

SAFETY DATA SHEET

SIEMENS

IMMULITE® 2000 Carbamazepine

MSDS no. : L2KCB2_6

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

1.1 Product identifier

Product name : IMMULITE® 2000 Carbamazepine
Product code : L2KCB2/6, 10381550, 10381528
Product description : Not available.

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

Not applicable.

1.3 Company/undertaking identification

Manufactured/supplied : Siemens Healthcare Diagnostics Limited
Sir William Siemens Square
Newton House
Camberley
Frimley
Surrey
GU16 8QD
UK

Phone: +44 (0) 1276 696000
Fax: +44 (0)1276 696133

e-mail address of person responsible for this SDS : dx.msds.healthcare@siemens.com

1.4 Emergency telephone number

: Poison Control:
In England and Wales:
NHS Direct – 0845 4647 or 111
In Scotland: NHS 24 – 08454 24 24 24
In the Republic of Ireland: 01 809 2166

CHEMTREC: 0870-8200418 (UK only)
00 + 1 + 703-527-3887 (UK & Ireland)
(International calls to the United Kingdom)

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

| | | |
|---|--|--|
| Product definition | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Mixture Mixture |
| <u>Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]</u> | | |
| | Carbamazepine Adjustors LONG-TERM AQUATIC HAZARD Carbamazepine Reagent Wedge Carbamazepine Adjustors | Category 3 The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended. The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. |
| Ingredients of unknown toxicity | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | |
| Ingredients of unknown ecotoxicity | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | |
| <u>Classification according to Directive 1999/45/EC [DPD]</u> | | |
| | Carbamazepine Reagent Wedge Carbamazepine Adjustors | The product is not classified as dangerous according to Directive 1999/45/EC and its amendments. The product is classified as dangerous according to Directive 1999/45/EC and its amendments. |
| Classification | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not classified. Xn; R22 R52/53 |
| Physical/chemical hazards | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Not applicable. |
| Human health hazards | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Harmful if swallowed. |
| Environmental hazards | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

| | | |
|--|--|--|
| Signal word | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No signal word. No signal word. |
| Hazard statements | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No known significant effects or critical hazards. H412 - Harmful to aquatic life with long lasting effects. |
| <u>Precautionary statements</u> | | |
| Prevention | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. P273 - Avoid release to the environment. |
| Response | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Not applicable. |

SECTION 2: Hazards identification

| | | |
|---|--|---|
| Storage | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Not applicable. |
| Disposal | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, and national regulations. |
| | : | |
| Supplemental label elements | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Safety data sheet available on request. Not applicable. |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Not applicable. |

2.3 Other hazards

| | | |
|--|--|----------------------------|
| Other hazards which do not result in classification | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | None known. None known. |
| Additional information | : Potentially biohazardous material. | |

Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

SECTION 3: Composition/information on ingredients

| | | |
|--------------------------|--|--------------------|
| Substance/mixture | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Mixture Mixture |
|--------------------------|--|--------------------|

| Product/ingredient name | Identifiers | % | <u>Classification</u> | | Type |
|---|---|------------|---|---|---------|
| | | | 67/548/EEC | Regulation (EC) No. 1272/2008 [CLP] | |
| Carbamazepine Reagent Wedge aminocaproic acid | EC: 200-469-3 CAS: 60-32-2 | >=1, <5 | Not classified. | Eye Irrit. 2, H319 | [1] |
| Carbamazepine Adjustors sodium azide | EC: 247-852-1 CAS: 26628-22-8 Index: 011-004-00-7 | >=0.25, <1 | T+; R28 R32 N; R50/53 See Section 16 for the full text of the R-phrases declared above. | Acute Tox. 2, H300 Acute Tox. 1, H310 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above. | [1] [2] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

SECTION 3: Composition/information on ingredients

- [1] Substance classified with a health or environmental hazard
 [2] Substance with a workplace exposure limit
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
 [5] Substance of equivalent concern

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

SECTION 4: First aid measures

4.1 Description of first aid measures

| | | |
|---------------------|-------------------------------|--|
| Eye contact | : Carbamazepine Reagent Wedge | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. |
| | Carbamazepine Adjustors | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs. |
| Inhalation | : Carbamazepine Reagent Wedge | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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. |
| | Carbamazepine Adjustors | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Skin contact | : Carbamazepine Reagent Wedge | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | Carbamazepine Adjustors | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. |

SECTION 4: First aid measures

| | | |
|--|-------------------------------|---|
| Ingestion | : Carbamazepine Reagent Wedge | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| | Carbamazepine Adjustors | Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Protection of first-aiders | : Carbamazepine Reagent Wedge | No action shall be taken involving any personal risk or without suitable training. |
| | Carbamazepine Adjustors | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |
| 4.2 Most important symptoms and effects, both acute and delayed | | |
| <u>Potential acute health effects</u> | | |
| Eye contact | : Carbamazepine Reagent Wedge | No known significant effects or critical hazards. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |
| Inhalation | : Carbamazepine Reagent Wedge | Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |
| Skin contact | : Carbamazepine Reagent Wedge | No known significant effects or critical hazards. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |
| Ingestion | : Carbamazepine Reagent Wedge | No known significant effects or critical hazards. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |

SECTION 4: First aid measures

Over-exposure signs/symptoms

| | | |
|---------------------|--|--|
| Eye contact | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No specific data. No specific data. |
| Inhalation | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No specific data. No specific data. |
| Skin contact | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No specific data. No specific data. |
| Ingestion | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No specific data. No specific data. |

4.3 Indication of any immediate medical attention and special treatment needed

| | | |
|----------------------------|--|--|
| Notes to physician | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | 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. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No specific treatment. No specific treatment. |

SECTION 5: Firefighting measures

5.1 Extinguishing media

| | |
|---------------------------------------|--|
| Suitable extinguishing media | : Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | : None known. |

5.2 Special hazards arising from the substance or mixture

| | |
|---|---|
| Hazards from the substance or mixture | : In a fire or if heated, a pressure increase will occur and the container may burst. |
| Hazardous thermal decomposition products | : Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides |

5.3 Advice for firefighters

| | |
|---|---|
| Special protective actions for fire-fighters | : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for 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. |

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-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 spilt material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilt 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).

6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

- : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker or exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|---|--|
| Carbamazepine Adjustors sodium azide | EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. Notes: as NaN₃ STEL: 0.3 mg/m ³ , (as NaN ₃) 15 minutes. TWA: 0.1 mg/m ³ , (as NaN ₃) 8 hours. |

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

SECTION 8: Exposure controls/personal protection

- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | | |
|---|--|-----------------------------------|
| Physical state | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Liquid. Solid. |
| Colour | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Colourless. Off-white. |
| Odour | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Odourless. Odourless. |
| pH | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | 7.95 to 8.05 Not applicable. |
| Melting point/freezing point | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Initial boiling point and boiling range | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Flash point | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Evaporation rate | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Flammability (solid, gas) | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Burning time | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Not available. |
| Burning rate | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Not available. |
| Upper/lower flammability or explosive limits | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Vapour pressure | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Solubility in water | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Partition coefficient: n-octanol/ water | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Auto-ignition temperature | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Decomposition temperature | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Viscosity | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Explosive properties | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Oxidising properties | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |

SECTION 9: Physical and chemical properties

9.2 Other information

| | |
|---|-------------------|
| SADT | : Not available. |
| <u>Aerosol product</u> | |
| Type of aerosol | : Not applicable. |
| Heat of combustion | : Not available. |
| Ignition distance | : Not applicable. |
| Enclosed space ignition - Time equivalent | : Not applicable. |
| Enclosed space ignition - Deflagration density | : Not applicable. |
| Flame height | : Not applicable. |
| Flame duration | : Not applicable. |

