

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

| | |
|-------------------------------------|--|
| Product name | Aquasafe 498 |
| SDS no. | 466742 |
| Use of the substance/mixture | Rust preventive For specific application advice see appropriate Technical Data Sheet or consult our company representative. |
| Supplier | Castrol India Ltd Technopolis Knowledge Park Office PO Box 19411 Mahakali Caves Rd Chakala, Andheri (E) Mumbai 400093 Telephone: +91 (022) 66984111/66984112 |
| EMERGENCY TELEPHONE NUMBER | Toll free: 000800 100 7479 (for use in India only - 24 hours) Carechem Singapore: +65 3158 1198 (24 hours) |
| E-mail address | MSDSadvice@bp.com |

2. Hazards identification

This preparation is classified as dangerous according to Directive 1999/45/EC as amended and adapted.

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

Additional hazards Defatting to the skin.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

3. Composition/information on ingredients

Highly refined mineral oil, emulsifiers and additives.

| Chemical name | CAS no. | % | EINECS / ELINCS. | Classification |
|--|----------------|---------|------------------|---------------------------------|
| Base oil - unspecified | Varies | 10 - 20 | | Not classified. [1] [2] |
| Sodium sulphonate | 68608-26-4 | 1 - 5 | 271-781-5 | Xi; R36 [1] |
| Amine neutralised carboxylic acids | Not available. | 1 - 5 | | Xi; R36/38 [1] |
| 2,6-ditert-butyl-p-cresol | 128-37-0 | 0.1 - 1 | 204-881-4 | N; R50/53 [1] [2] |
| Ethanol, 2,2'-[[3-[(2-hydroxyethyl)amino]propyl]imino]bis-, N-tallow alkyl derivs. | 90367-27-4 | 0.1 - 1 | 291-275-8 | Xn; R22 [1] C; R34 N; R50 |
| Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione | 5395-50-6 | 0.1 - 1 | 226-408-0 | R43 [1] |

See Section 16 for the full text of the R-phrases declared above.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in Section 8.

4. First-aid measures

| | |
|---------------------|--|
| Eye contact | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention. |
| Skin contact | Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops. |
| Inhalation | If inhaled, remove to fresh air. Get medical attention if symptoms appear. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Ingestion | Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Wash out mouth with water if person is conscious. If potentially dangerous quantities of this material have been swallowed, call a physician immediately. |

5 . Fire-fighting measures

Extinguishing media

Suitable

In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Not suitable

Do not use water jet.

Hazardous decomposition products

Decomposition products may include the following materials:

carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
metal oxide/oxides

Unusual fire/explosion hazards

In a fire or if heated, a pressure increase will occur and the container may burst.

Special fire-fighting procedures

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. This material is harmful to aquatic organisms.

Protection of fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6 . Accidental release measures

Personal precautions - For non-emergency personnel

Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Floors may be slippery; use care to avoid falling. Do not breathe vapour or mist. Ensure good ventilation. Put on appropriate personal protective equipment.

Personal precautions - For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.

Large spill

Immediately contact emergency personnel. Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spill product. Dispose of via a licensed waste disposal contractor.

Small spill

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Reference to other sections

See Section 1 for emergency contact information.
See Section 5 for firefighting measures.
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.

7 . Handling and storage

Handling - Protective measures

Avoid breathing vapours, spray or mists. Use with adequate ventilation. Avoid prolonged or repeated contact with skin. Avoid contact of spilled material and runoff with soil and surface waterways. Wash thoroughly after handling.

Handling - Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Protect from freezing.

8 . Exposure controls/personal protection

Ingredient name

Base oil - unspecified

Occupational exposure limits

ACGIH (United States).

TWA: 5 mg/m³ 8 hours. Form: Mineral oil, mist

ACGIH TLV (United States).

TWA: 2 mg/m³ 8 hours. Issued/Revised: 2/2001 Form: Inhalable fraction

ACGIH TLVs

Base oil - unspecified

ACGIH (United States).

TWA: 5 mg/m³ 8 hours. Form: Mineral oil, mist

ACGIH TLV (United States).

TWA: 5 mg/m³ 8 hours. Form: Mineral oil, mist

Base oil - unspecified

For information and guidance, the ACGIH values are included. For further information on these please consult your supplier.

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

This product contains a preservative that may release trace amounts of formaldehyde during use.

Exposure controls

Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection

Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure.

In case of insufficient ventilation, wear suitable respiratory equipment.

