Material Safety Data Sheet

Manufacturer: PZ CORMAY S.A.
ul. Wiosenna 22
05-092 ŁOMIANKI
POLAND

phone/fax. (0-22) 751 79 10, 751 79 14
between: 8 am and 4 pm

Date of card preparation: 21.09.2009

1. Identification of the preparation.

PRESTIGE 24i CARBAMAZEPINE (Version 24) (catalogue No 4-234)
PRESTIGE 24i CARBAMAZEPINE (Version 36) (catalogue No 4-434)
ACCENT-300 CARBAMAZEPINE (catalogue No 7-360)
A-400 CARBAMAZEPINE (catalogue No 7-460)
HC- CARBAMAZEPINE (catalogue No 4-534)

The PRESTIGE 24i CARBAMAZEPINE, HC-CARBAMAZEPINE, ACCENT-300 CARBAMAZEPINE, A-400 CARBAMAZEPINE sets are designed for laboratories in hospitals and outpatient clinics. The set is used for determining the carbamazepine concentrations in blood serum.

2. Hazards Identification.

The preparation is not regarded as dangerous.

3. Composition / information on components.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1-REAGENT</strong></td>
<td></td>
</tr>
<tr>
<td>sodium azide</td>
<td>Stężenie: &lt; 0.1%</td>
</tr>
<tr>
<td>CAS number: 26628-22-8</td>
<td></td>
</tr>
<tr>
<td>EC number: 247-852-1;</td>
<td></td>
</tr>
<tr>
<td>Index number: 011-004-00-7</td>
<td>Szkodliwość: T+; N; Zwroty: R 28-32-50/53; S 28-45-60-61</td>
</tr>
</tbody>
</table>

| **2-REAGENT**         |  |
| sodium azide          | Stężenie: < 0.1% |
| CAS number: 26628-22-8|  |
| EC number: 247-852-1;  |  |
| Index number: 011-004-00-7 | Szkodliwość: T+; N; Zwroty: R 28-32-50/53; S 28-45-60-61 |
4. First-Aid Measures.

**After exposure by respiratory tract:** Supply fresh air, consult doctor in case of symptoms.

**After skin contamination:** Wash off with large amount of water. Take off contaminated clothing.

**After contamination of eyes:** Rinse with large amount of water for at least 15 minutes. Consult a doctor.

**After consumption:** Give the sufferer a lot of water to drink. If the sufferer feels unwell, consult a doctor/ambulance.

5. Fire Fighting Measures:

**Suitable extinguishing media:**
- In adaptation to materials stored in the immediate neighbourhood: Water, CO\(_2\), powder.
- Fight larger fires with water jet or alcohol-resistant foam.
- Notify the neighbourhood of fire.
- Remove from the endangered area all persons not taking part in the liquidation of fire.
- Notify the State Fire Brigade, the State Police, the immediate local authorities, and if necessary, the Immediate Chemical Rescue Unit.
- Cool the endangered containers with a stream of water.
- The smothering water should be collected separately and not released into the sewage system.
- The preparation is not a flammable substance.

**Protective equipment:**
- The rescuers must be equipped with protective clothing and respiratory tract isolating equipment, irrespective of ambient air.

6. Accidental Release Measures:

**Preventive measures related to the staff:**
- Avoid contamination with the preparation.
- Notify the neighbourhood of the breakdown.
- Do not inhale vapours/aerosols.
- Secure the flow of fresh air into closed rooms.

**Measures for environmental protection:**
- Dilute with plenty of water.
- Do not let the substance penetrate into the sewage system.

**Cleaning/absorption procedures:**
- Collect with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Rinse with large amount of water if necessary.

**Additional information:**
- No dangerous materials are released.

7. Handling and Storage:

**Procedures:**
- In accordance with the norms generally accepted for chemicals in laboratories.
- While working with the preparation, one should use appropriate means of personal protection (see pt. 8).
- Avoid contact of the preparation with skin and eyes, as well as inhaling its mists.
- Secure efficient local ventilation.
- You must not have meals, drink, or smoke tobacco while working with the preparation, except in places designed for that purpose.

**Storage:**
- Hermetically closed. In temperature from +2°C to +8°C. Protect from contamination.
8. Exposure Controls/ Personal Protection:

**Appropriate control parameter:**
See Polish regulations.

**Sodium azide:**
NDS – 0.1 mg/m\(^3\), NDSCh – 0.3 mg/m\(^3\).
Risk of skin absorption.

**Personal control equipment:**
Respiratory passages: not required
Eyes: required (safety glasses)
Hands: required (protective gloves)
Body protection: required (protective work clothing)

**Industrial hygiene:** You must not have meals, drink, or smoke tobacco while working with the preparation, except in places designed for that purpose. Wash your hands after work with the substance carefully with soapy water. Apply skin-protective barrier cream.