SECTION 10: Stability and reactivity

| | | |
|--|-------------------------------|--|
| 10.1 Reactivity | : Carbamazepine Reagent Wedge | No specific test data related to reactivity available for this product or its ingredients. |
| | Carbamazepine Adjustors | No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | : Carbamazepine Reagent Wedge | The product is stable. |
| | Carbamazepine Adjustors | The product is stable. |
| 10.3 Possibility of hazardous reactions | : Carbamazepine Reagent Wedge | Under normal conditions of storage and use, hazardous reactions will not occur. |
| | Carbamazepine Adjustors | Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : Carbamazepine Reagent Wedge | No specific data. |
| | Carbamazepine Adjustors | No specific data. |
| 10.5 Incompatible materials | : Carbamazepine Reagent Wedge | No specific data. |
| | Carbamazepine Adjustors | No specific data. |
| 10.6 Hazardous decomposition products | : Carbamazepine Reagent Wedge | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| | Carbamazepine Adjustors | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|-------------|---------|----------|----------|
| Carbamazepine Adjustors sodium azide | LD50 Dermal | Rabbit | 20 mg/kg | - |
| | LD50 Dermal | Rat | 50 mg/kg | - |
| | LD50 Oral | Rat | 27 mg/kg | - |

SECTION 11: Toxicological information

Conclusion/Summary : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Acute toxicity estimates

| Route | ATE value |
|-------------------------|--------------|
| Carbamazepine Adjustors | |
| Oral | 8181.8 mg/kg |
| Dermal | 6060.6 mg/kg |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|--|----------------------|---------|-------|-------------------------|-------------|
| Carbamazepine Reagent Wedge aminocaproic acid | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |

Conclusion/Summary

Skin : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Eyes : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Respiratory : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Sensitisation

Conclusion/Summary

Skin : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Respiratory : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Mutagenicity

Conclusion/Summary : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Carcinogenicity

Conclusion/Summary : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Reproductive toxicity

Conclusion/Summary : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Teratogenicity

Conclusion/Summary : Carbamazepine Reagent Wedge Not available.
Carbamazepine Adjustors Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

SECTION 11: Toxicological information

| | | |
|---------------------|-------------------------------|--|
| Eye contact | : Carbamazepine Reagent Wedge | No known significant effects or critical hazards. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |
| Inhalation | : Carbamazepine Reagent Wedge | Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |
| Skin contact | : Carbamazepine Reagent Wedge | No known significant effects or critical hazards. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |
| Ingestion | : Carbamazepine Reagent Wedge | No known significant effects or critical hazards. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| | | |
|---------------------|-------------------------------|-------------------|
| Eye contact | : Carbamazepine Reagent Wedge | No specific data. |
| | Carbamazepine Adjustors | No specific data. |
| Inhalation | : Carbamazepine Reagent Wedge | No specific data. |
| | Carbamazepine Adjustors | No specific data. |
| Skin contact | : Carbamazepine Reagent Wedge | No specific data. |
| | Carbamazepine Adjustors | No specific data. |
| Ingestion | : Carbamazepine Reagent Wedge | No specific data. |
| | Carbamazepine Adjustors | No specific data. |

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

| | | |
|------------------------------------|-------------------------------|----------------|
| Potential immediate effects | : Carbamazepine Reagent Wedge | Not available. |
| | Carbamazepine Adjustors | Not available. |
| Potential delayed effects | : Carbamazepine Reagent Wedge | Not available. |
| | Carbamazepine Adjustors | Not available. |

Long term exposure

| | | |
|------------------------------------|-------------------------------|----------------|
| Potential immediate effects | : Carbamazepine Reagent Wedge | Not available. |
| | Carbamazepine Adjustors | Not available. |
| Potential delayed effects | : Carbamazepine Reagent Wedge | Not available. |
| | Carbamazepine Adjustors | Not available. |

Potential chronic health effects

Not available.

| | | |
|---------------------------|-------------------------------|---|
| Conclusion/Summary | : Carbamazepine Reagent Wedge | Not available. |
| | Carbamazepine Adjustors | Not available. |
| General | : Carbamazepine Reagent Wedge | No known significant effects or critical hazards. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |
| Carcinogenicity | : Carbamazepine Reagent Wedge | No known significant effects or critical hazards. |
| | Carbamazepine Adjustors | No known significant effects or critical hazards. |

