according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Date of issue: 04/17/2015Revision date: 06/18/2015

LA-CO Industries, Inc.

Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product form Mixture

Tempilstik® 119 °F (48 °C), 122 °F (50 °C), 125 °F (52 °C), 284 °F (140 °C), 294 °F (146 °C), Trade name

1100 °F (593 °C), 1112 °F (600 °C)

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

Use of the substance/mixture : Temperature indicator

Details of the supplier of the safety data sheet 1.3.

LA-CO Industries, Inc. 1201 Pratt Boulevard Elk Grove Village, IL. 60007-5746 Phone: (847) 956-7600 Fax: (847) 956-9885

E-mail: customer_service@laco.com

Emergency telephone number

: 24-hour emergency: CHEMTREC- U.S.: 1-800-424-9300 International: +1-703-527-3887 **Emergency number**

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with the Globally Harmonized Standard

Eve Irrit, 2A H319

Full text of H-statements: see section 16

2.2 Label elements

GHS labelling

Hazard pictograms (GHS)



Signal word (GHS) : Warning

Hazard statements (GHS) : H319 - Causes serious eye irritation

Precautionary statements (GHS) : P264 - Wash hands thoroughly after handling P280 - Wear eye protection, protective gloves

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P337+P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards

Unknown acute toxicity (GHS)

- 0.01 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
- 0.01 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
- 0.01 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

Substance

Not applicable

18/06/2015 EN (English) SDS Ref.: LACO1504024 1/1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

3.2. Mixture

Name	Product identifier	% (w/w)	GHS classification
adipic acid	(CAS No) 124-04-9	77.92 : 284 °F 99.31 : 294 °F	Eye Irrit. 2A, H319
myristic acid	(CAS No) 544-63-8	74.78 : 119 °F 82.26 : 122 °F 85.73 : 125 °F	Eye Irrit. 2A, H319
sodium carbonate	(CAS No) 497-19-8	18.18 : 1100 °F	Eye Irrit. 2A, H319

Full text of H-statements: 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. Get medical advice/attention if you

feel unwell.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Gently wash with plenty of soap and water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do NOT induce vomiting. Get medical advice/attention.

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

Symptoms/injuries after eye contact : Causes serious eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Sand. Water spray.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No specific fire or explosion hazard. Burning produces irritating, toxic and noxious fumes.

Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid creating or spreading dust. Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Protective equipment : Chemical goggles or safety glasses. Dust impervious gloves.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Chemical goggles or safety glasses. Dust impervious gloves.

Emergency procedures : Ventilate area

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Avoid generating dust. Contain and collect as any solid.

Methods for cleaning up : Minimize generation of dust. On land, sweep or shovel into suitable containers.

18/06/2015 EN (English) SDS Ref.: LACO1504024 2/1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible products : Strong oxidizers. Strong bases.

Prohibitions on mixed storage : Keep away from incompatible materials. Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Temperature indicator.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

o. i. Control parame	ater 5		
Tempilstik® 119 °F (48	°C), 122 °F (50 °C), 125 °F (52 °C), 284 °F (14	0°C), 294 °F (146 °C), 1100 °F (593 °C), 1112 °F (600 °C)	
ACGIH	Not applicable		
OSHA	Not applicable	Not applicable	
myristic acid (544-63-8)			
ACGIH	Not applicable		
OSHA	Not applicable	Not applicable	
sodium carbonate (497-19-8)			
ACGIH	Not applicable	Not applicable	
OSHA	Not applicable	Not applicable	
adipic acid (124-04-9)			
ACGIH	ACGIH TWA (mg/m³)	5 mg/m³	
ACGIH	Remark (ACGIH)	URT irr; ANS impair	
OSHA	Not applicable	Not applicable	
Canada (Quebec)	VEMP (mg/m³)	5 mg/m³	

8.2. Exposure controls

Appropriate engineering controls : Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Ensure good

ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear dust impervious gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Use air-purifying respirator

equipped with particulate filtering cartridges.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : A solid crayon-like marker.

Colour : Variable.

Odour : odourless.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

18/06/2015 EN (English) SDS Ref.: LACO1504024 3/1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

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 Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available Solubility : No data available 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 Oxidising properties : No data available Explosive limits : No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Keep away from incompatible materials. Avoid dust formation.

