Safety Data Sheet

Issuing Date May-04-2015 **Revision Date** Dec-20-2016

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier - Labeling according to Regulations (EC) No 1272/2008

Product Code(s) **6405**
Product name **Reducing Reagent**

Substance or Preparation Preparation

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

Recommended Use Use as a laboratory reagent
Industrial (not for food or food contact use)
Laboratory chemicals

1.3. Details of the supplier of the safety data sheet

Manufacturer Address
LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

Contact for timely inquiries in regards to this product:

Person Regulatory Affairs Department
E-mail address system@lamotteco.com

1.4. Emergency telephone number

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

Section 2: HAZARD(S) INDENTIFICATION

2.1. Classification of the substance or mixture
2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.1.2 Classification according to Directive 67/548/EEC or 1999/45/EC
For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Symbol(s)
Not dangerous

2.2. Label elements - EU (§28, 1272/2008)
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Pictogram(s)

Signal word None

Hazard statements None

EU Specific Hazard Statements
EUH210 - Safety data sheet available on request

Precautionary statements
P264 - Wash face, hands and any exposed skin thoroughly after handling. P280 - Wear eye protection/ face protection. P403 + P235 - Store in a well-ventilated place. Keep cool. P103 - Read label before use. P102 - Keep out of reach of children.

2.3. Other hazards
None

Section 3: COMPOSITION/ INFORMATION OF INGREDIENTS*

3.1 Substances

Not Applicable

3.2 Mixtures

Chemical name	EC No	CAS No.	Weight-%	Classification	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
Stannous chloride dihydrate	-	10025-69-1	1.6	-	No data available	-
Water	231-791-2	7732-18-5	to 100%	-	No data available	-
Glycerol	200-289-5	56-81-5	95	-	No data available	-

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

Inhalation Remove to fresh air. If symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water. Take off contaminated clothing and wash before reuse. If symptoms persist, call a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Ingestion Induce vomiting, but only if victim is fully conscious. Drink plenty of water. Consult a physician if necessary.

Self-protection of the first aider Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

4.2. Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3. Indication of any immediate medical attention and special treatment needed
None known

Section 5: FIREFIGHTER MEASURES

5.1. Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available

5.3. Advice for firefighters

Special protective equipment for firefighters As in any fire, wear self-contained breathing apparatus and full protective gear

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose of contents/containers in accordance with local regulations.

Methods for cleaning up After cleaning, flush away traces with water.

6.4. Reference to other sections For disposal see section 13.

Methods for Containment and Clean Up Pick up and transfer to properly labelled containers.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Do not taste or swallow. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials. Keep out of the reach of children.

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 AND PERSONAL PROTECTION

8.1. Control parameters

Chemical name	Eu	The United Kingdom	France	Spain	Germany
Stannous chloride dihydrate 10025-69-1	TWA 2 mg/m³ as Sn	TWA: 2 mg/m³ STEL: 4 mg/m³	Not Established	TWA: 2 mg/m³	-
Water 7732-18-5	Not Established	Not Established	Not Established	-	-
Glycerol 56-81-5	Not Established	TWA: 10 mg/m³ STEL: 30 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³	TWA: 50 mg/m³ Ceiling / Peak: 100 mg/m³
Chemical name	**Italy**	**Portugal**	**The Netherlands**	**Finland**	**Denmark**
Stannous chloride dihydrate 10025-69-1	-	TWA: 2 mg/m³	-	TWA: 2 mg/m³	TWA: 2 mg/m³
Water 7732-18-5	-	Not Established	-	Not Established	Not Established
Glycerol 56-81-5	-	TWA: 10 mg/m³	-	TWA: 20 mg/m³	Not Established
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Stannous chloride dihydrate 10025-69-1	TWA: 2 mg/m³ STEL 4 mg/m³	TWA: 2 mg/m³ STEL: 4 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³ STEL: 2 mg/m³	TWA: 2 mg/m³ STEL: 6 mg/m³
Water 7732-18-5	-	Not Established	Not Established	Not Established	Not Established
Glycerol 56-81-5	-	TWA: 50 mg/m³ STEL: 100 mg/m³	TWA: 10 mg/m³	Not Established	TWA: 10 mg/m³ STEL: 30 mg/m³

