

## Material Safety Data Sheet

### Section 1: Chemical and Product Identification

#### 1.1 Product Identifiers

Product No.: 1154  
Product Name: N-(4-pentynoyl)-mannosamine tetraacylated (Ac<sub>4</sub>ManNAI)  
Synonym: N/A

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

Identified Uses: Laboratory chemicals, Manufacture of substances

### Section 2: Composition/Information on Ingredients

CAS No.: 935658-93-8  
Mol. Formula: C<sub>19</sub>H<sub>25</sub>NO<sub>10</sub>  
Mol. Weight: 427.40  
Assay: N/A

### Section 3: Hazards Identification

#### 3.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

#### 3.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

#### 3.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None.

### Section 4: First-Aid Measures

#### 4.1 Description of first aid measures

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

##### In case of skin contact

Wash off with soap and plenty of water.

##### In case of eye contact

Flush eyes with water as a precaution.

##### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described the section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

### Section 5: Fire Fighting Measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

#### 5.3 Advice from firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **5.4 Further information**

No data available

### **Section 6: Accidental Release Measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Avoid breathing vapors, mist or gas. For personal protection see section 8.

#### **6.2 Environmental precautions**

Do not let product enter drains.

#### **6.3 Methods and materials for containment and cleaning up**

Keep in suitable, closed containers for disposal.

#### **6.4 Reference to other sections**

For disposal see section 13.

### **Section 7: Handling and Storage**

#### **7.1 Precautions for safe handling**

For precautions see section 3.2

#### **7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature -20 C

Handle and store under inert gas. Moisture sensitive.

#### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

### **Section 8: Exposure Controls/Personal Protection**

#### **8.1 Control parameters**

##### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

#### **8.2 Exposure controls**

##### **Appropriate engineering controls**

General industrial hygiene practice.

##### **Personal protective equipment**

###### **Eye/Face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

###### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

###### **Body Protection**

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

###### **Respiratory protection**

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

**Control of environmental exposure**

Do not let product enter drains.

**Section 9: Physical and Chemical Properties**

**9.1 Information on basic physical and chemical properties**

a) Appearance	Form: liquid
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	No data available
e) Melting / Freezing points	No data available
f) Initial boiling point & boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	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

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**

No data available

**10.5 Incompatible materials**

Strong oxidizing agents

**10.6 Hazardous decomposition products**

In the event of fire: see section 5

## **Section 11: Toxicological Information**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

No data available

Inhalation: No data available

Dermal: No data available

No data available

#### **Skin corrosion / irritation**

No data available

#### **Serious eye damage/eye irritation**

No data available

#### **Respiratory or skin sensitization**

No data available

#### **Germ cell mutagenicity**

No data available

#### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **Reproductive toxicity**

No data available.

#### **Specific target organ toxicity – single exposure**

No data available.

#### **Specific target organ toxicity – repeated exposure**

No data available.

#### **Aspiration hazard**

No data available.

#### **Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **Section 12: Ecological Information**

### **12.1 Toxicity**

No data available.

### **12.2 Persistence and degradability**

No data available.

### **12.3 Bio accumulative potential**

No data available.

### **12.4 Mobility in soil**

No data available.

#### **12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### **12.6 Other adverse effects**

No data available.

### **Section 13: Disposal Considerations**

#### **13.1 Waste treatment methods**

##### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

##### **Contaminated packaging**

Dispose of as unused product.

### **Section 14: Transport Information**

#### **DOT (US)**

It is not dangerous, hazardous, or restricted for transport by air.

#### **IMDG**

It is not dangerous, hazardous, or restricted for transport by air.

#### **IATA**

It is not regulated by IATA. It is not dangerous, hazardous, or restricted for transport by air.

### **Section 15: Regulatory Information**

#### **SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **SARA 311/312 Hazards**

No SARA Hazards

#### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **European information**

Caution: Substance not yet fully tested. S 5001

### **Section 16: Other Information**

We are not aware of any hazards for the above product.

*The above information is believed to be correct, but does not purport to be all-inclusive and should be used only as a guide. Click Chemistry Tools, LLC. shall not be held liable for any damage resulting from handling or from contact with the above product.*