

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

| 1.1. Product identifier                  |   |
|--|---|
| Trade name or designation of the mixture | SEPTRIN FOR INFUSION  |
| Registration number                      | -   |
| Synonyms                                 | SEPTRIN INJECTION AMPOULE 400/80 MG/5 ML * SEPTRIN I.V * SEPTRIN I.V SOLUCAO<br>PARA PERFUSAO INTRAVENOSA * SEPTRIN IM INJECTION * SEPTRIN INFUSION * SEPTRIN<br>INJECTION * SEPTRIN IV AMPOULS * SEPTRIN IV INFUSION * SEPTRIN IV INJECTION *<br>SEPTRIN ROZTWOR DO INIEKEJI 480 MG/5 ML * SEPTRIN SOLUCION INFUSION I.V 5 ML *<br>EUSAPRIM INFUSION * SULPHAMETHOXAZOLE AND TRIMETHOPRIM, FORMULATED<br>PRODUCT   |
| Issue date                               | 09-December-2014  |
| Version number                           | 07  |
| Revision date                            | 09-December-2014  |
| 1.2. Relevant identified uses of th      | e substance or mixture and uses advised against   |
| Identified uses                          | Medicinal Product.  |
|  | This safety data sheet is written to provide health, safety and environmental information for people handling this formulated product in the workplace. It is not intended to provide information relevant to medicinal use of the product. In this instance patients should consult prescribing information/package insert/product label or consult their pharmacist or physician. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate safety data sheet for each ingredient. |
| Uses advised against                     | No other uses are advised.  |
| 1.3. Details of the supplier of the      | safety data sheet   |
|  | GlaxoSmithKline UK<br>980 Great West Road<br>Brentford, Middlesex TW8 9GS UK<br>UK General Information (normal business hours): +44-20-8047-5000<br>Email Address: msds@gsk.com<br>Website: www.gsk.com   |
| 1.4. Emergency telephone<br>number       |   |
|  | TRANSPORT EMERGENCIES::UK In-country toll call:+(44)-870-8200418International toll call:+1 703 527 3887available 24 hrs/7 days; multi-language response   |

### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

#### Classification according to Regulation (EC) No 1272/2008 as amended

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

#### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

2.3. Other hazards Flammable liquid and vapour.

Caution - Pharmaceutical agent. See section 11 for additional information on health hazards.

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

| General information  |   |   |                        |                          |                 |
|--|---|---|------------------------|--------------------------|-----------------|
| Chemical name  |   | %   | CAS-No. / EC No.       | REACH Registration No.   | INDEX No. Notes |
| Propylene glycol   |   | < 50  | 57-55-6<br>200-338-0   | -                        | -               |
| Classification:  | DSD:  | -   |                        |                          |                 |
|  | CLP:  | -   |                        |                          |                 |
| ETHYL ALCOHOL, 90-9  | 99%   | < 15  | 64-17-5<br>200-578-6   | -                        | 603-002-00-5    |
| Classification:  | DSD:  | F;R11, Xi;R36   |                        |                          |                 |
|  | CLP:  | Flam. Liq. 2;H22  | 5, Eye Irrit. 2;H319,  | Carc. 1A;H350            |                 |
| SULFAMETHOXAZOLE   | <u>:</u>                                    | < 10  | 723-46-6<br>211-963-3  | -                        | -               |
| Classification:  | DSD:  | R52/53  |                        |                          |                 |
|  | CLP:  | Aquatic Chronic   | 2;H411                 |                          |                 |
| TRIMETHOPRIM   |   | 2   | 738-70-5<br>212-006-2  | -                        | -               |
| Classification:  | DSD:  | Xn;R22  |                        |                          |                 |
|  | CLP:  | Acute Tox. 4;H3   | 02                     |                          |                 |
| SODIUM HYDROXIDE   |   | < 2   | 1310-73-2<br>215-185-5 | -                        | 011-002-00-6    |
| Classification:  | DSD:  | C;R35   |                        |                          |                 |
|  | CLP:  | Acute Tox. 3;H3   | 01, Acute Tox. 4;H3    | 12, Skin Corr. 1A;H314   |                 |
| Other components below   | •   |   |                        |                          |                 |
| List of abbreviations and s<br>CLP: Regulation No. 12<br>DSD: Directive 67/548/E<br>M: M-factor<br>vPvB: very persistent ar<br>PBT: persistent, bioaccu<br>#: This substance has b | 72/2008.<br>EEC.<br>Ind very b<br>umulative | ioaccumulative su   | bstance.<br>nce.       | limit(s).                |                 |
| Composition comments   | ٦   | The full text for all   | R- and H-phrases is    | displayed in section 16. |                 |
| SECTION 4: First aid   | measu                                       | res   |                        |                          |                 |
| General information  | v   | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.        |                        |                          |                 |
| 4.1. Description of first aid  | measur                                      | es  |                        |                          |                 |
| Inhalation   | S   | Move to fresh air. If breathing is difficult, trained personnel should give oxygen. Call a physician if symptoms develop or persist. Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |                        |                          |                 |
| Skin contact   | I   | Immediately flush skin with plenty of water. Take off contaminated clothing and wash before reuse Get medical attention if symptoms occur.  |                        |                          |                 |
| Eye contact  |   | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  |                        |                          |                 |
| Ingestion  |   | If swallowed, rinse mouth with water (only if the person is conscious). If ingestion of a large amount does occur, call a poison control centre immediately. Do not induce vomiting without   |                        |                          |                 |

