

## TECHNICAL DATA SHEET OF

### Aluminium phosphide 56% TB

| <b>Chemistry identity</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Common name                             | Aluminium phosphide 56% TB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| IUPAC name                              | aluminium phosphide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CAS No                                  | 7803-51-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Formula structure                       | <b>AIP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Physical and chemical properties</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Appearance                              | Grey white Tablet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Content                                 | 56% min.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| pH                                      | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Solubility in water                     | It reacts with water                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Mammalian toxicity</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Acute oral                              | LD <sub>50</sub> for rats >25000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Acute dermal                            | LD <sub>50</sub> for rats > 2000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Acute inhalation                        | LC <sub>50</sub> (4 h) for rats >38.9ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Environment fate</b>                 | <p><b>Animals</b> Readily absorbed through the lungs, widely distributed, and excreted as hypophosphite and phosphite in urine, and as unchanged phosphine through the lungs.</p> <p><b>Plants</b> In stored products, phosphine undergoes oxidation to phosphoric acid.</p> <p><b>Soil/Environment</b> DT50 in air 5 h, degraded by photoreactions; in dark, DT50 c. 28 h. Rapidly degraded in soil.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Handling and storage</b>             | <p><b>Handling:</b> Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust or gas. Hydrogen phosphide gas may buildup in containers over time. When opening, point containers away from the face and body. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.</p> <p><b>Storage:</b> Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Keep away from water, acids, oxidising agents and certain metals (including gold, silver and brass). Store locked up. Do not store in buildings inhabited by people or animals</p> |
| <b>Package</b>                          | 1kg bottle or customized package                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |