Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name: Inner buffer
Article number: 84210
Registration number: none
A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Application of the substance: Research and Development

1.3 Details of the supplier of the safety data sheet
Gesellschaft für Gassysteme durch Katalyse und Elektrochemie mbH
Lilienthalstrasse 146
Building 11
34123 Kassel
Germany

Phone: +49 561 59190
Fax: +49 561 59191

E-mail: info@gaskatel.de

1.4 Emergency telephone number

Section 2 Hazards indentification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 (CLP)
This substance does not meet the criteria for classification according to Regulation No 1272/2008/EC

2.2 Label elements
Not required

Hazard pictograms
Not required

Signal word
Not required

2.3 Other hazards
No additional information available.
Section 3 Composition/information on ingredients

3.2 Description of the mixture: phosphate mixture
Composition/information on components: No ingredients that must be named according to Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation
Fresh air supply. Provide medical treatment in case of complaints.

After swallowing:
Rinse mouth, spit out liquid again. If you feel unwell, consult a doctor.

After eye contact:
Rinse eye under running water for 10 minutes with eyelids spread wide apart, protecting the uninjured eye. In case of complaints or in case of doubt, seek medical attention.

After skin contact:
Remove wetted clothing. Wash affected skin areas thoroughly under running water with soap. In case of subjectively felt or objectively recognizable skin changes, seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed
No additional information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

Section 5 Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents:
Adapt extinguishing measures to the environment. Spray water, foam, dry powder, carbon dioxide (CO2).

For safety reasons unsuitable extinguishing agents: Water with full jet
5.2 Special hazards arising from the substance or mixture
Non-flammable.

5.3 Advice for firefighters
Staying in the area of danger only with respiratory protection device independent of circulating air.
Additional information: None

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Evacuate endangered area, warn affected area. To eliminate the dangerous condition, the danger area may only be entered with suitable protective measures. Wear breathing, eye, hand and body protection (see chapter Personal protective measures).

6.2 Environmental precautions
Do not allow product to reach sewage system or any water course.
Slightly hazardous to water.

6.3 Methods and material for containment and cleaning up
Absorb with liquid-binding material (sand, diatomite, acid binder, universal binder). Dispose of the absorbed material according to regulations.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information

Section 7 Handling and storage

7.1 Precautions for safe handling
Pay attention to cleanliness at the workplace. Do not leave vessels open.
Wash hands before breaks and at the end of work. Keep away from food, drinks, feed.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a cool, dry, well-ventilated place.
Store only in original container. Observe storage instructions for combined storage.

7.3 Specific end use(s)
No further relevant information available.
Section 8 Exposure controls/personal protection

8.1 Control parameters

No further relevant information available.

8.2 Exposure controls

Technical measures
Technical measures and the application of suitable working procedures have priority over the use of personal protective equipment. See Section 7.

Personal protective equipment

General protective and hygienic measures
Do not eat, drink or smoke while working.
Keep away from foodstuffs, beverages and feed.

Individual protection measures

Eye protection

Tightly sealed goggles.

Protection of hands

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the resulting standard EN374.
Material of gloves:  nitrile rubber
glove thickness:  0.11 mm
Penetration time:  >480 min

Respiratory protection

No information available.
Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Form: Liquid
Color: colorless
Odor: No information available
Odor threshold: No information available
pH-Value: pH 7
Melting point: Not determined
Boiling point/Boiling range: No information available
Flash point: Not determined
Flammability (solid, gaseous): Not relevant
Ignition temperature: Not applicable
Decomposition temperature: No information available
Self-igniting: No information available
Lower explosion limit: No information available
Upper explosion limit: No information available
Vapor pressure: No information available
Vapor density: No information available
Relative density: Not determined
Bulk density: Not applicable
Water solubility: Mixable in any ratio.
Evaporation rate: Not applicable
Distribution coefficient (n-Octanol/Water): No information available
Viscosity dynamic: Not determined
Explosive properties: Not to be classified as explosive
Oxidizing properties: No information available

Section 10 Stability and reactivity

10.1 Reactivity
No dangerous reactions are expected when used as intended.

10.2 Chemical Stability
Under normal conditions the product is chemically stable.

10.3 Possibility of hazardous reactions
No further information available.

10.4 Conditions to avoid
No Information available.

10.5 Incompatible materials
No Information available.

10.6 Hazardous decomposition products:
No Information available.
### Section 11 Toxicological information

#### 11.1 Information on toxicological effects
- Product is not classified as acutely toxic.
- Product is not to be classified as skin corrosive/irritant.
- Product is not to be classified as severely eye-damaging or eye-irritating.
- Product is not to be classified as inhalation or skin allergen.

### Section 12 Ecological information

#### 12.1 Toxicity
- Product is not to be classified as hazardous to water.

#### 12.2 Persistence and degradability
- Not applicable.

#### 12.3 Bioaccumulative potential
- No information available.

#### 12.4 Mobility in soil
- The product is soluble in water.

#### 12.5 Results of PBT and vPvB assessment
- A PBT / vPvB assessment is not applicable since it is an inorganic substance or an inorganic mixture.

#### 12.6 Other adverse effects
- No information available.
Section 13 Disposal considerations

13.1 Waste treatment methods
Keep chemicals in original containers. Do not mix with other wastes. Uncleaned containers should be handled according to the product. Product residues should be disposed of in accordance with the national and regional fonts.

Section 14 Transport informations

Land transport (ADR/RID) 14.1 - 14.6 Not relevant
Inland waterway transport (ADN) Not relevant
Air Transport (IATA) 14.1 - 14.6 Not relevant
Sea transport (IMDG) 14.1 - 14.6 Not relevant

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable

Section 15 Regulatory information

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

National Regulations

Information about limitation of use:
Employment restrictions concerning pregnant and lactating women must be observed. Employment restrictions concerning juveniles must be observed.

15.2 Chemical safety assessment
A Chemical Safety Assessment has not been carried out.

Section 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Abbreviations and acronyms:

<table>
<thead>
<tr>
<th>Abk.</th>
<th>Beschreibungen der verwendeten Abkürzungen</th>
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<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route</td>
</tr>
<tr>
<td>BCF</td>
<td>BioConcentration Factor</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service</td>
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<tr>
<td>CLP</td>
<td>Classification, Labelling and Packaging</td>
</tr>
<tr>
<td>CMR</td>
<td>Carcinogenic, Mutagenic or toxicic for Reproduction</td>
</tr>
<tr>
<td>DMEL</td>
<td>Derived Minimal Effect Level</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
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<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
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<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
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<tr>
<td>EmS</td>
<td>Emergency Schedule</td>
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<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals”</td>
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<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods</td>
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<tr>
<td>MARPOL</td>
<td>Marine Pollutant</td>
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<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
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<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
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<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
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<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses</td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
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