10.5. Incompatible materials

Strong bases. Strong oxidizers.

municitie sold (EAA C2 0)

10.6. Hazardous decomposition products

Thermal decomposition generates: Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

myristic acid (544-63-8)		
LD50 oral rat	> 10000 mg/kg	
sodium carbonate (497-19-8)		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rat	>	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 inhalation rat (mg/l)	2300 mg/m³	
adipic acid (124-04-9)		
LD50 oral rat	5560 mg/kg	
LD50 dermal rabbit	7940 ml/kg	
LC50 inhalation rat (mg/l)	> 7.7 mg/l/4h	
ATE CLP (oral)	5560.000 mg/kg bodyweight	

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified

18/06/2015 EN (English) SDS Ref.: LACO1504024 4/1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

sodium carbonate (497-19-8)	
IARC group	Not listed in carcinogenicity class
National Toxicology Program (NTP) Status	Not listed in carcinogenicity class

Reproductive toxicity : Not classified Specific target organ toxicity (single : Not classified

exposure)

sodium carbonate (497-19-8)LOAEL (inhalation, rat, dust/mist/fume)70 mg/l/4h

Specific target organ toxicity (repeated exposure)

: Not classified

adipic acid (124-04-9)

NOAEL (oral, rat, 90 days) 750 mg/kg bodyweight/day

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms

Symptoms/injuries after eye contact : Causes serious eye irritation.
Likely routes of exposure : Inhalation;Skin and eye contact

SECTION 12: Ecological information

12.1 Toxicity

myristic acid (544-63-8)	myristic acid (544-63-8)		
LC50 fish 1	> 10000 mg/l 48 h		
EC50 Daphnia 1	> 27 mg/l 16 h		
sodium carbonate (497-19-8)			
LC50 fish 1	300 mg/l Lepomis macrochirus		
EC50 Daphnia 1	200 - 227 g/l		
adipic acid (124-04-9)			
LC50 fish 1	>= 1000 mg/l 96 h		
EC50 Daphnia 1	46 mg/l 48 h		

12.2. Persistence and degradability

myristic acid (544-63-8)		
Persistence and degradability	Readily biodegradable.	
Biodegradation	99 % 15 d	
adipic acid (124-04-9)		
adipic acid (124-04-9)		
adipic acid (124-04-9) Persistence and degradability	Readily biodegradable.	

12.3. Bioaccumulative potential

myristic acid (544-63-8)	stic acid (544-63-8)	
Log Pow	5.2 (5.2 - 6.11)	
adipic acid (124-04-9)		
BCF fish 1	3.162	
Log Pow	0.093	

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

18/06/2015 EN (English) SDS Ref.: LACO1504024 5/1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

SECTION 14: Transport information

In accordance with DOT and TDG

Not considered a dangerous good for transport regulations

Proper Shipping Name (ADR) : Not applicable

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

adipic acid (124-04-9)		
	RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb

myristic acid (544-63-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

sodium carbonate (497-19-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

adipic acid (124-04-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

RQ (Reportable quantity, section 304 of EPA's List of Lists) 5000 lb

15.2. International regulations

CANADA

myristic acid (544-63-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

sodium carbonate (497-19-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

adipic acid (124-04-9)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

myristic acid (544-63-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

sodium carbonate (497-19-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

adipic acid (124-04-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Tempilstik® 119 °F (48 °C), 122 °F (50 °C), 125 °F (52 °C), 284 °F (140 °C), 294 °F (146 °C), 1100 °F (593 °C), 1112 °F (600 °C)

All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS).

All ingredients are listed in the Toxic Substances Control Act (TSCA).

All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

15.3. US State regulations

adipic acid (124-04-9)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

SECTION 16: Other information

Indication of changes : Original Document.

18/06/2015 EN (English) SDS Ref.: LACO1504024 6/1

Safety Data Sheet

Abbreviations and acronyms

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Data sources : ACGIH (American Conference of Government Industrial Hygienists).

> European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database.

Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing",

Fifth Edition.

National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th

edition.

OSHA 29CFR 1910.1200 Hazard Communication Standard.

TSCA Chemical Substance Inventory. Accessed at

http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.

: ATE: Acute Toxicity Estimate. CAS (Chemical Abstracts Service) number.

CLP: Classification, Labelling, Packaging.

EC50: Environmental Concentration associated with a response by 50% of the test population.

GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).

LD50: Lethal Dose for 50% of the test population. OSHA: Occupational Safety & Health Administration.

PBT: Persistent, Bioaccumulative, Toxic.

TWA: Time Weight Average.

TSCA: Toxic Substances Control Act.

Other information : None.

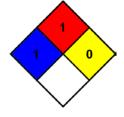
NFPA health hazard : 1 - Exposure could cause irritation but only minor residual

injury even if no treatment is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and not reactive with water.



Full text of H-statements:

 on the date mente.		
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A	
H319	Causes serious eye irritation	

SDS Prepared by: The Redstone Group, LLC

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LACO NA GHS SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

18/06/2015 EN (English) SDS Ref.: LACO1504024 7/1