LA-CO Industries, Inc.

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)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada Hazardous Products Regulations (HPR) / Règlement sur les produits dangereux (RPD)
SDS ID: LACO1504024
Issue date: 4/17/2015 Revision date: 8/2/2022 Supersedes: 7/11/2018 Version: 2.2

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Trade name : 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)

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Temperature indicator

Restrictions on use : No data available

1.3. Supplier

LA-CO Industries
1201 Pratt Blvd.
Elk Grove Village, IL, 60007-5746
US
T 847-956-7600 - F 847-956-9885
customer_service@laco.com

1.4. Emergency telephone number

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887;
全国应急中心 0532 8388 9090

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS) :

Signal word (GHS) : Warning

Hazard statements (GHS_US) : 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 which do not result in classification

No data available

2.4. Unknown acute toxicity (GHS_US)

0.22% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
0.22% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
0.22% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Concentration ranges are due to batch differences.

Name	Product identifier	% (w/w)	GHS US classification
adipic acid	CAS-No.: 124-04-9	0 - <100	Eye Irrit. 2A, H319
myristic acid	CAS-No.: 544-63-8	0 - 90	Eye Irrit. 2A, H319
sodium carbonate	CAS-No.: 497-19-8	0 - 20	Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Irrit. 2A, H319

Full text of hazard classes and 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 person to fresh air and keep 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 (acute and delayed)

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

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

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

Hazardous decomposition products in case of fire : Thermal decomposition generates : Carbon dioxide. Carbon monoxide. Mixture of hydrocarbons.

5.3. Special protective equipment and precautions for fire-fighters

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 : Minimise generation of dust. On land, sweep or shovel into suitable containers.

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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)
No data available

myristic acid (544-63-8)
No data available

sodium carbonate (497-19-8)
No data available

adipic acid (124-04-9)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Adipic acid
ACGIH TWA (mg/m³)	5 mg/m³
Remark (ACGIH)	URT irr; ANS impair
Regulatory reference	ACGIH 2022

8.2. Appropriate engineering controls

Appropriate engineering controls : Avoid dispersal of dust in the air (i.e, clearing dust surfaces with compressed air). Ensure good ventilation of the work station.

8.3. Individual protection measures/Personal protective equipment

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.

Personal protective equipment symbol(s):

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
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Relative evaporation rate (butylacetate=1)	:	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
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive limits	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	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 creating or spreading dust.

10.5. Incompatible materials

Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

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Unknown acute toxicity (GHS_US)	0.22% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 0.22% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 0.22% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

myristic acid (544-63-8)	
LD50 Oral rat	> 10000 mg/kg

sodium carbonate (497-19-8)	
LD50 Oral rat	2800 mg/kg
LD50 Dermal rabbit	> 2000 mg/kg
ATE (oral)	2800 mg/kg bodyweight
ATE (dust,mist)	2.3 mg/l/4h

adipic acid (124-04-9)	
LD50 Oral rat	11000 mg/kg
LD50 Dermal rabbit	7940 ml/kg
LC50 Inhalation rat	7.7 mg/l
ATE (oral)	11000 mg/kg bodyweight
ATE (dermal)	7940000 mg/kg bodyweight
ATE (vapours)	7.7 mg/l/4h
ATE (dust,mist)	7.7 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified

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

STOT-single exposure : Not classified

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

STOT-repeated exposure : Not classified

adipic acid (124-04-9)	
NOAEL (oral, rat, 90 days)	750 mg/kg bodyweight/day

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Likely routes of exposure : Inhalation. Skin and eye contact.

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

SECTION 12: Ecological information

12.1. Toxicity

myristic acid (544-63-8)	
LC50 fish 1	118 mg/l Source: IUCLID
EC50 crustacea	> 27 mg/l 16 h

sodium carbonate (497-19-8)	
LC50 fish 1	300 mg/l Lepomis macrochirus
EC50 crustacea	200 – 227 g/l

adipic acid (124-04-9)	
LC50 fish 1	97 mg/l
EC50 crustacea	46 mg/l

12.2. Persistence and degradability

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

adipic acid (124-04-9)	
Persistence and degradability	Readily biodegradable.
Biodegradation	90 % 5 d

12.3. Bioaccumulative potential

myristic acid (544-63-8)	
Log Pow	6.11 Source: ChemIDplus

adipic acid (124-04-9)	
BCF fish 1	3.162
Log Pow	0.08

12.4. Mobility in soil

No data available

12.5. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Disposal 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.

SECTION 14: Transport information

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated
Proper Shipping Name (TDG) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (TDG) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

adipic acid (124-04-9)	
CERCLA RQ	5000 lb

15.2. International regulations

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All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS).
All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

myristic acid (544-63-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

sodium carbonate (497-19-8)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on Taiwan National Chemical Inventory
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)

adipic acid (124-04-9)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

15.3. US State regulations

⚠ **WARNING:** This product can expose you to Silicon dioxide (cristobalite), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Revision date	:	08/02/2022
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.
Other information	:	None.

Full text of H-statements	
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

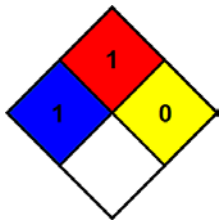
Abbreviations and acronyms	
	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	OSHA: Occupational Safety & Health Administration
	PBT: Persistent, Bioaccumulative, Toxic
	TWA: Time Weighted Average

Abbreviations and acronyms	
	TSCA: Toxic Substances Control Act

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:
General information.

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.