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Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 01/02/2013 Revision date: 11/12/2014 Supersedes: 10/27/2011

Product identifier Product form : Mixture Product name : 288LM1 Leuco-Malachite Ampoule 1 Product code : 288LM1 Product code : 288LM1 1.2. Relevant identified uses of the substance or mixture and uses advised against
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Use of the substance/mixture : Laboratory chemical
1.3. Details of the supplier of the safety data sheet
SIRCHIE Finger Print Laboratories 100 Hunter Place Youngsville, NC 27596 - USA T 919-554-2244; 800-356-7311 - F 919-554-2266; 800-899-8181 http://www.sirchie.com
1.4. Emergency telephone number
Emergency number: 1.800.424.9300
SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Classification (GHS-US) Flam. Lig. 3 H226

Skin Corr. 1A H314 Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)

Signal word (CHS LIS)	GHS02 GHS05
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H226 - Flammable liquid and vapor H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS-US)	 P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking P233 - Keep container tightly closed P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof Not required equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P260 - Do not breathe mist, fume, vapors P264 - Wash all exposed skin thoroughly after handling P280 - Wear eye protection, protective gloves P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a poison center/doctor/ P321 - Specific treatment (see a doctor on this label) P363 - Wash contaminated clothing before reuse P370+P378 - In case of fire: Use CO2, Dry Chemical, foam, water spray to extinguish P403+P235 - Store in a well-ventilated place. Keep cool P405 - Store locked up P501 - Dispose of contents/container to Dispose according to local, state, and federal regulations
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2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
AQUA	(CAS No) 7732-18-5	60.2	Not classified
acetic acid	(CAS No) 64-19-7	39.8	Flam. Liq. 3, H226 Skin Corr. 1A, H314

Full text of H-phrases: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effects	s, both acute and delayed
Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Indication of any immediate medical a	attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the sub-	stance or mixture
Reactivity	: No data available.
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release meas	ures
6.1. Personal precautions, protective equ	ipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
	: Ventilate area.
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Notify	authorities if liquid enters sewers or public waters.
6.3. Methods and material for containment	t and cleaning up
	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
6.4. Reference to other sections	
See Heading 8. Exposure controls and personal p	rotection.
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SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
7.2. Conditions for safe storage, including	g any incompatibilities
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
288LM1 Leuco-Malachite Ampoule 1		
OSHA	OSHA PEL (TWA) (ppm)	10 ppm
acetic acid (64-19-7)		
OSHA	Not applicable	
AQUA (7732-18-5)		
ACGIH	Not applicable	
OSHA	Not applicable	
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8.2. **Exposure controls**

Personal protective equipment

: Gas mask. Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat. drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and	chemical properties
Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Color	: clear;Colorless;Colorless
Odor	: Vinegar odour
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available

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Relative density	: No data available
Solubility	: Water: Solubility in water of component(s) of the mixture : •:
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTI	ON 10: Stability and reactivity
10.1.	Reactivity
No data	available.
10.2.	Chemical stability
Stable u	nder normal conditions. Not established.
10.3.	Possibility of hazardous reactions
Not esta	blished.
10.4.	Conditions to avoid
Direct su	inlight. Heat. Sparks. Extremely high or low temperatures.
10.5.	Incompatible materials
Strong a	cids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
acetic acid (64-19-7)	
LD50 oral rat	3310 mg/kg body weight (Rat; Other; Read-across)
ATE US (oral)	3310.000 mg/kg body weight
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
	Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTIO	N 12: Ecological information
12.1.	Foxicity

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acetic acid (64-19-7)	
LC50 fish 1	75 mg/l (96 h; Lepomis macrochirus; GLP)
EC50 Daphnia 1	47 mg/l (24 h; Daphnia magna; Not neutralized)
LC50 fish 2	94 mg/l (96 h; Oryzias latipes)
EC50 Daphnia 2	95 mg/l (24 h; Daphnia magna; Static system)
TLM fish 1	100 ppm (96 h; Carassius auratus)
Threshold limit algae 1	90 mg/l (192 h; Microcystis aeruginosa; Neutralized)
Threshold limit algae 2	4000 mg/l (192 h; Scenedesmus quadricauda; Neutralized)

12.2. Persistence and degradability

288LM1 Leuco-Malachite Ampoule 1	
Persistence and degradability	Not established.
acetic acid (64-19-7)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 0.74 g O₂/g substance
Chemical oxygen demand (COD)	1.03 g O₂/g substance
ThOD	1.07 g O₂/g substance

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Bioaccumulative potential	Not established.
acetic acid (64-19-7)	
BCF fish 1	3.16 (Pisces)
Log Pow	-0.17 (Experimental value; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

acetic acid (64-19-7)	
Surface tension	0.028 N/m (20 °C)
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects	
Effect on ozone layer	:
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.

SECTION 13: Disposal consideration	IS
13.1. Waste treatment methods	
Waste disposal recommendations Ecology - waste materials	Dispose in a safe manner in accordance with local/national regulations.Avoid release to the environment.
SECTION 14: Transport information	

In accordance with DOT	
Transport document description	: UN2789 Glacial Acetic acid Corrosive, 8, II
UN-No.(DOT)	: UN2789
Proper Shipping Name (DOT)	: Glacial Acetic acid
	Corrosive
Department of Transportation (DOT) Hazard Classes	: 8 - Class 8 - Corrosive material 49 CFR 173.136

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Hazard labels (DOT)	: 8 - Corrosive 3 - Flammable liquid
Packing group (DOT)	: II - Medium Danger
Additional information	
Other information	: No supplementary information available.
ADR	
No additional information available	
Transport by sea	
No additional information available	
Air transport	
UN-No.(IATA)	: 2789
Proper Shipping Name (IATA)	: Acetic acid, glacial
	: 8 - Corrosives
Packing group (IATA) Subsidiary risks (IATA)	: II - Medium Danger : (3) Flammable liquid
SECTION 15: Regulatory inform	hation
15.1. US Federal regulations	
No additional information available	
15.2. International regulations	
CANADA No additional information available	
EU-Regulations No additional information available	
Classification according to Regulation	(EC) No. 1272/2008 [CLP]
Classification according to Directive 67	//548/EEC [DSD] or 1999/45/EC [DPD]
C; R34 R10	
Full text of R-phrases: see section 16	
15.2.2. National regulations	
15.3. US State regulations	

SECTION 16: Other information	
Indication of changes	: Revision - See : *.
Revision date	: 11/12/2014
Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

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Full text of H-phrases:	
Flam. Liq. 3	Flammable liquids Category 3
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage
IFPA health hazard	2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
FPA fire hazard	: 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.
IFPA reactivity	: 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.
MIS III Rating	
lealth	: 2 Moderate Hazard - Temporary or minor injury may occur
lammability	: 2 Moderate Hazard
hysical	: 1 Slight Hazard
nyoloal	

SDS US (GHS HazCom 2012)

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