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: 04/06/2015 Version: 1.0

## LA-CO Industries, Inc.

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

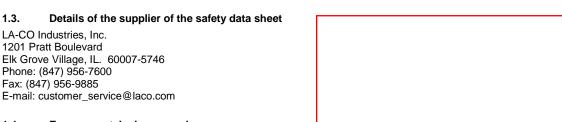
#### 1.1. Product identifier

Product form Trade name : Mixture

: Tempilstik® 150 °F (66 °C), 158 °F (70 °C), 167 °F (75 °C), 169 °F (76 °C), 175 °F (79 °C)

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

Use of the substance/mixture : Temperature indicator



#### 1.4. Emergency telephone number

Emergency number

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

## SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

#### Classification in accordance with the Globally Harmonized Standard

Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation:dust,mist)	H332
STOT RE 2	H373

Full text of H-phrases: see section 16

#### 2.2 Label elements

#### **GHS-US** labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US) Hazard statements (GHS-US)

Precautionary statements (GHS-US)

- H373 May cause damage to organs through prolonged or repeated exposure P260 Do not breathe dust, fume
- P264 Wash hands thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P271 Use only outdoors or in a well-ventilated area
- P280 Wear protective gloves
- P301+P312 If swallowed: Call a doctor, a POISON CENTER if you feel unwell

H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

- P302+P352 If on skin: Wash with plenty of water
- P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing
- P312 Call a POISON CENTER, a doctor if you feel unwell
- P314 Get medical advice/attention if you feel unwell
- P321 Specific treatment (see First aid measures on this label)
- P330 Rinse mouth
- P362+P364 Take off contaminated clothing and wash it before reuse
- P501 Dispose of contents/container to an authorised waste collection point

#### 2.3. Other hazards

No additional information available

: Warning

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#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	% (w/w)	GHS-US classification
acetoacetanilide	(CAS No) 102-01-2	72.15 – 72.52 : 150 °F 75.63 – 76.02 : 158 °F 87.74 – 88.18 : 167 °F 84.23 – 85.65 : 169 °F 88.45 – 88.90 : 175 °F	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373
butyl 4-hydroxybenzoate	(CAS No) 94-26-8	5.62 – 5.67 : 175 °F	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of H-phrases: see section 16

### SECTION 4: First aid measures

4.1. Description of first aid measures	
First-aid measures general	<ul> <li>Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell</li> </ul>
First-aid measures after inhalation	<ul> <li>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.</li> </ul>
First-aid measures after skin contact	: Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: In case of contact, immediately flush eyes with plenty of water.
First-aid measures after ingestion	: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
4.2. Most important symptoms and effe	cts, both acute and delayed
Cumptomo/injurioo	
Symptoms/injuries	: May cause damage to organs through prolonged or repeated exposure.
Symptoms/injuries after inhalation	<ul> <li>May cause damage to organs through prolonged or repeated exposure.</li> <li>Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.</li> </ul>
, ,	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if

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

Treat symptomatically and supportively.

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
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 s	ubstance 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 : Always approach spills or fires from upwind/uphill. Avoid creating or spreading dust. Avoid contact with skin and eyes.

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6.1.1.	For non-emergency personnel	
Protect	ive equipment	: Wear suitable gloves resistant to chemical penetration. In case of inadequate ventilation wear respiratory protection.
Emerge	ency procedures	: Evacuate unnecessary personnel.
6.1.2.	For emergency responders	
Protect	ive equipment	: Wear suitable gloves resistant to chemical penetration. Where excessive dust may result, use approved respiratory protection equipment.
Emerge	ency procedures	: Ventilate area.
6.2.	Environmental precautions	
Avoid r	elease to the environment.	
6.3.	Methods and material for contain	ment and cleaning up
For cor	ntainment	: Avoid generating dust. Contain and collect as any solid.
Method	ls for cleaning up	: Minimize generation of dust. On land, sweep or shovel into suitable containers.
6.4.	Reference to other sections	
Section	13: disposal information. Section 7: s	afe handling. Section 8: personal protective equipment.
SECT	ION 7: Handling and storage	
7.1.	Precautions for safe handling	
	tions for safe handling	: Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume.
	e measures	<ul> <li>Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild scap and water before acting drinking or smoking and when leaving work</li> </ul>

mild soap and water	before eating.	drinking or	r smoking and v	vhen leaving work.