iy if the If swallowed, rinse mouth with water (only if the person is conscious). If ingestion of a large amount does occur, call a poison control centre immediately. Do not induce vomiting without advice from poison control center. 4.2. Most important symptoms Accidental exposure or contact might produce: nausea, fever, diarrhoea. and effects, both acute and

delayed 4.3. Indication of any No specific antidotes are recommended. Treat according to locally accepted protocols. For additional guidance, refer to the current prescribing information or to the local poison control immediate medical attention information centre. and special treatment needed

## **SECTION 5: Firefighting measures**

General fire hazards

Flammable liquid and vapour.

| 5.1. Extinguishing media                                   |   |
|--|---|
| Suitable extinguishing media                               | Foam. Dry chemical powder. Carbon dioxide (CO2).  |
| Unsuitable extinguishing media                             | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| 5.2. Special hazards arising from the substance or mixture | During fire, gases hazardous to health may be formed.   |
| 5.3. Advice for firefighters                               |   |
| Special protective equipment for firefighters              | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Special fire fighting<br>procedures                        | Move containers from fire area if you can do so without risk.                                 |
| Specific methods   | Use standard firefighting procedures and consider the hazards of other involved materials.    |

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

| For non-emergency<br>personnel                            | Keep unnecessary personnel away. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.   |
|---|---|
| For emergency responders                                  | Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use personal protection recommended in Section 8 of the SDS.   |
| 6.2. Environmental precautions                            | Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.  |
| 6.3. Methods and material for containment and cleaning up | Keep combustibles (wood, paper, oil etc) away from spilled material.<br>Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapours or<br>divert vapour cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet<br>to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the<br>product and place into a container for later disposal. Prevent entry into waterways, sewer,<br>basements or confined areas. Following product recovery, flush area with water.<br>Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers<br>for later disposal. Clean surface thoroughly to remove residual contamination.<br>Never return spills to original containers for re-use. |
| 6.4. Reference to other sections                          | For personal protection, see section 8. For waste disposal, see section 13 of the SDS.  |

## **SECTION 7: Handling and storage**

| 7.1. Precautions for safe handling                                      | Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Avoid release to the environment. No special control measures required for the normal handling of this product. |
|---|---|
| 7.2. Conditions for safe<br>storage, including any<br>incompatibilities | Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight.<br>Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).   |
| 7.3. Specific end use(s)  | Medicinal Product.  |

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### **Occupational exposure limits**

| GSK  |          |             |             |
|--|----------|-------------|-------------|
| Components   | Туре     | Value       | Note        |
| SULFAMETHOXAZOLE<br>(CAS 723-46-6)                   | 8 HR TWA | 2000 mcg/m3 |             |
|  | OHC      | 1           |             |
| TRIMETHOPRIM (CAS<br>738-70-5)                       | 8 HR TWA | 500 mcg/m3  |             |
|  | OHC      | 2           |             |
| TRIS(HYDROXYMETHYL)A<br>MINOMETHANE (CAS<br>77-86-1) | OHC      | 1           | PROVISIONAL |

| Ireland. Occupational Expos<br>Components   | Туре  | Value   | Form  |
|---|---|---|---|
| ETHYL ALCOHOL, 90-99%<br>(CAS 64-17-5)      | STEL  | 1000 ppm  |   |
| Propylene glycol (CAS<br>57-55-6)           | TWA   | 470 mg/m3   | Total vapour and particulates.                                |
|   |   | 10 mg/m3<br>150 ppm   | Particulate.<br>Total vapour and<br>particulates.             |
| SODIUM HYDROXIDE<br>(CAS 1310-73-2)         | STEL  | 2 mg/m3   |   |
| iological limit values                      | No biological exposure limits noted fo  | r the ingredient(s).  |   |
| ecommended monitoring<br>ocedures           | Follow standard monitoring procedure  | 28.   |   |
| erived no-effect level (DNEL)               | Not available.  |   |   |
| redicted no effect<br>oncentrations (PNECs) | Not available.  |   |   |
| xposure guidelines                          |   |   |   |
| 2. Exposure controls                        |   |   |   |
| ppropriate engineering<br>ontrols           | General ventilation normally adequate<br>operations involving this material base<br>outcome of a site- or operation-specif  | ed upon the OEL/Occupational                                      |   |
| dividual protection measures,               | such as personal protective equipme   | ent   |   |
| General information                         | Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Follow all local regulations if personal protective equipment (PPE) is used in the workplace. |   |   |
| Eye/face protection                         | If contact is likely, safety glasses with side shields are recommended. (e.g. EN 166). Not normally needed.   |   |   |
| Skin protection                             |   |   |   |
| - Hand protection                           | For prolonged or repeated skin contact resistant protective gloves (EN 374) w normally needed.  |   |   |
| - Other                                     | Wear suitable protective clothing as protection against splashing or contamination. (EN 14605 for splashes, EN ISO 13982 for dust). Not normally needed.  |   |   |
| Respiratory protection                      | When workers are facing concentration<br>certified respirators. Where breathable<br>gases/vapours of organic, inorganic, a<br>EN 14387). No personal respiratory p  | e aerosols/dust are formed, us<br>acid inorganic, alkaline compou | e suitable combination filter<br>unds and toxic particles (eg |
| Thermal hazards                             | Wear appropriate thermal protective of  | lothing, when necessary.  |   |
| ygiene measures                             | Always observe good personal hygier<br>and before eating, drinking, and/or sm<br>equipment to remove contaminants. F<br>from a qualified environment, health a  | noking. Routinely wash work c                                     | lothing and protective  |
| nvironmental exposure control               | S   |   |   |
| Hazard guidance and                         | Inform appropriate managerial or sup  | ervisory personnel of all enviro                                  | nmental releases.   |

## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Appearance

| Physical state                          | Liquid.  |
|---|--|
| Form                                    | Aqueous solution.  |
| Colour                                  | Not available.   |
| Odour                                   | Not available.   |
| Odour threshold                         | Not available.   |
| рН                                      | Not available.   |
| Melting point/freezing point            | Not available.   |
| Initial boiling point and boiling range | Not available.   |
| Flash point                             | 44 - 45 °C (111.2 - 113 °F) Closed cup (Estimation based on components). |

| Evaporation rate                           | Not available.                                |
|--|---|
| Flammability (solid, gas)                  | Not available.                                |
| Upper/lower flammability or exp            | losive limits                                 |
| Flammability limit - lower<br>(%)          | Not available.                                |
| Flammability limit - upper<br>(%)          | Not available.                                |
| Vapour pressure                            | Not available.                                |
| Vapour density                             | Not available.                                |
| Relative density                           | Not available.                                |
| Solubility(ies)                            |   |
| Solubility (water)                         | Not available.                                |
| Solubility (other)                         | Not available.                                |
| Partition coefficient<br>(n-octanol/water) | Not available.                                |
| Auto-ignition temperature                  | Not available.                                |
| Decomposition temperature                  | Not available.                                |
| Viscosity                                  | Not available.                                |
| Explosive properties                       | Not available.                                |
| Oxidizing properties                       | Not available.                                |
| 9.2. Other information                     | No relevant additional information available. |
|  |   |

## **SECTION 10: Stability and reactivity**

| 10.1. Reactivity                          | Strong acids.  |
|---|--|
| 10.2. Chemical stability                  | Material is stable under normal conditions.  |
| 10.3. Possibility of hazardous reactions  | No dangerous reaction known under conditions of normal use.  |
| 10.4. Conditions to avoid                 | Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| 10.5. Incompatible materials              | Strong oxidising agents. Peroxides. Phenols.   |
| 10.6. Hazardous<br>decomposition products | Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.   |

## **SECTION 11: Toxicological information**

| General information                      | Occupational exposure to the substance or mixture may cause adverse effects.   |  |  |
|--|--|--|--|
| Information on likely routes of exposure |  |  |  |
| Inhalation                               | Under normal conditions of intended use, this materi   | al is not expected to be an inhalation hazard. |  |
| Skin contact                             | Health injuries are not known or expected under nor  | mal use.                                       |  |
| Eye contact                              | Health injuries are not known or expected under nor  | mal use.                                       |  |
| Ingestion                                | Health injuries are not known or expected under nor  | mal use.                                       |  |
| Symptoms                                 | Accidental exposure or contact might produce: naus   | ea, fever, diarrhoea.                          |  |
| 11.1. Information on toxicologic         | al effects   |  |  |
| Acute toxicity                           | Expected to be a low hazard for usual industrial or commercial handling by trained personnel.<br>Health injuries are not known or expected under normal use. |  |  |
| Components                               | Species  | Test results                                   |  |
| ETHYL ALCOHOL, 90-99% (CAS 64-17-5)      |  |  |  |
| Acute                                    |  |  |  |
| Oral                                     |  |  |  |
| LD50                                     | Rat  | > 2000 mg/kg                                   |  |
| SODIUM HYDROXIDE (CAS 1310-73-2)         |  |  |  |
| Acute                                    |  |  |  |
| Dermal                                   |  |  |  |
| LD50                                     | Rabbit   | 1350 mg/kg                                     |  |
| Oral                                     |  |  |  |
| LD50                                     | Rat  | 104 - 340 mg/kg                                |  |