The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Hand protection

Wear protective gloves if prolonged or repeated contact is likely.

Chemical-resistant gloves. Recommended: Nitrile gloves.

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye protection

Safety glasses with side shields.

Skin and body

Wear appropriate clothing to avoid prolonged skin contact.

Personal protective equipment (Pictograms)



9 . Physical and chemical properties

General information

Appearance

| | |
|----------------|---------|
| Physical state | Liquid. |
| Colour | Beige. |
| Odour | Mild |

Important health, safety and environmental information

| | |
|-------------|---|
| Flash point | Closed cup: >100°C (>212°F) |
| Viscosity | Kinematic: 40 to 60 mm ² /s (40 to 60 cSt) at 40°C |
| Density | <1000 kg/m ³ (<1 g/cm ³) at 20°C |
| Solubility | Emulsifies in water. |

10 . Stability and reactivity

Stability

The product is stable.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous polymerisation will not occur.
Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

High temperatures

Materials to avoid

Reactive or incompatible with the following materials: oxidising materials.
Slightly reactive or incompatible with the following materials: acids.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Acute toxicity

Effects and symptoms

| | |
|------------------------|--|
| Eyes | May cause eye irritation. |
| Skin | Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. |
| Inhalation | Vapours and aerosol can produce mucous membrane, nose and throat irritation. |
| Ingestion | Ingestion may cause gastrointestinal irritation and diarrhoea. |
| Chronic effects | Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. |

12 . Ecological information

| | |
|----------------------------------|---|
| Persistence/degradability | Expected to be biodegradable. |
| Mobility | Liquid. Emulsifies in water. |
| Environmental hazards | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

13 . Disposal considerations

Disposal considerations / Waste information

The generation of waste should be avoided or minimised wherever possible. Waste product residues should not be disposed of via the sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Special precautions

Diluted Fluid The spent diluted fluid comprises a relatively stable emulsion. Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques (e.g. emulsion splitting, coagulation and filtration) approved by the local authority. Spent fluid should never be disposed of down the drain. The aqueous phase should not be discharged into sewage systems unless provided for by local regulations; the non-aqueous phase should be disposed of as undiluted fluid. Note that separated aqueous solutions or effluents may contain metal salts as well as traces of oil and must be checked for conformity in these respects against consents given by the authorities before disposal. Further treatment may be required.

Unused product

| Waste code | Waste designation |
|------------|--------------------------------|
| 13 08 99* | wastes not otherwise specified |

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Packaging

| Waste code | European waste catalogue (EWC) |
|------------|--|
| 15 01 10* | packaging containing residues of or contaminated by dangerous substances |

14 . Transport information

Not classified as hazardous for transport (ADR/RID, ADN, IMDG, ICAO/IATA)

15 . Regulatory information

Classification and labelling have been performed according to EU directives 1999/45/EC and 67/548/EEC as amended and adapted.

Label requirements

| | |
|-----------------------------------|--|
| Risk phrases | R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| Safety phrases | S61- Avoid release to the environment. Refer to special instructions/safety data sheet. |
| Additional warning phrases | Contains Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione. May produce an allergic reaction. |

Other regulations

| | |
|--|---|
| REACH Status | The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH. |
| United States inventory (TSCA 8b) | All components are listed or exempted. |
| Australia inventory (AICS) | At least one component is not listed. |

| | | |
|---------------------------------------|---------------------------------|-------------------------------------|
| Product name Aquasafe 498 | Product code 466742-DE02 | Page: 4/5 |
| Date of issue 20 November 2012 | Format India (India) | Language ENGLISH (ENGLISH) |

| | |
|---|--|
| Canada inventory | At least one component is not listed. |
| China inventory (IECSC) | All components are listed or exempted. |
| Japan inventory (ENCS) | At least one component is not listed. |
| Korea inventory (KECI) | At least one component is not listed. |
| Philippines inventory (PICCS) | At least one component is not listed. |

16 . Other information

| | |
|--|---|
| Full text of R-phrases referred to in sections 2 and 3 | R22- Harmful if swallowed. R34- Causes burns. R36- Irritating to eyes. R36/38- Irritating to eyes and skin. R43- May cause sensitisation by skin contact. R50- Very toxic to aquatic organisms. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
|--|---|

History

| | |
|---|---------------------|
| Date of issue/ Date of revision | 20/11/2012. |
| Date of previous issue | 08/11/2012. |
| Prepared by | Product Stewardship |

Notice to reader

✔ Indicates information that has changed from previously issued version.

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.