SECTION 11: Toxicological information

| | | |
|------------------------------|--|--|
| Mutagenicity | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Teratogenicity | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Developmental effects | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Fertility effects | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Interactive effects | : | |
| Other information | : Not available. | |

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|--|---|----------|
| Carbamazepine Adjustors sodium azide | Acute EC50 0.348 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours |
| | Acute EC50 4.2 to 6.2 mg/l Fresh water | Daphnia - Daphnia pulex - Larvae | 48 hours |
| | Acute LC50 9000 µg/l Fresh water | Crustaceans - Gammarus lacustris | 48 hours |
| | Acute LC50 0.68 mg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |
| | Chronic NOEC 5600 µg/l Marine water | Algae - Macrocystis pyrifera | 96 hours |

| | | |
|---------------------------|--|----------------------------------|
| Conclusion/Summary | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
|---------------------------|--|----------------------------------|

12.2 Persistence and degradability

| | | |
|---------------------------|--|----------------------------------|
| Conclusion/Summary | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
|---------------------------|--|----------------------------------|

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|-----|-----------|
| Carbamazepine Reagent Wedge aminocaproic acid | -2.95 | - | low |

12.4 Mobility in soil

| | | |
|--|--|----------------------------------|
| Soil/water partition coefficient (K_{oc}) | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |
| Mobility | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not available. Not available. |

12.5 Results of PBT and vPvB assessment

SECTION 12: Ecological information

| | | |
|-----------------------------------|--|--|
| PBT | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Not applicable. |
| vPvB | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not applicable. Not applicable. |
| 12.6 Other adverse effects | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | No known significant effects or critical hazards. No known significant effects or critical hazards. |

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

| | | |
|----------------------------|---|---|
| Methods of disposal | : The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. | |
| Hazardous waste | : Carbamazepine Reagent Wedge | Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC. |
| | Carbamazepine Adjustors | The classification of the product may meet the criteria for a hazardous waste. |
| | Sodium azide may react with lead or copper plumbing to form highly explosive metal azides. | |

Packaging

| | |
|----------------------------|---|
| Methods of disposal | : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. |
| Special precautions | : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. |

SECTION 14: Transport information

ADR/RID

| | | |
|--|--|----------------------------------|
| 14.1 UN number | Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not regulated. Not regulated. |
| 14.2 UN proper shipping name | Carbamazepine Reagent Wedge Carbamazepine Adjustors | - - |
| 14.3 Transport hazard class(es) | Carbamazepine Reagent Wedge Carbamazepine Adjustors | - - |
| 14.4 Packing group | Carbamazepine Reagent Wedge Carbamazepine Adjustors | - - |
| 14.5 Environmental hazards | Carbamazepine Reagent Wedge Carbamazepine Adjustors | No. No. |

SECTION 14: Transport information

| | | |
|-------------------------------|-----------------------------|---|
| Additional information | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

ADN

| | | |
|-----------------------|-----------------------------|----------------|
| 14.1 UN number | Carbamazepine Reagent Wedge | Not regulated. |
| | Carbamazepine Adjustors | Not regulated. |

| | | |
|-------------------------------------|-----------------------------|---|
| 14.2 UN proper shipping name | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

| | | |
|--|-----------------------------|---|
| 14.3 Transport hazard class(es) | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

| | | |
|---------------------------|-----------------------------|---|
| 14.4 Packing group | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

| | | |
|-----------------------------------|-----------------------------|-----|
| 14.5 Environmental hazards | Carbamazepine Reagent Wedge | No. |
| | Carbamazepine Adjustors | No. |

| | | |
|-------------------------------|-----------------------------|---|
| Additional information | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