| Components                           | Species  | Test results  |
|--------------------------------------|--|---|
| SULFAMETHOXAZOLE (CAS 72             | 3-46-6)  |   |
| Acute                                |  |   |
| Oral                                 |  |   |
| LD50                                 | Rat  | > 2000 mg/kg  |
| TRIMETHOPRIM (CAS 738-70-5)          |  |   |
| Acute                                |  |   |
| Oral                                 | _  |   |
| LD50                                 | Rat  | 1360 mg/kg  |
| * Estimates for product may b        | e based on additional compone  | ent data not shown.   |
| Skin corrosion/irritation            | Health injuries are not known  | or expected under normal use. May be irritating to the skin.  |
| Corrosivity                          |  |   |
| SULFAMETHOXAZOLE                     |  | Acute dermal irritation<br>Result: negative<br>Species: Rabbit  |
| Irritation Corrosion - Skin          |  | Species. Rabbit   |
| TRIMETHOPRIM                         |  | Acute dermal irritation   |
|                                      |  | Result: negative  |
| Sorious ave demoge/ave               | Hoalth injurios are not known  | Species: Rabbit<br>or expected under normal use. May be irritating to eyes.                                 |
| Serious eye damage/eye<br>irritation |  | or expected under normal use. May be initiating to eyes.  |
| Eye                                  |  |   |
| SULFAMETHOXAZOLE                     |  | Acute ocular irritation   |
|                                      |  | Result: negative<br>Species: Rabbit   |
| Respiratory sensitisation            | Under normal conditions of ir  | itended use, this material is not expected to be an inhalation hazard.                                      |
| Skin sensitisation                   | Health injuries are not known  | or expected under normal use.   |
| Sensitisation                        |  |   |
| SULFAMETHOXAZOLE                     |  | Maximisation assay (Magnusson and Kligman)  |
|                                      |  | Result: negative<br>Species: Guinea pig   |
| TRIMETHOPRIM                         |  | Maximisation assay (Magnusson and Kligman)  |
|                                      |  | Result: negative  |
| Germ cell mutagenicity               | Species: Guinea pig<br>Health injuries are not known or expected under normal use. |   |
| • •                                  |  | or expected under hormal use.   |
| Mutagenicity<br>SULFAMETHOXAZOLE     |  | Ames Assay, GLP assay   |
|                                      |  | Result: negative  |
| TRIMETHOPRIM                         |  | Ames Assay, GLP assay; Literature data  |
|                                      |  | Result: negative<br>Chromosomal Aberration Assay In Vitro, CHO cells,                                       |
|                                      |  | Literature data   |
|                                      |  | Result: Equivocal (chromosome damage)   |
| SULFAMETHOXAZOLE                     |  | Chromosomal Aberration Assay In Vitro, human peripheral<br>lymphocytes                                      |
|                                      |  | Result: negative  |
| TRIMETHOPRIM                         |  | Chromosomal Aberration Assay In Vitro, human peripheral<br>lymphocytes, Literature data<br>Result: negative |
| SULFAMETHOXAZOLE                     |  | Micronucleus Assay in vitro, cultured human peripheral  |
|                                      |  | lymphocytes   |
| TRIMETHOPRIM                         |  | Result: positive<br>Micronucleus Assay in vitro, cultured human peripheral                                  |
|                                      |  | lymphocytes, Literature data  |
| SULFAMETHOXAZOLE                     |  | Result: positive<br>Syrian Hamster Embryo (SHE) cell transformation assay<br>Result: positive               |
| Carcinogenicity                      |  | expected as a result of occupational exposure. High concentrations  |
| SULFAMETHOXAZOLE                     | or doses administered over a   | n extended period of time were required to produce adverse effects.<br>2 year bioassay                      |
|                                      |  | Result: Positive (thyroid tumours)  |
|                                      |  | Species: Rat  |
| TRIMETHOPRIM                         |  | SAR / QSAR, DEREK, Lhasa, UK<br>Result: No structual alerts identified.                                     |
|                                      |  |   |
|                                      |  |   |

| IARC Monographs. Overall Evaluation of Carcinogenicity |  |  |
|--|--|--|
| SULFAMETHOXAZOLE (CAS 723-46-6)                        |  | 3 Not classifiable as to carcinogenicity to humans.  |
| Reproductive toxicity                                  |  | or expected under normal use. These effects are linked only to high doses did not produce this adverse effect.   |
| Reproductivity<br>TRIMETHOPRIM                         |  | Embryo-foetal development - Oral, Literature data<br>Result: Teratogenic and embryotoxic; folic acid antagonist;<br>adverse effects noted at oral doses 40X equivalent of<br>therapeutic dose<br>Species: Rat<br>Embryo-foetal development - Oral, Literature data<br>Result: Teratogenic and embryotoxic; folic acid antagonist;<br>adverse effects noted at oral doses 6X equivalent of<br>therapeutic dose<br>Species: Rabbit<br>Fertility, Literature data<br>Result: NOAEL / fertility = 70 mg/kg/day (male) and 14<br>mg/kg/day (female) (maximum doses)<br>Species: Rat |
| Specific target organ toxicity -<br>single exposure    | Not assigned.  |  |
| Specific target organ toxicity - repeated exposure     | Not assigned.  |  |
| Aspiration hazard                                      | No studies have been conducted.<br>No information available. |  |
| Mixture versus substance<br>information                |  |  |
| Other information                                      | Caution - Pharmaceutical age<br>adverse effects.             | nt. Occupational exposure to the substance or mixture may cause  |

