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MATERIAL SAFETY DATA SHEET

1. Identification of substance:

Product name: **HNMPA-(AM)3**

Cat. number: **VD-OEIA-1112**

2. Physical and chemical properties:

Appearance: **Colorless oil**

CAS Number: **120944-03-8**

Purity: **>=98%**

Formula: **C₂₀H₂₃O₁₀P**

TO BE USED FOR RESEARCH PURPOSES ONLY. NOT FOR DRUG OR CLINICAL USE IN HUMANS OR FOOD ADDITIVE USE

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3. Handling and storage

- Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust.
- Keep container tightly closed. Keep container in a cool, well-ventilated area. **Store at -20°C. Protect from light.**

4. Exposure controls/Personal protection

- Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

5. Personal protective equipment

- Lab coat.
- Safety glasses.



6. Stability and Reactivity

- **Stability:**
Stable under recommended storage conditions.
- **Hazardous Decomposition Products:**
These products are carbon oxides (CO, CO₂), phosphates.
- **Condition to avoid:**
Not available.

7. Hazards identification

■ Hazard ratings:

Flammability:	1
Toxicity:	0
Body Contact:	0
Reactivity:	0
Chronic:	0

8. First-aid measures

- **In case of contact with eyes:** Rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.
- **In cases of skin contact:** Wash with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes and wash before wearing. In case of eye contact, flush with copious amounts of water for at least 15 minutes.
- **In cases of inhalation:** Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration.
- **In cases of ingestion:** If swallowed, rinse mouth out with water, contact local poison center and call a physician.

9. Accidental release measures

- **Personal precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.
- **Spill and Leak:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.

10. Toxicological information

- No specific information is available in our database regarding the other toxic effects of this material for humans.

11. Fire-Fighting Measures

- **Flammability of the Product:**
May be combustible at high temperature.
- **Special protective equipment for fire-fighters**
Wear self contained breathing apparatus for fire fighting if necessary.

12. Transport Information

- **DOT (US)**
Not regulated.
- **IMDG**
Not regulated.
- **IATA**
Not regulated.

13. Ecological information

- **Ecotoxicological effects:**
Not available
- **Other information:**
The product itself and its products of degradation are not toxic.

14. Disposal consideration

- Arrange for the immediate collection of material by a licensed waste disposal contractor. Observe all federal, state, and local environmental regulations

15. Regulations

- **Product related hazard informations:**
No data available.
- **Safety phrases:**
Keep away from food, drink and animal feeding stuffs.
Wear suitable protective clothing.
If swallowed, seek medical advice immediately and show this container or label.

16. Other

- The information above is believed to be accurate and represents the best information currently available to us. We assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party.

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