

## Safety Data Sheet

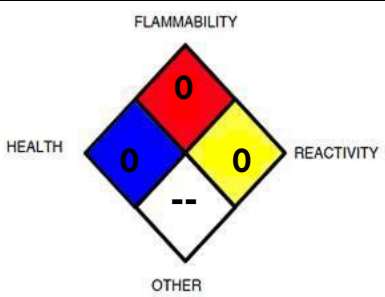
### Section 1: Product & Company Identification

<b>Product Name:</b>	L-NMMA
<b>Product #:</b>	M-1014
<b>Synonyms:</b>	N $\omega$ -Methyl-L-arginine; NG-Monomethyl-L-arginine; N5-(Methylamidino)-L-ornithine
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	% Composition
L-NMMA	53308-83-1	-	≥99

### Section 3: Hazards Identification

<b>Symbols</b>	N/A
<b>HMIS Classification</b>	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

<b>NFPA Classification</b>	 <p>The diagram is a diamond-shaped hazard diamond. The top triangle is red and labeled 'FLAMMABILITY' with a '0' inside. The left triangle is blue and labeled 'HEALTH' with a '0' inside. The right triangle is yellow and labeled 'REACTIVITY' with a '0' inside. The bottom triangle is white and labeled 'OTHER' with '--' inside.</p>
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## Section 4: First Aid Measures

<b>General Overview:</b>	The most important known symptoms and effects are described in the labelling (see section 2.2 and/or section 11)
<b>Inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
<b>Skin:</b>	Wash off with soap and plenty of water.
<b>Eyes:</b>	Flush eyes with water as a precaution.
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water.
	See section 11 for more detailed information on health effects & symptoms.

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	No data available
<b>Extinguishing Media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Hazardous thermal (de)composition products:</b>	Carbon oxides, Nitrogen oxides (NO <sub>x</sub> )
<b>Special Fire Fighting Procedures:</b>	Wear self-contained breathing apparatus for firefighting if necessary.
<b>Flash Point:</b>	No data available

## Section 6: Accidental Release Measures

<b>Personal Precautions:</b>	Avoid dust formation. Avoid breathing vapors, mist or gas.
<b>Environmental Precautions:</b>	Do not let product enter drains.
<b>Methods for Clean-up:</b>	Sweep up and shovel. Keep in suitable, closed containers for disposal.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place. Recommended storage temperature: -20°C
<b>Handling:</b>	Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

## SECTION 8: Exposure controls / Personal Protection

### Respiratory Protection:




Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Skin and Body:



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.

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

<b>Eyes:</b>	 <p>Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).</p>
<b>Ventilation/Engineering Measures:</b>	Do not let product enter drains.
<b>Hygiene:</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Other:</b>	N/A

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	White powder
<b>Formula</b>	$C_7H_{16}N_4O_3 \cdot CH_2COOH$
<b>Molecular Wt.</b>	248.3
<b>Melting Pt.</b>	No data available
<b>Boiling Pt.</b>	No data available
<b>Density:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	Water
<b>Flash Point:</b>	No data available
<b>Autoignition Temp:</b>	No data available

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	Carbon oxides, Nitrogen oxides (NO <sub>x</sub> )
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	No data available

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	N/A
<b>ACUTE Toxicity:</b>	N/A
<b>CHRONIC Toxicity:</b>	N/A
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	<p>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.</p> <p>AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.</p> <p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	No data available
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Offer surplus and non-recyclable solutions to a licensed disposal company.
<b>Contaminated Packaging:</b>	Dispose of as unused product.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	N/A
<b>ADR / RID (LAND):</b>	Not regulated

<b>DOT regulations:</b>	Not regulated
<b>IMDG/IMO (SEA):</b>	Not regulated
<b>IATA/DGR (AIR):</b>	Not regulated
<b>Special Provisions:</b>	N/A

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	Not hazardous
<b>Risk Phrases:</b>	N/A
<b>Safety Phrases:</b>	N/A
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	TSCA: Not listed California Proposition 65: No products were found
<b>U.S. Federal Regulations:</b>	SARA 302/304 emergency planning and notification: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found. SARA 313 toxic chemicals notification and release reporting: No products were found.  Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: No products were found.
<b>WHMIS (Canada):</b>	N/A

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*