## **SECTION 12: Ecological information**

| 12.1. Toxicity Contains        |           | substance which causes risk of hazardous effects to the environment. |                                  |  |
|--------------------------------|-----------|--|----------------------------------|--|
| Components                     |           | Species  | Test results                     |  |
| Propylene glycol (CAS 57-55-6) |           |  |                                  |  |
| Acute                          |           |  |                                  |  |
|                                | IC50      | Activated sludge   | > 1000 mg/l, 3 hours             |  |
| Aquatic                        |           |  |                                  |  |
| Acute                          |           |  |                                  |  |
| Algae                          | EC50      | Green algae (Selenastrum<br>capricornutum)                           | 19000 mg/l, 14 days              |  |
|                                | NOEC      | Green algae (Selenastrum<br>capricornutum)                           | 15000 mg/l, 14 days              |  |
| Crustacea                      | EC50      | Daphnia  | 43500 mg/l, 48 hours             |  |
|                                | NOEC      | Daphnia  | 28500 mg/l, 48 hours             |  |
| Fish                           | EC50      | Fathead minnow (Adult Pimephales promelas)                           | 51400 mg/l, 96 hours Static test |  |
|                                |           | Rainbow trout (Adult Oncorhyncus mykiss)                             | 51600 mg/l, 96 hours Static test |  |
|                                | NOEC      | Fathead minnow (Adult Pimephales promelas)                           | 41000 mg/l, 96 hours Static test |  |
|                                |           | Rainbow trout (Adult Oncorhyncus mykiss)                             | 42000 mg/l, 96 hours Static test |  |
| Microtox                       | EC50      | Microtox   | 51400 mg/l, 30 minutes           |  |
| SODIUM HYDROXIDE (CAS 13       | 310-73-2) |  |                                  |  |
| Aquatic                        |           |  |                                  |  |
| Acute                          |           |  |                                  |  |
| Fish                           | EC50      | Mosquito fish (Adult Gambusia affinis)                               | 125 mg/l, 96 hours Static test   |  |
|                                |           | Rainbow trout (Adult Oncorhyncus mykiss)                             | 45.4 mg/l, 96 hours Static test  |  |

