

SAFETY DATA SHEET

GHS SDS Date: 06/24/2017

SDS Name: Kapp Lunar Flux™ for Soldering of Aluminum 550–800°F / 288-427°C

SDS Number: 556 GHS

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SECTION I: PRODUCT AND COMPANY INFORMATION

Product Name: Kapp Lunar Flux™ for Soldering of Aluminum 550–800°F / 288-427°C

CAS Numbers:

COMPONENT	CAS NO.	COMPONENT	CAS NO.
Zinc Chloride	7646-85-7	Sodium Fluoride	7681-49-4
Ammonium Chloride	12125-02-9	Methanol	67-56-1

Company Identification: Kapp Alloy and Wire, Inc., 1 Klein Street / PO Box 1188, Oil City, PA 16301 USA

Contact: Telephone: 814-676-0613 or 1-800-327-6533, Fax: 814-676-5565, Email: info@kappalloy.com**SECTION II: HAZARD INFORMATION**

Classification of the mixture according to Regulation (EC) No. 1272/2008



GHS02 Flammable

H226 – Flammable Liquid and Vapor



GHS05 Corrosion Eye Damage

H318 - Causes serious eye damage



GHS07 Skin Irritation

H302 – Harmful if swallowed.

H315 - Causes skin irritation.



GHS08 Health Hazard

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Label Elements according to Regulation (EC) No. 1272/2008

Hazard Pictograms:



GHS02



GHS05



GHS07



GHS08

Signal Word: **DANGER**

Hazard-determining components of labelling: Zinc Chloride, Ammonium Chloride, Sodium Fluoride, Methanol

Hazard Statements:

H226 Flammable Liquid and Vapor

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P220 - Wear protective gloves, clothing, eye, face, and respiratory protection.

P260 - Do not breathe dust/fumes.

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- P264 - Wash thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P305+P351+P338 – IF IN EYES: Flush with water for at least 15 minutes to remove irritant. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician immediately.
 P304+P341 – IF INHALED: Terminate exposure and remove to fresh air. Call physician; advise of chemical composition (section III). Over-inhalation may cause life-threatening lung injury.
 P302+P352 IF ON SKIN: Wash thoroughly with soap and water to remove any residue. If a rash develops, call a physician.
 P301 + P310 IF SWALLOWED: Call a physician or Poison Control Center IMMEDIATELY; Advise of chemical composition (Section III). Corrosive to mucous membranes. May contain corrosive hydrofluoric acid solution.
 P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards:

PBT: Does not meet criteria for persistent – bio cumulative – toxic.

vPvB: Does not meet criteria for very persistent – very bio cumulative.

SECTION III: COMPOSITION / INGREDIENTS

*(Hazardous components 1% or greater; Carcinogens 0.1% or greater) None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

Component	CAS Number	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Zinc Chloride	7646-85-7	1 mg/m ³	1 mg/m ³	Hazard: Corrosive
Methanol	67-56-1	200 mg/m ³	-----	Hazard: Flammable
Sodium Fluoride	7681-49-4	2.5 mg/m ³	2.5 mg/m ³	Hazard: Acute & Chronic Effects (See Sec III)
Ammonium Chloride	12125-02-9	10 mg/m ³	10 mg/m ³	Hazard: May be nuisance dust

NA = Not Applicable NE = Not Established NAIF = No Applicable Information found

SECTION IV: FIRST AID MEASURES

IF IN EYES: Flush with water for at least 15 minutes to remove irritant. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician immediately.

IF INHALED: Terminate exposure and remove to fresh air. Call physician; advise of chemical composition (section III). Over-inhalation may cause life-threatening lung injury.

IF ON SKIN: Wash thoroughly with soap and water to remove any residue. If a rash develops, call a physician.

IF SWALLOWED: Call a physician or Poison Control Center IMMEDIATELY; Advise of chemical composition (Section III). Corrosive to mucous membranes. May contain corrosive hydrofluoric acid solution.

SECTION V: FIRE FIGHTING MEASURES

Flash point & Methods Used: 60°F / 15.6°C

Auto Ignition Temperature: None

Flammability Limits: (in air, % by volume) LEL: 5.5; UEL: 36.7

Extinguisher Media: All-purpose type foam for large fires. CO₂ or dry chemical extinguisher for small fires.

Special Fire Fighting Procedures: Full protective equipment required. May release zinc oxide and HCl fumes. Toxic metal halide fumes produced.

Unusual Fire/Explosion Hazards: Dense smoke may be generated

EMERGENCY PHONE NUMBER * CALL 1-800-327-6533 * AVAILABLE 24 HOURS

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SECTION VI: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is spilled or released:

- Neutralize with soda ash or sodium bicarbonate; contain, absorb, sweep-up, and dispose in accordance with EPA regulations.
- Prevent direct contact to skin, eyes, and clothes.
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Danger to drinking water if large quantities leak into the ground.

SECTION VII: HANDLING AND STORAGE

Precautions to be taken in handling and storage:

- Store flux at ambient conditions 35-80 °F (2-27 °C). Keep under extremely dry and controlled conditions.
- Wash thoroughly after handling and remove any residue. No eating or smoking in work area.
- Do not breathe fumes – may be fatal! Professionally wash contaminated clothing before re-use. Material will naturally absorb moisture and cake solid. Existing lung disorders will have increased toxic susceptibility.

SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION



Skin Protection: Wear protective gloves of Nitrile Rubber or Natural Rubber to protect hands and wrists.

Respiratory Protection: Use NIOSH-approved breathing apparatus to prevent exposure to dusts and fumes.

Eye Protection: Chemical tight safety goggles, face shield. Do NOT wear contact lenses.

Ventilation: Maintain air flow away from user to remove all fumes and vapors, so that the PEL is never exceeded. Adhere to Environmental regulations for exhausts. Conform to applicable regulatory statutes.

Other: Full protective equipment normally used in soldering (applicable) operations so as to prevent any contact. Review operations to avoid contact with hazardous gas, liquids or solids.

See also: 29 CFR 1910.132 - 29 CFR 1910.140. *Personal Protective Equipment*
29 CFR 1910.251 - 29 CFR 1910.257. *Welding, Cutting and Brazing*

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	148.3°F / 64.6°C @ 760 mmHg
Specific Gravity (H ₂ O = 1 @ 72 °F):	1.51
Solubility in Water:	Moderate
Active Temperature Range:	Active between 550–800°F / 288-427°C
Evaporation Rate (Butyl Acetate = 1):	1.3
Appearance and Odor:	White slurry with alcohol odor; corrosive, flammable
Use:	Aluminum soldering flux with corrosive residue.

SECTION X: STABILITY AND REACTIVITY

Stability:	Stable
Conditions to avoid:	Excessive heat or cold, Corrosive to Metals.
Incompatibility (materials to avoid):	Alkaline, Sulfides or cyanides, Strong oxidizing or reducing materials.
Hazardous Decomposition Products:	Hydrogen Chloride and Ammonium Chloride fumes.
Hazardous Polymerization:	Will not occur.

SECTION XI: TOXICOLOGY INFORMATION

Target Organ Statement

- DANGER: Solids cause severe burns to skin, eyes, and respiratory system. Fluorides affect bones, muscles, and may have crippling effects long-term. Alcohol may affect kidneys.

Effects of Chronic Exposure

- Dermatitis and contact burns to skin, eyes, and respiratory system (See target organ statement).
- Coughing, liver, and kidney effects; nausea, erythema.
- Osseous fluorosis due to fluoride.

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*0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

	Health	Flammability	Reactivity	Special
NFPA Rating	3	3	2	0
HMIS Rating	3	3	2	PE=C

SECTION XII: ECOLOGY INFORMATION**STATE RIGHT-TO-KNOW PROGRAMS:****Pennsylvania:** All materials of Section III are listed in PA code Title 34.**California:** As currently manufactured, this material contains no compounds subject to Proposition 65.**SECTION XIII: DISPOSAL CONSIDERATION**

Waste Disposal Method

- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Disposal must be made according to official regulations. Dispose of according to federal, state, local, international, and OSHA regulations.

SECTION XIV: TRANSPORT INFORMATIONDEPARTMENT OF TRANSPORTATION: **DOMESTIC GROUND**

Proper shipping name: Flammable Liquids, Corrosive, N.O.S. (Methanol Alcohol; Zinc chloride)

Hazard Class: 3, Subsidiary 8

ID & Packing Group Number: UN 2924, PG III

ERG Guide Number: 132

SECTION XV: REGULATORY INFORMATION**TOXIC SUBSTANCE CONTROL ACT:** All components of this compound are listed within the TSCA inventory.**RoHS, REACH, and REACH-SVHC Compliance:**

This Product is RoHS and REACH Compliant. This product is free of REACH-SVHC substances.

SARA Title III Program

Section 313 Supplier Notification: This product contains the following toxic chemicals subject to the reporting requirements of EPCRA of 1986 and 40 CFR 372.

Component	CAS Number	SARA III
Zinc Chloride	7646-85-7	<63%
Methanol	67-56-1	< 30%
Fluoride (sodium salt)	7681-49-4	<10%
Ammonium Chloride	12125-02-9	<6%

SECTION XVI: OTHER INFORMATIONThis information must be included in all SDS that are copied and distributed for this material.

**GOOD HOUSEKEEPING PROCEDURES SHOULD BE MAINTAINED.
PERSONNEL SHOULD WASH THOROUGHLY BEFORE SMOKING OR EATING
FOOD AND DRINK SHOULD NOT BE CONSUMED, TOBACCO PRODUCTS USED, OR COSMETICS
APPLIED IN AREAS WHERE EXPOSURES EXIST.**

Please retain this sheet for your files. Kapp Alloy maintains a file of Safety Data Sheets (SDS) for each alloy produced in compliance with Federal OSHA Hazard Communication Standard (29 CFR 1910.1200) & various right-to-know laws.

The information and recommendations contained within this publication have been compiled from sources believed to be reliable and to represent the best information available to Kapp Alloy and Wire, Inc. at the time of issue. It is our policy to include an SDS with initial orders for each product. This submission is to become a matter of record and need not accompany subsequent shipments for the same product to the same customer. The information contained on this sheet is intended solely for employee health and safety education and not for contract specification purposes. No warranty, guarantee, or representation is made by Kapp Alloy and Wire, Inc., nor does Kapp Alloy and Wire, Inc. assume any responsibility in connection there within; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances. Should you need additional information, contact us.