<table>
<thead>
<tr>
<th></th>
<th>1-REAGENT</th>
<th>2-REAGENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form:</td>
<td>suspension</td>
<td>solution</td>
</tr>
<tr>
<td>Colour:</td>
<td>white</td>
<td>pale yellow</td>
</tr>
<tr>
<td>Odour:</td>
<td>odourless</td>
<td>odourless</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Boiling temperature:</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting temperature:</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>incombustible</td>
<td>incombustible</td>
</tr>
<tr>
<td>Flammability:</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Density:</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>pH:</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>soluble</td>
<td>soluble</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity:

**Conditions that should be avoided:**
The preparation is stable in conditions provided by the manufacturer.

**Substances that should be avoided:**
Acids, strong oxidants, metals: lead, copper.

**Dangerous decomposition products:**
In case of fire – nitrose gases.

**Dangerous reactions:**
No dangerous reactions known.

11. Toxicological Information:

No data for the preparation. The preparation toxicity evaluation is based on evaluation of the toxicity of particular components.

**Sodium azide**

**Acute toxicity:**
- LD\(_{50}\) (oral, rat) – 27 mg/kg b. w.
- LD\(_{50}\) (dermal, rabbit)- 20 mg/kg b. w.

**Subacute to chronic toxicity:**
No teratogenic effect in animal experiments.
Further toxicological information:

- **After inhalation of dusts/aerosols:** Severe irritations of: mucous membranes, respiratory tract. Possible damages: pulmonary edema. Latency time until onset of action.
- **After skin contact:** Slight irritations. Danger of skin absorption.
- **After eye contact:** Slight irritations.
- **After swallowing:** Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
- **Systemic effects:** CNS disorders, cardiovascular failure, tachycardia, drop in blood pressure, coughing, dyspnoea, spasms, headache, dizziness, nausea, vomiting, collapse, unconsciousness.

Further data:

This substance should be handled with particular care.

12. Ecological Information:

<table>
<thead>
<tr>
<th>Sodium azide</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ecotoxic effects:</strong></td>
</tr>
<tr>
<td>Biological effects:</td>
</tr>
<tr>
<td>Fish toxicity: <em>Limnea macrochirus</em> <em>LC₅₀</em>: 0,7 mg/l/96 h</td>
</tr>
<tr>
<td>Daphnia toxicity: <em>Daphnia pulex</em> <em>EC₅₀</em>: 4,2 mg/l /96 h</td>
</tr>
<tr>
<td>Algeal toxicity: mixed culture of green algae <em>IC₅₀</em>: 272 mg/l</td>
</tr>
<tr>
<td>Bacterial toxicity: <em>Photobacterium phosphoreum</em> <em>EC₅₀</em>: 38,5 mg/l</td>
</tr>
<tr>
<td><em>Pseudomonas fluorescens</em> <em>UE₅₀</em>: 2,6 mg/l</td>
</tr>
</tbody>
</table>

Further ecological data:

Do not allow for penetration into waters, sewage or soil.

13. Disposal Considerations:

**Product:**
Chemical residues, in general, are included into special waste. Disposing of the latter is regulated by appropriate laws and ordinances. We recommend contacting the appropriate authorities, or waste disposal enterprises that will advise you on how to dispose of special waste.

**Packing:**
Remove in accordance with official regulations. Treat contaminated packages in the same way as the substance itself. If the regulations do not provide otherwise, non-contaminated packages can be treated like household waste or forward them to be utilized.

14. Transportation Information:

The product is not subject to transport regulations.
15. Regulatory Information:

**Marking:**
Not applicable.

**Material Safety Data Sheet was prepared in accordance with:**

16. Other Information.

**Relevant R-phares:**
R 28 - Very toxic if swallowed.
R 32 - Contact with acid liberates very toxic gas.
R 50/53 - Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

All reagents in this kit (1-REAGENT and 2-REAGENT) contain sodium azide as a preservative. Sodium azide can cause high explosive metal azide combinations with lead and cooper. Drains should be flushed well with a large amount of water when discarding the solution.

The foregoing information is based on the present state of our knowledge. It characterizes the product with respect to the appropriate safety measures. They do not guarantee the properties of the product.

We do not take responsibility for damage and losses that may result from inappropriate use of the preparation.

*The foregoing safety chart prepared in electronic version is legally valid without sign manual.*