| Components  |   | Species   | Test results  |
|---|---|---|---|
| SULFAMETHOXAZOLE (CAS   | 723-46-6)   |   |   |
| Aquatic   |   |   |   |
| Acute   |   |   |   |
| Activated Sludge<br>Respiration   | IC50  | Residential sludge  | > 100 mg/l, 3 hours Nominal, OECD 20  |
| Algae   | EC50  | Blue-green algae (S. leopolensis)   | 0.0268 mg/l, 96 hours Measured  |
|   | NOEC  | Blue-green algae (S. leopolensis)   | 0.0059 mg/l   |
| Crustacea   | EC50  | Water flea (Ceriodaphnia dubia)   | 15.51 mg/l, 48 hours OECD 202   |
|   |   | Water flea (Daphnia magna)  | > 100 mg/l, 48 hours , OECD 202   |
| Fish  | EC50  | Rainbow trout (Adult Oncorhyncus mykiss)  | > 1000 mg/l   |
|   | NOEC  | Zebra fish (Adult Brachydanio rerio)  | > 8 mg/l, 10 days   |
| Chronic   |   |   |   |
| Crustacea   | NOEC  | Water flea (Ceriodaphnia dubia)   | 0.25 mg/l, 7 days 7 day static renewal,<br>EPA 1002 Method  |
| TRIMETHOPRIM (CAS 738-70  | 0-5)  |   |   |
| Acute   |   |   |   |
| _   | IC50  | Activated sludge  | 17.8 mg/l   |
| Aquatic   |   |   |   |
| <i>Acute</i><br>Algae   | EC50  | Green algae (Selenastrum capricornutum)   | 110 mg/l, 72 hours  |
| Crustacea   | EC50  | Water flea (Daphnia magna)  | 123 mg/l, 48 hours  |
| Fish  | NOEC  | Zebra fish (Adult Brachydanio rerio)  | 100 mg/l, 72 hours  |
| Chronic   | NOLO  |   | 100 mg/l, 72 hours  |
| Crustacea   | LOEC  | Water flea (Ceriodaphnia dubia)   | 10 mg/l, 7 days 7 day static renewal  |
|   | NOEC  | Water flea (Ceriodaphnia dubia)   | 5.6 mg/l, 7 days  |
| degradability<br>Photolysis   |   |   |   |
| Half-life (Photolysis<br>Propylene glycol   | -aqueous)   | 1.3 - 2.3 years Estimat   | ied   |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis  | DLE   | 1.3 - 2.3 years Estimat<br>2.4 Days Measured<br>32 Hours Estimated  | ed  |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol  | DLE   | 2.4 Days Measured   | ied   |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability  | DLE<br>-atmospheric)  | 2.4 Days Measured   | ed  |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability  | DLE<br>-atmospheric)  | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A   | ctivated sludge   |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradatior   | DLE<br>-atmospheric)<br>n (Aerobic biod   | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modified  | ctivated sludge<br>), Activated sludge<br>ellens<br>d Zahn-Wellens, primary   |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradation<br>Propylene glycol   | DLE<br>-atmospheric)<br>n (Aerobic biod   | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modified  | activated sludge<br>9, Activated sludge<br>ellens<br>d Zahn-Wellens, primary<br>f parent., Activated sludge<br>ed sludge        |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradation<br>Propylene glycol<br>SULFAMETHOPRIM<br>Percent degradation<br>Propylene glycol  | DLE<br>-atmospheric)<br>n (Aerobic biod   | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modified<br>biodegradation, loss of<br>50 %, 42 days, Activat<br>50 %, 75 days, Sedime<br>odegradation)<br>100 %, 9 days  | activated sludge<br>), Activated sludge<br>ellens<br>d Zahn-Wellens, primary<br>f parent., Activated sludge<br>ed sludge<br>ent |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradation<br>Propylene glycol<br>SULFAMETHOPRIM<br>Percent degradation<br>Propylene glycol<br>TRIMETHOPRIM  | DLE<br>-atmospheric)<br>n (Aerobic biod<br>DLE<br>n (Anaerobic bi                     | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modifier<br>biodegradation, loss of<br>50 %, 42 days, Activat<br>50 %, 75 days, Sedime<br>odegradation)<br>100 %, 9 days<br>50 %, 100 days, Sedime  | activated sludge<br>), Activated sludge<br>ellens<br>d Zahn-Wellens, primary<br>f parent., Activated sludge<br>ed sludge<br>ent |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradation<br>Propylene glycol<br>SULFAMETHOPRIM<br>Percent degradation<br>Propylene glycol<br>TRIMETHOPRIM<br>12.3. Bioaccumulative poten<br>Partition coefficient  | DLE<br>-atmospheric)<br>n (Aerobic biod<br>DLE<br>n (Anaerobic bi                     | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modifier<br>biodegradation, loss of<br>50 %, 42 days, Activat<br>50 %, 75 days, Sedime<br>odegradation)<br>100 %, 9 days<br>50 %, 100 days, Sedime  | activated sludge<br>), Activated sludge<br>ellens<br>d Zahn-Wellens, primary<br>f parent., Activated sludge<br>ed sludge<br>ent |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradation<br>Propylene glycol<br>SULFAMETHOPRIM<br>Percent degradation<br>Propylene glycol<br>TRIMETHOPRIM<br>12.3. Bioaccumulative poten<br>Partition coefficient  | DLE<br>-atmospheric)<br>n (Aerobic biod<br>DLE<br>n (Anaerobic bi                     | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modifier<br>biodegradation, loss of<br>50 %, 42 days, Activat<br>50 %, 75 days, Sedime<br>odegradation)<br>100 %, 9 days<br>50 %, 100 days, Sedime  | activated sludge<br>), Activated sludge<br>ellens<br>d Zahn-Wellens, primary<br>f parent., Activated sludge<br>ed sludge<br>ent |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradation<br>Propylene glycol<br>SULFAMETHOPRIM<br>Percent degradation<br>Propylene glycol<br>TRIMETHOPRIM<br>12.3. Bioaccumulative poten<br>Partition coefficient<br>n-octanol/water (log Kow)<br>ETHYL ALCOHOL, 90-99<br>Propylene glycol                     | DLE<br>-atmospheric)<br>n (Aerobic biod<br>DLE<br>n (Anaerobic bi                     | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modifier<br>biodegradation, loss of<br>50 %, 42 days, Activat<br>50 %, 75 days, Sedime<br>odegradation)<br>100 %, 9 days<br>50 %, 100 days, Sedin<br>ble.<br>-0.31<br>-1.35                 | activated sludge<br>), Activated sludge<br>ellens<br>d Zahn-Wellens, primary<br>f parent., Activated sludge<br>ed sludge<br>ent |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradation<br>Propylene glycol<br>SULFAMETHOPRIM<br>Percent degradation<br>Propylene glycol<br>TRIMETHOPRIM<br>12.3. Bioaccumulative poten<br>Partition coefficient<br>n-octanol/water (log Kow)<br>ETHYL ALCOHOL, 90-99<br>Propylene glycol<br>SULFAMETHOXAZOLE | DLE<br>-atmospheric)<br>n (Aerobic biod<br>DLE<br>n (Anaerobic bi                     | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modified<br>biodegradation, loss of<br>50 %, 42 days, Activat<br>50 %, 75 days, Sedime<br>odegradation)<br>100 %, 9 days<br>50 %, 100 days, Sedin<br>ble.<br>-0.31<br>-1.35<br>0.68         | activated sludge<br>), Activated sludge<br>ellens<br>d Zahn-Wellens, primary<br>f parent., Activated sludge<br>ed sludge<br>ent |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradation<br>Propylene glycol<br>SULFAMETHOPRIM<br>Percent degradation<br>Propylene glycol<br>TRIMETHOPRIM<br>12.3. Bioaccumulative poten<br>Partition coefficient<br>n-octanol/water (log Kow)<br>ETHYL ALCOHOL, 90-99<br>Propylene glycol                     | DLE<br>-atmospheric)<br>n (Aerobic biod<br>DLE<br>n (Anaerobic bi                     | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modifier<br>biodegradation, loss of<br>50 %, 42 days, Activat<br>50 %, 75 days, Sedime<br>odegradation)<br>100 %, 9 days<br>50 %, 100 days, Sedin<br>ble.<br>-0.31<br>-1.35                 | activated sludge<br>), Activated sludge<br>ellens<br>d Zahn-Wellens, primary<br>f parent., Activated sludge<br>ed sludge<br>ent |
| Half-life (Photolysis<br>Propylene glycol<br>SULFAMETHOXAZC<br>Half-life (Photolysis<br>Propylene glycol<br>Biodegradability<br>Percent degradation<br>Propylene glycol<br>SULFAMETHOPRIM<br>Percent degradation<br>Propylene glycol<br>TRIMETHOPRIM<br>12.3. Bioaccumulative poten<br>Partition coefficient<br>n-octanol/water (log Kow)<br>ETHYL ALCOHOL, 90-99<br>Propylene glycol<br>SULFAMETHOXAZOLE | DLE<br>-atmospheric)<br>n (Aerobic biod<br>DLE<br>n (Anaerobic bi<br>ntial Not availa | 2.4 Days Measured<br>32 Hours Estimated<br>egradation-inherent)<br>62 %, 5 days BOD5, A<br>79 %, 20 Days BOD20<br>0 %, 28 days Zahn-We<br>44 %, 13 days Modifier<br>biodegradation, loss of<br>50 %, 42 days, Activat<br>50 %, 75 days, Sedime<br>odegradation)<br>100 %, 9 days<br>50 %, 100 days, Sedim<br>ble.<br>-0.31<br>-1.35<br>0.68<br>0.91 | activated sludge<br>), Activated sludge<br>ellens<br>d Zahn-Wellens, primary<br>f parent., Activated sludge<br>ed sludge<br>ent |

