

Temp-Alarm® 18

LA-CO Industries, Inc.

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: 09/21/2015
Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : Temp-Alarm® 18

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

Use of the substance/mixture : Temperature indicator

1.3. Details of the supplier of the safety data sheet

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



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

Eye Irrit. 2A H319
Skin Sens. 1 H317
Aquatic Chronic 3 H412

Full text of classification categories and H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS-US) :

P261 - Avoid breathing mist, vapours
P264 - Wash hands thoroughly after handling
P272 - Contaminated work clothing must not be allowed out of the workplace
P273 - Avoid release to the environment
P280 - Wear eye protection, protective gloves
P302+P352 - If on skin: Wash with plenty of water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P321 - Specific treatment (see First aid measures on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P501 - Dispose of contents/container to an authorised waste collection point

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

Temp-Alarm® 18

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)

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	% (w/w)	GHS-US classification
Xylene	(CAS No) 1330-20-7	1.67 - 3.34	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
2-methylpropan-1-ol	(CAS No) 78-83-1	0.67 - 1.67	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336
Nonylphenol, branched, ethoxylated	(CAS No) 68412-54-4	0.1 - 0.26	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,4,7,9-tetramethyldec-5-yne-4,7-diol	(CAS No) 126-86-3	0.2 - 0.25	Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
ammonium hydroxide (ammonia%)	(CAS No) 1336-21-6	0.16 - 0.17	Skin Corr. 1B, H314 STOT SE 3, H335 Aquatic Acute 1, H400

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.
- 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 : Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- 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 : Call a POISON CENTER or doctor/physician if you feel unwell.

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

- Symptoms/injuries after inhalation : Dizziness. Drowsiness. Headache.
- Symptoms/injuries after skin contact : May cause an allergic skin reaction.
- Symptoms/injuries after eye contact : Causes serious eye irritation.
- Symptoms/injuries after ingestion : Nausea. Drowsiness. Headache.

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 : Carbon dioxide. Dry chemical. Foam.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : No particular fire or explosion hazard.
- Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

- Firefighting instructions : 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 all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

- Protective equipment : Chemical goggles or safety glasses. Wear suitable gloves.

Temp-Alarm® 18

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)

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Chemical goggles or safety glasses. Wear suitable gloves.

Emergency procedures : Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container.

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 all eye and skin contact and do not breathe vapour and mist.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible products : Strong acids. Strong bases.

Heat and ignition sources : Keep away from heat, sparks and flame.

Prohibitions on mixed storage : 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

Temp-Alarm® 18		
ACGIH	Not applicable	
OSHA	Not applicable	
2-methylpropan-1-ol (78-83-1)		
ACGIH	ACGIH TWA (mg/m³)	152 mg/m³
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	Remark (ACGIH)	Skin & eye irr
OSHA	OSHA PEL (TWA) (mg/m³)	300 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Canada (Quebec)	VEMP (mg/m³)	152 mg/m³
Canada (Quebec)	VEMP (ppm)	50 ppm
Xylene (1330-20-7)		
ACGIH	ACGIH TWA (mg/m³)	434 mg/m³
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	ACGIH STEL (mg/m³)	651 mg/m³
ACGIH	ACGIH STEL (ppm)	150 ppm
ACGIH	Remark (ACGIH)	URT & eye irr; CNS impair
OSHA	OSHA PEL (TWA) (mg/m³)	435 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Canada (Quebec)	VECD (mg/m³)	651 mg/m³
Canada (Quebec)	VECD (ppm)	150 ppm

Temp-Alarm® 18

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)

Xylene (1330-20-7)		
Canada (Quebec)	VEMP (mg/m³)	434 mg/m³
Canada (Quebec)	VEMP (ppm)	100 ppm
ammonium hydroxide (ammonia%) (1336-21-6)		
ACGIH	ACGIH TWA (mg/m³)	18 mg/m³
ACGIH	ACGIH TWA (ppm)	25 ppm
ACGIH	ACGIH STEL (mg/m³)	27 mg/m³
ACGIH	ACGIH STEL (ppm)	35 ppm
ACGIH	Remark (ACGIH)	(ammonia, anhydrous)
OSHA	OSHA PEL (TWA) (mg/m³)	35 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm
OSHA	Remark (OSHA)	(ammonia, anhydrous)
Canada (Quebec)	VECD (mg/m³)	24 mg/m³
Canada (Quebec)	VECD (ppm)	35 ppm
Canada (Quebec)	VEMP (mg/m³)	17 mg/m³
Canada (Quebec)	VEMP (ppm)	25 ppm
Canada (Quebec)	Notations and remarks	(ammonia, anhydrous)
2,4,7,9-tetramethyldec-5-yne-4,7-diol (126-86-3)		
ACGIH	Not applicable	
OSHA	Not applicable	
Nonylphenol, branched, ethoxylated (68412-54-4)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear suitable gloves. neoprene gloves.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Organic vapor cartridge.
Environmental exposure controls	: Prevent leakage or spillage. Prevent contaminated water run-off.
Other information	: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
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	: 100 °C
Flash point	: > 100 °C
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

Temp-Alarm® 18

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)

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	: 6.3 %
-------------	---------

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
----------------	------------------

2-methylpropan-1-ol (78-83-1)	
LD50 oral rat	3350 mg/kg
LD50 dermal rabbit	2460 mg/kg
LC50 inhalation rat (mg/l)	24.6 mg/l/4h
ATE CLP (oral)	3350.000 mg/kg bodyweight
ATE CLP (dermal)	2460.000 mg/kg bodyweight
ATE CLP (vapours)	24.600 mg/l/4h
ATE CLP (dust,mist)	24.600 mg/l/4h

Xylene (1330-20-7)	
LD50 oral rat	> 3500 mg/kg
ATE CLP (dermal)	1100.000 mg/kg bodyweight
ATE CLP (dust,mist)	1.500 mg/l/4h

ammonium hydroxide (ammonia%) (1336-21-6)	
LC50 inhalation rat (ppm)	5000 ppm

Nonylphenol, branched, ethoxylated (68412-54-4)	
LD50 oral rat	8400 mg/kg
LD50 dermal rabbit	2.5 nl/kg
ATE CLP (oral)	8400.000 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Xylene (1330-20-7)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Not classified
-----------------------	------------------

Specific target organ toxicity (single exposure)	: Not classified
--	------------------

Temp-Alarm® 18

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)

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms

Symptoms/injuries after inhalation : Dizziness. Drowsiness. Headache.
Symptoms/injuries after skin contact : May cause an allergic skin reaction.
Symptoms/injuries after eye contact : Causes serious eye irritation.
Symptoms/injuries after ingestion : Nausea. Drowsiness. Headache.
Likely routes of exposure : Inhalation;Skin and eye contact

SECTION 12: Ecological information

12.1 Toxicity

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

2-methylpropan-1-ol (78-83-1)	
LC50 fish 1	1430 mg/l 96 h
EC50 Daphnia 1	1100 mg/l 48 h

Nonylphenol, branched, ethoxylated (68412-54-4)	
LC50 fish 1	0.323 mg/l 96 h
EC50 Daphnia 1	0.716 mg/l 48 h

12.2. Persistence and degradability

Temp-Alarm® 18	
Persistence and degradability	May cause long-term adverse effects in the environment.

2-methylpropan-1-ol (78-83-1)	
Biodegradation	70 (70 - 80) % 28 d

Nonylphenol, branched, ethoxylated (68412-54-4)	
Persistence and degradability	inherently biodegradable.
Biodegradation	52 % 28 d

12.3. Bioaccumulative potential

2-methylpropan-1-ol (78-83-1)	
Log Pow	0.76

Xylene (1330-20-7)	
BCF fish 1	1.3 mg/l
Bioaccumulative potential	Not expected to bioaccumulate.

Nonylphenol, branched, ethoxylated (68412-54-4)	
Log Pow	5.39
Bioaccumulative potential	Not expected to bioaccumulate.

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

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

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

Temp-Alarm® 18

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 15: Regulatory information

15.1. US Federal regulations

2-methylpropan-1-ol (78-83-1)

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

Xylene (1330-20-7)

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

ammonium hydroxide (ammonia%) (1336-21-6)

Subject to reporting requirements of United States SARA Section 313

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

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

1000 lb

2,4,7,9-tetramethyldec-5-yne-4,7-diol (126-86-3)

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

Nonylphenol, branched, ethoxylated (68412-54-4)

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

15.2. International regulations

CANADA

2-methylpropan-1-ol (78-83-1)

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

Xylene (1330-20-7)

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

ammonium hydroxide (ammonia%) (1336-21-6)

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

2,4,7,9-tetramethyldec-5-yne-4,7-diol (126-86-3)

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

Nonylphenol, branched, ethoxylated (68412-54-4)

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

EU-Regulations

2-methylpropan-1-ol (78-83-1)

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

Xylene (1330-20-7)

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

ammonium hydroxide (ammonia%) (1336-21-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)- Directive 79/831/EEC, sixth Amendment of Directive 67/548/EEC (dangerous substances)

2,4,7,9-tetramethyldec-5-yne-4,7-diol (126-86-3)

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

Nonylphenol, branched, ethoxylated (68412-54-4)

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

National regulations

Temp-Alarm® 18

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).

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

Temp-Alarm® 18

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)

15.3. US State regulations

2-methylpropan-1-ol (78-83-1)

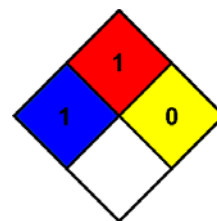
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New York - Right to Know List of Hazardous Chemicals
U.S. - Pennsylvania - List of Hazardous Substances

ammonium hydroxide (ammonia%) (1336-21-6)

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.
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 .
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 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:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour
H312	Harmful in contact with skin

Temp-Alarm® 18

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)

H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

SDS Prepared by: The Redstone Group, LLC
6077 Frantz Rd.
Suite 206
Dublin, OH USA 43016
T 614-923-7472
www.redstonegrp.com

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