7.2.	Conditions for safe storage, including any incompatibilities
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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				
Tempilstik® 150 °F (66 °	°C), 158 °F (70 °C), 167 °F (75 °C), 169 °F (76 °C), 175 °F (79 °C)			
ACGIH Not applicable				
OSHA Not applicable				
acetoacetanilide (102-01-2)				
ACGIH	ACGIH Not applicable			
OSHA Not applicable				
butyl 4-hydroxybenzoate (94-26-8)				
ACGIH	ACGIH Not applicable			
OSHA	Not applicable			

### 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	:	In case of dust production: protective goggles.
Respiratory protection	:	Use air-purifying respirator equipped with particulate filtering cartridges. In case of inadequate ventilation wear respiratory protection.

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#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

	eneriter histories
Physical state	: Solid
Colour	: Variable.
Odour	: odourless.
Odour threshold	: No data available
pH	: 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
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.

#### 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: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation:dust,mist: Harmful if inhaled.

Tempilstik® 150 °F (66 °C), 158 °F (70 °C), 167 °F (75 °C), 169 °F (76 °C), 175 °F (79 °C)		
ATE CLP (oral) 1278.978 mg/kg bodyweight		
ATE CLP (dermal)	1243.922 mg/kg bodyweight	
ATE CLP (dust,mist) 1.696 mg/l/4h		

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acetoacetanilide (102-01-2)	
LD50 oral rat	1131 (1131 - 4650) mg/kg
ATE CLP (oral)	1131.000 mg/kg bodyweight
ATE CLP (dermal)	1100.000 mg/kg bodyweight
ATE CLP (dust,mist)	1.500 mg/l/4h
butyl 4-hydroxybenzoate (94-26-8)	
LD50 oral rat	13200 mg/kg
ATE CLP (oral)	13200.000 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.
acetoacetanilide (102-01-2)	
NOAEL (oral, rat, 90 days)	12 mg/kg bodyweight/day 28 days
Additional information	Affected organs: blood
	Route of exposure: oral
Aspiration hazard	: Not classified
Potential adverse human health effects and	
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.
Likely routes of exposure	: Inhalation;Skin and eye contact
SECTION 12: Ecological information	on
12.1 Toxicity	
acetoacetanilide (102-01-2)	
LC50 fish 1	242 (242 - 332) mg/l 96 hours, Brachydanio rerio
ErC50 (algae)	318 mg/l Selenastrum capricornutum, 72 hours
ErC50 (other aquatic plants)	500 mg/l 3 hours

12.2. Persistence and degrada
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NOEC chronic algae

0,	
acetoacetanilide (102-01-2)	
Persistence and degradability	Readily biodegradable.
Biodegradation	97 % degraded after 6 days
12.3. Bioaccumulative potential	
acetoacetanilide (102-01-2)	
Log Pow	0.76
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.	

180 mg/l

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#### **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

#### acetoacetanilide (102-01-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory butyl 4-hydroxybenzoate (94-26-8)

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

#### 15.2. International regulations

#### CANADA

acetoacetanilide (102-01-2)

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

#### butyl 4-hydroxybenzoate (94-26-8)

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

#### EU-Regulations

#### acetoacetanilide (102-01-2)

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

#### butyl 4-hydroxybenzoate (94-26-8)

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

#### National regulations

Tempilstik® 150 °F (66 °C), 158 °F (70 °C), 167 °F (75 °C), 169 °F (76 °C), 175 °F (79 °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

No additional information available

SECTION 16: Other information	on
Indication of changes	: Original Document.
Data sources	: ACGIH 2000.
	Canadian Centre for Occupational Health and Safety. Accessed at: http://www.ccohs.ca/oshanswers/legisl/whmis_classifi.html.
	ESIS (European chemincal 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, labelling 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.

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Abbreviations and acronyms	: ACGIH (American Conference of Governement 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.
	STEL: Short Term Exposure Limits.
	TSCA: Toxic Substances Control Act.
	TWA: Time Weight Average.
Other information	: None.
NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention 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-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H3/3	May cause damage to organs through prolonged or repeated exposure

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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