| TRIMETHOPRIM  |   | 3 Estimated  |
|---|---|--|
| 12.4. Mobility in soil  |   |  |
| Adsorption<br>Sludge/biomass distribu<br>SULFAMETHOXAZOLE<br>TRIMETHOPRIM<br>Soil/sediment sorption<br>TRIMETHOPRIM | ution coefficient - log Kd<br>- log Koc   | 0.01 Measured, pH 7<br>1.88 Measured<br>1.88 Estimated   |
| Mobility in general   |   |  |
| Volatility<br>Henry's law<br>Propylene glycol<br>SULFAMETHOXAZOLE<br>TRIMETHOPRIM                                   |   | 0 atm m <sup>3</sup> /mol Estimated<br>0 atm m <sup>3</sup> /mol, 25 C Estimated<br>0 atm m <sup>3</sup> /mol Estimated  |
| 12.5. Results of PBT<br>and vPvB<br>assessment  | Not available.  |  |
| 12.6. Other adverse effects   | Not available.  |  |
| SECTION 13: Disposal cor  | nsiderations  |  |
| 13.1. Waste treatment methods   |   |  |
| Residual waste  | product residues. This materia  | n local regulations. Empty containers or liners may retain some<br>al and its container must be disposed of in a safe manner (see:<br>discharge into water courses or onto the ground. |
| Contaminated packaging  | Empty containers should be taken to an approved waste handling site for recycling or disposal.<br>Since emptied containers may retain product residue, follow label warnings even after container is emptied. |  |
| EU waste code   | The Waste code should be as<br>disposal company.  | signed in discussion between the user, the producer and the waste  |
| Disposal methods/information  |   | e in sealed containers at licensed waste disposal site. Do not<br>ourses or onto the ground. Dispose in accordance with all applicable   |
| •   |   | I see les blance en dations  |

