Section 1 - Product and Company Identification

1.1 Product identifiers

Product name: Adju-Phos®
Catalog code: vac-phos-250
CAS number: 7784-30-7

Adju-Phos® is a trademark which belongs to Brenntag Biosector A/S and which is registered in a large number of countries and regions worldwide.

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

Identified use: Laboratory chemicals. Only for professional use.

Disclaimer: All InvivoGen products are supplied for research and laboratory use only. Not for drug, household or other uses.

1.3 Details of the supplier of the safety data sheet

Supplier:
InvivoGen USA, 3950 Sorrento Valley Blvd, Suite 100
San Diego, California 92121, USA
(+1) 888 457 5873

InvivoGen Europe, 5 rue Jean Rodier
31400 Toulouse, France
+33 (0) 5 62 71 69 39

InvivoGen Hong Kong, Unit 709A, Bio-Informatics Center
2 Science Park West Avenue, Hong Kong Science Park
Shatin, Hong Kong
+852 3622 3480

Manufacturer:
Brenntag Biosector, Elsenbakken 23
DK-3600 Frederikssund
Denmark
+45 47 38 47 00

1.4 Emergency telephone number: ORFILA (INRS): +33 (0)1 45 42 59 59

Section 2 – Hazards Identification

2.1 Classification of substance

Not a hazardous substance or mixture.

2.2 Label elements

Not a hazardous substance or mixture.

2.3 Other hazards – none

PBT/vPvB: no ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.
Section 3 – Composition/Information on Ingredient

3.2 Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Classification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum phosphate</td>
<td>7784-30-7</td>
<td>None</td>
<td>2 %</td>
</tr>
</tbody>
</table>

Section 4 – First Aid Measures

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, remove to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash skin with soap and plenty of water. If irritation persists, consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

May cause slight irritations of eyes.

4.3 Indication of any immediate medical attention and special treatment needed

Show this safety data sheet to a physician if irritation persists.

Section 5 – Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, carbon dioxide, dry chemical powder or appropriate foam.

5.2 Specific hazards arising from the chemical

Do not inhale smoke fumes. In case of fire, the product may form hazardous decomposition products.

5.3 Special Firefighting Procedures

Wear self-contained breathing apparatus for fire fighting if necessary.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency

Use personal protective equipment. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

Section 7 – Handling and Storage

7.1 Precautions for safe handling

Avoid contact with eyes. Change contaminated clothing. Wash with plenty of water and soap after use.
7.2 Conditions for safe storage, including any incompatibilities
Store in tightly closed original container at room temperature.

7.3 Specific end use(s)
See section 1.

Section 8 – Exposure Controls/PPE

8.1 Control parameters
Occupational exposure limits (EH40/2007):

<table>
<thead>
<tr>
<th>Substance</th>
<th>8-hour TWA</th>
<th>15-min STEL</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium salts, soluble</td>
<td>2 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DNEL/PNEC: No chemical safety report</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Appropriate engineering controls: General industrial hygiene practice.

Personal protective equipment

Respiratory protection
Respiratory protection is not normally required.

Skin protection
In case of long-term skin contact: Wear protective gloves of nitrile rubber (>0.3 mm) (EN 374).
Break-through time: Approx. 3 hours.

Eye/face protection
Wear safety goggles (EN166) when risk of eye contact.

Control of environmental exposure
Do not let product enter drains.

Section 9 – Physical/Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance
Physical state: Gel in aqueous suspension
Color: White

Safety Data
Odor: Neutral
Odor threshold: No data available
pH: 6.0-7.0 (at the time of production)
Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
Decomposition temperature: > 200 °C
Flash point: No data available
Evaporation rate: No data available
Flammability: No data available
Upper/lower flammability or explosive limits: No data available
Vapor pressure: No data available
Relative density: No data available
Solubility in water: Insoluble in water
Partition coefficient: n-octanol/water: No data available
Autoignition temperature: No data available
Viscosity: No data available

9.2 Other safety information
No data available
Section 10 – Stability and Reactivity

10.1 Reactivity: No data available
10.2 Chemical stability: Stable under recommended storage conditions. See section 7 for storage conditions.
10.3 Possibility of hazardous reactions: No data available
10.4 Conditions to avoid: No data available
10.5 Incompatible materials: No data available
10.6 Hazardous decomposition products: When heated to high temperatures (decomposition) it emits toxic fumes.

Section 11 – Toxicological Information

11.1 Information on toxicological effects
Acute toxicity:
Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available

Other information on acute toxicity: No substances with classified toxicological properties. Information on likely routes of exposure: skin, lungs and gastrointestinal tract.

Symptoms
Inhalation: Vapours may cause slight irritation to the airways.
Skin: May cause slight irritation with redness.
Eyes: May cause slight irritation with redness and pain.
Ingestion: May cause irritation of the gastrointestinal tract.

Chronic effects: None known

Skin corrosion/irritation: No data available
Serious eye damage/irritation: No data available
Respiratory or skin sensitization: No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available

Additional information: No data available

Section 12 – Ecological Information

12.1 Toxicity: No substances with classified ecotoxicological properties.
12.2 Persistence and degradability: No data available
12.3 Bioaccumulative potential: No data available
12.4 Mobility in soil: No data available
12.5 Results of PBT and vPvB assessment: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.
12.6 Other adverse effects: No data available

Section 13 – Disposal Considerations

13.1 Waste treatment methods
Product: Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Must not be disposed of together with household garbage.

Contaminated Packaging: Dispose of as unused product.
EWC-code: 15 05 09 (mixture); 15 02 03 (paper towels, inert materials, etc. contaminated with the mixture)

Section 14 – Transport Information

14.1 UN number
ADR/RID: -
DOT (US): -
IMDG: -
IATA: -
14.2 UN proper shipping name
Not dangerous goods

14.3 Transport hazard class(es)
ADR/RID: -  DOT (US): -  IMDG: -  IATA: -

14.4 Packaging group
ADR/RID: -  DOT (US): -  IMDG: -  IATA: -

14.5 Environmental hazards
ADR/RID: no  DOT (US): no  IMDG Marine pollutant: no  IATA: no

14.6 Special precautions for user
Must be protected from freezing during transport.

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

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available

15.2 Chemical Safety Assessment
No chemical safety report

Section 16 – Other Information

Training advice: No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with the safety data sheet and have normal training in the use of personal protective equipment.

The information contained in this SDS relates only to the material(s) designated and does not relate to use(s) in combination with any other material, process(es) and/or chemical reaction(s). InvivoGen provides this information in good faith and is based on our present knowledge. This SDS is provided without warranty of any kind. The recipient is responsible for ensuring that, where applicable, existing laws and guidelines are observed.