

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)
Issue date: 4/8/2015 Revision date: 8/19/2024 Supersedes: 8/13/2024 Version: 2.2

SECTION 1: Identification**1.1. Identification**

Product form : Mixture
Trade name : Tempilstik® 572 °F (300 °C) 575 °F (302 °C)

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Temperature indicator

1.3. Supplier

LA-CO Industries, Inc.
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**

Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Hazardous to the aquatic environment – Chronic Hazard Category 3	H412	Harmful to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements**GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS US) : P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective gloves, protective clothing.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330 - Rinse mouth.

Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container to Collection point.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

11.72% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
91.04% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
99.91% 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

Name	Product identifier	%	GHS US classification
Fluorescein	CAS-No.: 2321-07-5	80-<100	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
1,1,1 Tris Ethane	CAS-No.: 27955-94-8	5 – 10	Aquatic Chronic 2, H411
1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde, butylated	CAS-No.: 68002-25-5	1 – 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312

Comments : The remaining components are not hazardous and/or present at amounts below reportable limits
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. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Immediately call a poison center or doctor/physician. 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 : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause cancer.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.

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

Symptoms/effects after ingestion : None under normal conditions.

Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

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 : Carbon dioxide. Sand. Water spray. Water spray. Dry powder. Foam.
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.
Explosion hazard : No direct explosion hazard.
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 : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
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. EN469. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment : Chemical goggles or safety glasses. Dust impervious gloves.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.
Methods for cleaning up : Mechanically recover the product. Minimize generation of dust. On land, sweep or shovel into suitable containers.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment. For further information refer to section 13.

Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	: Avoid breathing fume, dust. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Keep container tightly closed.
Incompatible products	: Strong oxidizers. Strong bases.
Information on mixed storage	: Keep away from incompatible materials.
Storage area	: Store in dry, cool, well-ventilated area.
Packaging materials	: Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:
Protective gloves
Eye protection:
Chemical goggles or face shield. Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of inadequate ventilation wear respiratory protection. Use air-purifying respirator equipped with particulate filtering cartridges. EN 12083

Personal protective equipment symbol(s):



Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: A solid crayon-like marker.
Color	: dark red
Odor	: Odorless
Odor threshold	: No data available
pH	: No data available
Melting point	: 300 °C
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Tempilstik® 572 °F (300 °C) 575 °F (302 °C)	
ATE US (oral)	639.407 mg/kg body weight
Unknown acute toxicity (GHS US)	11.72% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 91.04% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 99.91% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Fluorescein (2321-07-5)	
LD50 oral rat	600 mg/kg
ATE US (oral)	600 mg/kg body weight

1,1,1 Tris Ethane (27955-94-8)	
LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight
ATE US (oral)	5000 mg/kg
ATE US (dermal)	2000 mg/kg

1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde, butylated (68002-25-5)	
LD50 oral rat	> 1100 mg/kg
LD50 dermal rabbit	1800 mg/kg
LC50 Inhalation - Rat	> 6 mg/l/4h
ATE US (dermal)	1800 mg/kg body weight

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : Not applicable
Likely routes of exposure : Inhalation. Skin and eye contact.
Symptoms/effects : May cause cancer.
Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Causes serious eye damage. Eye irritation.
Symptoms/effects after ingestion : None under normal conditions.

Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Fluorescein (2321-07-5)

LC50 - Fish [1]	9.535 mg/l Source: ECOSAR
-----------------	---------------------------

1,1,1 Tris Ethane (27955-94-8)

EC50 96h - Algae [1]	1.603 mg/l Source: ECOSAR
----------------------	---------------------------

12.2. Persistence and degradability

Tempilstik® 572 °F (300 °C) 575 °F (302 °C)

Persistence and degradability	Rapidly degradable
-------------------------------	--------------------

Fluorescein (2321-07-5)

Persistence and degradability	Rapidly degradable
-------------------------------	--------------------

1,1,1 Tris Ethane (27955-94-8)

Persistence and degradability	Not readily biodegradable.
-------------------------------	----------------------------

Biodegradation	8 %
----------------	-----

1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde, butylated (68002-25-5)

Persistence and degradability	Rapidly degradable
-------------------------------	--------------------

12.3. Bioaccumulative potential

1,1,1 Tris Ethane (27955-94-8)

Partition coefficient n-octanol/water (Log Kow)	3.88
---	------

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
Ecological waste information	: Avoid release to the environment.

Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated.	Not applicable	Not regulated.	Not regulated.
14.2. Proper Shipping Name			
Not regulated.	Not applicable	Not regulated.	Not regulated.
14.3. Transport hazard class(es)			
Not regulated.	Not applicable	Not regulated.	Not regulated.
14.4. Packing group			
Not regulated.	Not applicable	Not regulated.	Not regulated.
14.5. Environmental hazards			
Not regulated.	Not applicable	Not regulated.	Not regulated.
No supplementary information available			

14.6. Special precautions for user

DOT

Not regulated.

TDG

Not applicable

IMDG

Not regulated.

IATA

Not regulated.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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.

15.2. International regulations

CANADA

Fluorescein (2321-07-5)

Listed on the Canadian DSL (Domestic Substances List)

Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

1,1,1 Tris Ethane (27955-94-8)

Listed on the Canadian NDSL (Non-Domestic Substances List)

1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde, butylated (68002-25-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

1,1,1 Tris Ethane (27955-94-8)

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

National regulations

Tempilstik® 572 °F (300 °C) 575 °F (302 °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).

1,1,1 Tris Ethane (27955-94-8)

Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde, butylated (68002-25-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations



WARNING:

This product can expose you to Bisphenol A (BPA), which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Name	Cas No. (Report)	Carc.	Dev.	Repro. (Female)	Repro. (Male)	NSRL	MADL
Formaldehyde (gas)	50-00-0	X				40 µg/day	
Bisphenol A (BPA)	80-05-7	X	X	X	X		3 µg/day (dermal exposure from solid materials)

SECTION 16: Other information

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)

Revision date

: 8/19/2024

Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

Data sources : ACGIH 2000. Canadian Centre for Occupational Health and Safety. Accessed at: http://www.ccohs.ca/oshanswers/legisl/whmis_classifi.html. ESIS (European chemical Substances Information System; accessed at: <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>. European Chemicals Agency (ECHA) Registered Substances list. Accessed at <http://echa.europa.eu/>. 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. 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. TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.

Other information : None.

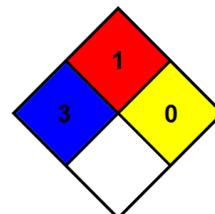
Full text of hazard classes and H-statements	
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H312	Harmful in contact with skin
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Abbreviations and acronyms	
	ACGIH (American Conference of Government Industrial Hygienists)
	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
	PNEC: Predicted No Effect Level
	STEL: Short Term Exposure Limits
	TSCA: Toxic Substances Control Act
	TWA: Time Weighted Average

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

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.



Tempilstik® 572 °F (300 °C) 575 °F (302 °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)

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.