IMDG

| | | |
|-----------------------|-----------------------------|----------------|
| 14.1 UN number | Carbamazepine Reagent Wedge | Not regulated. |
| | Carbamazepine Adjustors | Not regulated. |

| | | |
|-------------------------------------|-----------------------------|---|
| 14.2 UN proper shipping name | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

| | | |
|--|-----------------------------|---|
| 14.3 Transport hazard class(es) | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

| | | |
|---------------------------|-----------------------------|---|
| 14.4 Packing group | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

| | | |
|-----------------------------------|-----------------------------|-----|
| 14.5 Environmental hazards | Carbamazepine Reagent Wedge | No. |
| | Carbamazepine Adjustors | No. |

| | | |
|-------------------------------|-----------------------------|---|
| Additional information | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

IATA

| | | |
|-----------------------|-----------------------------|----------------|
| 14.1 UN number | Carbamazepine Reagent Wedge | Not regulated. |
| | Carbamazepine Adjustors | Not regulated. |

| | | |
|-------------------------------------|-----------------------------|---|
| 14.2 UN proper shipping name | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

| | | |
|--|-----------------------------|---|
| 14.3 Transport hazard class(es) | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

| | | |
|---------------------------|-----------------------------|---|
| 14.4 Packing group | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

SECTION 14: Transport information

| | | |
|-------------------------------|-----------------------------|-----|
| 14.5 | Carbamazepine Reagent Wedge | No. |
| Environmental hazards | Carbamazepine Adjustors | No. |
| Additional information | Carbamazepine Reagent Wedge | - |
| | Carbamazepine Adjustors | - |

14.6 Special precautions for user : Carbamazepine Reagent Wedge

Carbamazepine Adjustors

Transport within user's premises:
always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport within user's premises:
always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

| | | |
|---|-------------------------------|-----------------|
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : Carbamazepine Reagent Wedge | Not applicable. |
| | Carbamazepine Adjustors | Not applicable. |

Other EU regulations

Europe inventory : Not determined.

Seveso II Directive

Carbamazepine Reagent Wedge

This product is not controlled under the Seveso II Directive.

Carbamazepine Adjustors

This product is not controlled under the Seveso II Directive.

International regulations

| | | |
|--|-------------------------------|------------|
| Chemical Weapons Convention List Schedule I Chemicals | : Carbamazepine Reagent Wedge | Not listed |
| | Carbamazepine Adjustors | Not listed |

| | | |
|---|-------------------------------|------------|
| Chemical Weapons Convention List Schedule II Chemicals | : Carbamazepine Reagent Wedge | Not listed |
| | Carbamazepine Adjustors | Not listed |

SECTION 15: Regulatory information

| | | |
|--|--|--------------------------|
| Chemical Weapons Convention List Schedule III Chemicals | : Carbamazepine Reagent Wedge Carbamazepine Adjustors | Not listed Not listed |
|--|--|--------------------------|

15.2 Chemical Safety Assessment : Not applicable.

SECTION 16: Other information

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

| | |
|---|--|
| Carbamazepine Adjustors Aquatic Chronic 3, H412 | Calculation method |
| Full text of abbreviated H statements : Carbamazepine Reagent Wedge H319 | Causes serious eye irritation. |
| Carbamazepine Adjustors H300 H310 H400 H410 H412 | Fatal if swallowed. Fatal in contact with skin. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects. |
| Full text of classifications [CLP/GHS] : Carbamazepine Reagent Wedge Eye Irrit. 2, H319 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 |
| Carbamazepine Adjustors Acute Tox. 1, H310 Acute Tox. 2, H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Aquatic Chronic 3, H412 | ACUTE TOXICITY: SKIN - Category 1 ACUTE TOXICITY: ORAL - Category 2 ACUTE AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 3 |
| Full text of abbreviated R phrases : R22- Harmful if swallowed. | |
| Full text of classifications [DSD/DPD] : Xn - Harmful | |
| Date of printing : 1/15/2016. | |
| Date of issue/ Date of revision : 1/15/2016. | |
| Date of previous issue : 5/6/2015. | |
| Version : 3 | |
| Notice to reader | |

SECTION 16: Other information

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

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