8.2. Exposure controls

Appropriate engineering controls

When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Personal protection measures, such as personal protective equipment

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.

Safety helmet with face screen and neck protection.

- Hand protection

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

Gloves anti-heat for the liquefied product (EN 407, level 2).

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognise that suitable gloves offering this level of protection may not be available.

In this case a lower breakthrough time may be acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material.

Gloves anti-heat for the liquefied product (EN 407, level 2).

- 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.

Wear a safety helmet with face screen or safety glasses and fire resistant clothing and boots.

- Respiratory protection

Insulated breathing apparatus must be worn in confined premises with heavy concentrations of fumes and gases.

Positive-pressure, air-supplied respirator in areas where H2S vapours may accumulate is recommended. European Committee for Standardization (CEN) standards EN 136, 140 and 405 provide respirator masks and EN 149 and 143 provide filter recommendations.

- Thermal risks

When handling heated product, wear heat resistant gloves, safety hat with visor, and heat resistant coveralls (with cuffs over gloves and legs over boots), and heavy-duty boots, e.g. leather for heat resistance.

Exposure controls linked to environmental protection

Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour. Information on accidental release measures are to be found in section 6.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state : Paste.

Aspect :

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

Colour

- colour : black or brownish-black

Odour

Odour threshold : Not stated.

- odour : characteristic

Melting point

Melting point/melting range : Not specified.

Freezing point

Freezing point / Freezing range : Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not relevant.

Flammability

Flammability (solid, gas) : Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) : Not stated.
Explosive properties, upper explosivity limit (%) : Not stated.

Flash point

Flash Point Interval :

Flash point : > 230°C

Auto-ignition temperature

Self-ignition temperature : Not specified.

Autoignition temperature > 400 °C

Decomposition temperature

Decomposition point/decomposition range : Not specified.

pH

pH (aqueous solution) : Not stated.
pH : Not relevant.

Kinematic viscosity

Viscosity : Not stated.

Viscosity : 200 to 2000 mm2/s @ 135°C

Viscosity : 135 to 330 mm2/s @ 135°C

Solubility

Water solubility : Insoluble.
Fat solubility : Not stated.

Solubility :

- in water: insoluble and not miscible
- in organic solvents: soluble in a large number of usual solvents
- in fatty substances (oils, ...): partially soluble

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water : Not stated.

n-octanol/water partition coefficient Log Pow > 6

Vapour pressure

Vapour pressure (50°C) : Not relevant.

Density and/or relative density

Density : = 1

Density/specific gravity : 1000 - 1100 kg/m3 @ 25°C

Relative vapour density

Vapour density : Not stated.

Particle characteristics

The mixture does not contain nanoforms.

9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

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

None under normal processing.

10.4. Conditions to avoid

Sparks, hot points, open flames and static electricity.

Avoid excessive temperature (above the maximum recommended handling and storage temperature) that may produce irritant vapours and fumes.

10.5. Incompatible materials

Do not allow molten material to contact water or liquids as this can cause violent eruptions, splatter hot material, or ignite flammable material.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO_2)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No data available.

11.1.1. Substances

Acute toxicity :

BITUME (CAS: 8052-42-4)

Oral route :	LD50 > 5000 mg/kg OECD Guideline 401 (Acute Oral Toxicity) Species : Rat (recommended by the CLP)
Dermal route :	LD50 > 2000 mg/kg bodyweight/day OECD Guideline 402 (Acute Dermal Toxicity) Species : Rabbit (recommended by the CLP)
Inhalation route (n/a) :	LC50 > 94.4 OECD Guideline 403 (Acute Inhalation Toxicity) Species : Rat (recommended by the CLP)

Skin corrosion/skin irritation :

Expected to be slightly irritating. Contact with hot material can cause thermal burns which may result in permanent skin damage.

Serious damage to eyes/eye irritation :

Expected to be slightly irritating. Hot product may cause severe eye burns and/or blindness.

Carcinogenicity :

Bitumens contain low concentrations of Polycyclic Aromatic Compounds (PACs). At ambient temperatures and in undiluted bitumens these PACs are not considered to be bio-available. However, if bitumens are mixed with diluents to obtain a low viscosity at ambient temperatures, or heated it is believed that such materials may become bio-available.

A two-year inhalation study that exposed rats to fumes collected from an air-rectified asphalt was negative.

BITUME (CAS: 8052-42-4)

Carcinogenicity Test :	Negative. No carcinogenic effect.

Reproductive toxicant :

BITUME (CAS: 8052-42-4)

	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Study on development :	Species : Rat

Specific target organ systemic toxicity - repeated exposure :

BITUME (CAS: 8052-42-4)

Dermal route :	Duration of exposure : 28 days C = 200 mg/kg bodyweight/day OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) Species : Rabbit (recommanded by CLP)
Inhalation route :	Duration of exposure : 90 days C = 103.9 Species : Rat (recommanded by CLP)

11.1.2. Mixture

Mixture versus substance information

Carcinogenicity Classification

Asphalt, fumes

IARC 2B: Occupational exposures to hard bitumens and their emissions during mastic asphalt work are ‘possibly carcinogenic to humans’ (IARC Group 2B). Occupational exposures to straight-run bitumens and their fume condensates during road paving are ‘possibly carcinogenic to humans’ (IARC Group 2B).

GHS / CLP: No carcinogenicity classification

11.2. Information on other hazards

Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with effects on human health.

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 8052-42-4 : IARC Group 2B : The agent is possibly carcinogenic to humans.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract.

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

Bitumen is a construction material and its biodegradability is very slow.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Ground : given its physical and chemical characteristics, the product has no soil mobility.

Water : insoluble, the bitumen floats or settles according to its density

12.5. Results of PBT and vPvB assessment

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC1907/2006.

Anthracene is not present in this substance at greater than 0.1% (CONCAWE 2010).

12.6. Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with environmental effects.

12.7. Other adverse effects

Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

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, 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.

Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :

05 01 17 bitumen

Classification of waste is always the responsibility of the end user.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2024 [65]).

14.1. UN number or ID number

3257

14.2. UN proper shipping name

UN3257=ELEVATED TEMPERATURE LIQUID, N.O.S., at or above 100 °C and below its flash- point (including molten metals, molten salts, etc.), filled at or below 190 °C

14.3. Transport hazard class(es)

- Classification :

9

14.4. Packing group

III

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	9	M9	III	9	99	0	274 643 668	E0	3	D

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	9	-	III	0	F-A. S-P	232 274	E0	Category A SW5	-

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	9	-	III	Forbidden	Forbidden	Forbidden	Forbidden	-	-
	9	-	III	Forbidden	Forbidden	-	-	-	-

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

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. 2023/707.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2024/197. (ATP 21)

Container information:

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach.

Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Particular provisions :

No data available.

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

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.

This product is not classified for human health or environmental hazards. An exposure scenario is not required. Under Article 31 of REACH, a SDS is not required for this product. Therefore, this SDS has been created on a voluntary basis to pass on potentially relevant information required under Article 32.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

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.

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.