**Special precautions** Dispose in accordance with all applicable regulations.

## **SECTION 14: Transport information**

#### ADR

| ADI | <b>`</b>                         |   |
|-----|----------------------------------|---|
|     | 14.1. UN number                  | UN1170                                    |
|     | 14.2. UN proper shipping         | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
|     | name                             |   |
|     | 14.3. Transport hazard class(es) |   |
|     | Class                            | 3   |
|     | Subsidiary risk                  | -   |
|     | Label(s)                         | 3   |
|     | Hazard No. (ADR)                 | 30  |
|     | Tunnel code                      | D/E                                       |
|     | 14.4. Packing group              | III                                       |
|     | 14.5. Environmental hazards      | No.                                       |
|     | 14.6. Special precautions        | Not available.                            |
|     | for user                         |   |
| IAT | A                                |   |
|     | 14.1. UN number                  | UN1170                                    |
|     | 14.2. UN proper shipping         | Ethanol solution                          |
|     | name                             |   |
|     | 14.3. Transport hazard           | 3   |
|     | class(es)                        |   |
|     | Subsidiary class(es)             | -   |
|     | 14.4. Packing group              | III                                       |
|     | 14.5. Environmental hazards      | No.                                       |
|     | Labels required                  | 3   |
|     | ERG Code                         | 3L  |
|     | 14.6. Special precautions        | Not available.                            |
|     | for user                         |   |
|     | Other information                |   |
|     | Cargo aircraft only              | Allowed.                                  |
|     |                                  |   |

**Additional Information:** Passenger & cargo Allowed. IMDG 14.1. UN number UN1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) 14.2. UN proper shipping name 14.3. Transport hazard class(es) Class 3 Subsidiary risk \_ Label(s) 3 14.4. Packing group ||| 14.5. Environmental hazards Marine pollutant No. F-E. S-D EmS 14.6. Special precautions Not available. for user 14.7. Transport in bulk MARPOL Annex II applies to liquids used in a ship's operation that pose a threat to the marine environment. These materials may not be transported in bulk. according to Annex II of MARPOL73/78 and the IBC Code

#### ADR; IATA; IMDG

**General information** 



Classifications are for the material when offered for transport as fully regulated. Depending on the specific transport details (Ship-From/Ship To locations, quantities being shipped, type of packaging and mode of transport) it may be possible to ship this material in a manner other than fully regulated. (One example is IATA Limited or Excepted Quantity. There are others.) Be sure to review all regulatory agency packaging instructions and special provisions, referenced in this section, to identify options applicable to the specifics of your shipment.

### **SECTION 15: Regulatory information**

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

#### **EU** regulations

|   | Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I                            |
|---|--|
|   | Not listed.  |
|   | Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II                           |
|   | Not listed.  |
|   | Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended                            |
|   | Not listed.  |
|   | Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as ame |
|   | Not listed.  |
|   | Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as ame |
|   | Not listed.  |
|   | Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as ame |
|   | Not listed.  |
|   | Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended     |
|   | Not listed.  |
|   | Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry                                |
|   | Not listed.  |
|   | Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA            |
|   | Not listed.  |
| 1 | Authorisations   |
|   | Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended               |
|   |  |

#### **Restrictions on use**

as amended

as amended

as amended

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended ETHYL ALCOHOL, 90-99% (CAS 64-17-5)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not listed.

### Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work ETHYL ALCOHOL, 90-99% (CAS 64-17-5)

SODIUM HYDROXIDE (CAS 1310-73-2)

#### Directive 94/33/EC on the protection of young people at work

SODIUM HYDROXIDE (CAS 1310-73-2)

| Other regulations                   | The product is classified and labelled in accordance with EC directives or respective national laws.<br>This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. |
|-------------------------------------|--|
| National regulations                | Follow national regulation for work with chemical agents.  |
| 15.2. Chemical safety<br>assessment | No Chemical Safety Assessment has been carried out.  |

### **SECTION 16: Other information**

| List of abbreviations  | Not available.   |
|--|--|
| References   | GSK Hazard Determination   |
| Information on evaluation<br>method leading to the<br>classification of mixture        | The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.  |
| Full text of any statements or<br>R-phrases and H-statements<br>under Sections 2 to 15 | R10 Flammable.   |
|  | R11 Highly flammable.  |
|  | R22 Harmful if swallowed.  |
|  | R35 Causes severe burns.   |
|  | R36 Irritating to eyes.  |
|  | R36/38 Irritating to eyes and skin.  |
|  | R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic<br>environment.  |
|  | H225 Highly flammable liquid and vapour.   |
|  | H301 Toxic if swallowed.   |
|  | H302 Harmful if swallowed.   |
|  | H312 Harmful in contact with skin.   |
|  | H314 Causes severe skin burns and eye damage.  |
|  | H319 Causes serious eye irritation.  |
|  | H350 May cause cancer.<br>H411 Toxic to aquatic life with long lasting effects.  |
|  |  |
| Revision information   | Product and Company Identification: Product and Company Identification<br>Composition / Information on Ingredients: Undisclosed Ingredient Statement<br>Physical & Chemical Properties:<br>Ecological Information: Ecotoxicity<br>Transport Information: Material Transportation Information<br>Regulatory Information: Risk Phrases - Class.<br>GHS: Classification             |
| Training information   | Follow training instructions when handling this material.  |
| Disclaimer   | The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, express or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose. |