Chemical name	European Union	United Kingdom	France	Spain	Germany
Stannous chloride dihydrate 10025-69-1	-	-	-	-	-
Water 7732-18-5	-	-	-	-	-
Glycerol 56-81-5	-	-	-	-	-
Chemical name	**Italy**	**Portugal**	**Netherlands**	**Finland**	**Denmark**
Stannous chloride dihydrate 10025-69-1	-	-	-	-	-
Water 7732-18-5	-	-	-	-	-
Glycerol 56-81-5	-	-	-	-	-
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Stannous chloride dihydrate 10025-69-1	-	-	-	-	-
Water 7732-18-5	-	-	-	-	-
Glycerol 56-81-5	-	-	-	-	-

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Hand protection Rubber/latex/neoprene or other suitable chemical resistant gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure. Wear nitrile gloves.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Environmental exposure controls	No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid		
Appearance	Clear Colorless to slightly colored viscous liquid	**Odor**	Odorless

Property	**Values**	**Remarks • Method**
pH	No information available	
Melting point / freezing point		No information available
Boiling point / boiling range	290 °C / 554 °F	For Glycerin
Flash point	199 °C / 390 °F	CC for Glycerin
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limit in Air		
Upper	Not applicable	
Lower	Not applicable	
Vapor pressure	<17 mmHg @ 20°C	No information available
Vapor density		No information available
Specific gravity	1.252 @ 25°C for Glycerin	No information available
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Explosive properties		No information available
Oxidizing properties		No information available

9.2. Other information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information 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

Hazardous polymerization	Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing

10.4. Conditions to avoid

Excessive heat. Incompatible Products.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions -. Carbon oxides (COx).

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 10,119.00 mg/kg
ATEmix (dermal) 10,526.00 mg/kg

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Stannous chloride dihydrate	= 2300 mg/kg (Rat) = 700 mg/kg (Rat)		
Water	> 90 mL/kg (Rat)		
Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m³ (Rat) 1 h

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Sensitization No information available.

Mutagenic effects No information available.

Carcinogenic effects No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Stannous chloride dihydrate	Not Established	Not Established	55: 48 h Daphnia magna mg/L EC50 Static
Water	Not Established	Not Established	Not Established
Glycerol	Not Established	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	500: 24 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

Inherently biodegradable, fulfilling criteria.

12.3. Bioaccumulative potential

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

Chemical name	Log Pow
Stannous chloride dihydrate	Not Established
Water	Not Established
Glycerol	-1.76

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Stannous chloride dihydrate	-
Water	-
Glycerol	-

12.6. Other adverse effects

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine disrupting potential
Stannous chloride dihydrate	Not Established	Not Established	Not Established
Water	Not Established	Not Established	Not Established
Glycerol	Not Established	Not Established	Not Established

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Dispose of waste product or used containers according to local regulations.

Contaminated packaging Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

IMDG/IMO Not regulated
14.1
14.2
14.3
14.4
14.5

RID
14.1
14.2
14.3
14.4

ADR Not regulated
14.1
14.2
14.3
14.4

14.5

IATA Not regulated
14.1
14.2
14.3
14.4

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical name	French RG number	Title
Stannous chloride dihydrate (CAS # 10025-69-1)	-	-
Water (CAS # 7732-18-5)	-	-
Glycerol (CAS # 56-81-5)	-	-

Germany None

Water contaminating class (Netherlands) None

Switzerland Poison Classification None

European Union None

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment
No chemical safety assessment has been carried out for this substance/mixture by the supplier.

Section 16: ANY OTHER RELEVANT INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Text of R phrases mentioned in Section 3
R22 - Harmful if swallowed

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

TWA - TWA (time-weighted average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value

Prepared by	Regulatory Affairs Department
Issuing Date	May-04-2015
Revision Date	Dec-20-2016
Recommendations on Use	Laboratory chemicals Industrial (not for food or food contact use) Restricted to professional users

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet