Regular Soldering Flux Paste

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: 05/26/2011Revision date: 03/09/2015Supersedes: 05/26/2011
Version: 2.1

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

1.1. Product identifier

Product form : Mixture

Trade name : Regular Soldering Flux Paste

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

Use of the substance/mixture : Soldering flux

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

Not classified

2.2 Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

2.4 Unknown acute toxicity (GHS-US)

0.03 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	% (w/w)	GHS-US classification
Ethanolamine hydrochloride	(CAS No) 2002-24-6	15	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
ammonium chloride	(CAS No) 12125-02-9	9.14	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319

Full text of H-phrases: 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. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries : No significant signs or symptoms indicative of any health hazard are expected to occur.

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

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. 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.

Explosion hazard : Product is not explosive.

Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. 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 fire/flame resistant/retardant clothing. Wear a self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves. Nitrile gloves. Chemical goggles or safety glasses. In case of inadequate ventilation wear respiratory protection.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves. Neoprene or nitrile rubber gloves. Chemical goggles or safety glasses. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment.

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 : Stop the flow of material, if this is without risk. Contain and/or absorb spill with inert material, then place in suitable container.

Methods for cleaning up : Take up in non-combustible absorbent material and shove into container for disposal. 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 : Do not eat, drink or smoke when using this product. Provide good ventilation in process area to prevent formation of vapour. Remove all sources of ignition.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible products	:	Strong oxidizing agents. Strong acids. Strong bases. amines. Acid chlorides,. metals. Cyanides and sulfide salts.
Prohibitions on mixed storage	:	Keep away from incompatible materials.

7.3. Specific end use(s)

Flux.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Regular Soldering Flux Paste		
ACGIH	Not applicable	
OSHA	Not applicable	

ammonium chloride (12125-02-9)		
ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
ACGIH	ACGIH STEL (mg/m³)	20 mg/m³
ACGIH	Remark (ACGIH)	Eye & URT irr
OSHA	Not applicable	
Canada (Quebec)	VECD (mg/m³)	20 mg/m³
Canada (Quebec)	VEMP (mg/m³)	10 mg/m³

Ethanolamine hydrochloride (2002-24-6)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls	:	Provide local exhaust ventilation of closed transfer systems to minimize exposures.
Personal protective equipment	:	Avoid all unnecessary exposure.
Hand protection	:	It is a good industrial hygiene practice to minimize skin contact. Wear suitable gloves. Impermeable protective nitrile gloves.
Respiratory protection	:	In case of inadequate ventilation wear respiratory protection. Use an approved respirator equipped with oil/mist cartridges.
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
Appearance	:	Paste.
Colour	:	yellowish to white.
Odour	:	Faint.
Odour threshold	:	No data available
pH	:	6.5 - 7
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	:	> 204 °C (TOC)
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	:	1.1
Solubility	:	Soluble in water.
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available

Viscosity, dynamic	:	No data available
Explosive properties	:	Product is not explosive.
Oxidising properties	:	No oxidizing properties.
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
Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Contact with incompatible materials. Avoid excessive heat or cold.

10.5. Incompatible materials
Strong oxidizing agents. Strong bases. Strong acids. amines. aluminum and other metals. Cyanides and sulfide salts.

10.6. Hazardous decomposition products
Carbon dioxide. Carbon monoxide. Ammonia. hydrogen chloride. Burning produces irritating, toxic and noxious fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Regular Soldering Flux Paste	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 20 mg/l vapours, 1 hour exposure

ammonium chloride (12125-02-9)	
LD50 oral rat	1410 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	1410.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified.
(Non-irritating to skin in rabbits.)

Serious eye damage/irritation : Not classified.
(Slightly irritant but not relevant for classification)

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) : Not classified

ammonium chloride (12125-02-9)	
NOAEL (subchronic, oral, animal/male, 90 days)	>= 580 mg/kg bodyweight 56 days

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms

Likely routes of exposure : Skin and eye contact

SECTION 12: Ecological information

12.1 Toxicity

Ecology - general : Avoid undiluted product to come into sewer or surface water.

ammonium chloride (12125-02-9)	
LC50 fish 1	209 mg/l 96 h
EC50 Daphnia 1	101 mg/l 48 h

12.2. Persistence and degradability

Regular Soldering Flux Paste	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

Regular Soldering Flux Paste	
Bioaccumulative potential	Not established.

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.

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

ammonium chloride (12125-02-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb

Ethanolamine hydrochloride (2002-24-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

ammonium chloride (12125-02-9)
Listed on the Canadian DSL (Domestic Substances List) inventory.

Ethanolamine hydrochloride (2002-24-6)
Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

ammonium chloride (12125-02-9)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Ethanolamine hydrochloride (2002-24-6)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Regular Soldering Flux Paste
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). All ingredients are listed in the Toxic Substances Control Act (TSCA).

15.3. US State regulations

ammonium chloride (12125-02-9)
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 : Removed. WHMIS. 1998.

Data sources : ACGIH 2000.

ESIS (European chemincal Substances Information System; accessed at: http://esis.jrc.ec.europa.eu/index.php?PGM=cla.

OSHA 29CFR 1910.1200 Hazard Communication Standard.

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.

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.

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.

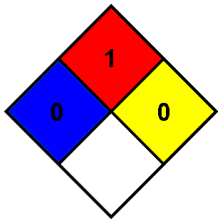
TWA: Time Weight Average.

Other information : None.

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

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 (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 SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

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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