



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product identifier

Product name: 95/5 Paste

Other means of identification

Product code: 543

Recommended use of the chemical and restrictions on use

Recommended use: General purpose soldering flux, corrosive residue

Details of the supplier of the safety data sheet

Manufacturer: Force Industries Division.
28 Industrial Blvd. Paoli, PA 19301.

Emergency Telephone number

For hazardous materials incidents only, call CHEMTREC Emergency Response Number:
1-800-424-9300.

For all other questions about this product, call Force Industries Division at 610-647-3575.

Revision Date: July 21, 2016

Supersedes: March 9, 2016

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute Toxicity (Oral) – Category 4

Acute Toxicity (Inhalation) – Category 4

Skin Corrosion - Category 1B

Serious Eye Damage – Category 1

Specific target organ toxicity – single exposure – Category 3

Specific target organ toxicity – repeated exposure- Category 2

Acute aquatic toxicity – Category 1

Chronic aquatic toxicity- Category 1

Hazard statement(s)

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H410	Very toxic to aquatic life with long-lasting effects



2.2 GHS Label elements, including precautionary statements

Emergency overview

Appearance:	Grey
Physical state:	Paste
Odor:	None
<u>DANGER</u>	

Precautionary statement(s)

- P260 Do not breathe dust/fumes/gas/mist/vapors/spray.
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink, or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/clothing and eye/face protection.
 P281 Use personal protective equipment as required.
- P301+P312+P330 IF SWALLOWED: Call a POISON CENTER/doctor and rinse mouth.
 +P331 DO NOT induce vomiting.
- P302+P352 IF ON SKIN: Wash with plenty of water.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing and rinse with water/shower.
- P304+P340+P310 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/physician 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. Immediately call a physician.
 +P310
- P332+P313 If skin irritation occurs, get medical advice/attention.
 P337+P313 If eye irritation persists, get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P391 Collect spillage.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container to in accordance with local/regional /national/international regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS –none.



SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>EINECS No.</u>	<u>Weight %</u>
Zinc Chloride	7646-85-7	231-592-0	5-20
2-Aminoethanol hydrochloride	2002-24-6	217-900-6	2-15
Zinc Oxide	1314-13-2	215-222-5	1-10
Ammonium Chloride	12125-02-9	235-186-4	1-10
Tin	7440-31-5	231-141-8	60-80
Antimony	7439-92-1	231-100-4	1-10

Others, if any, are non-hazardous and claimed as trade secret.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move patient out of dangerous area.

EYES: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. Blindness can result.

SKIN: Promptly flush with water to remove all residue. If rash or burn develops, consult a physician. Material is corrosive.

INGESTION: If swallowed, do not induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

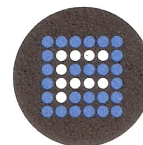
INHALATION: Remove to fresh air. If fumes are inhaled, call a physician. Over-inhalation may cause life threatening lung injury.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Components	OSHA PEL	ACGIH
Zinc Chloride	1 mg/m ³	1 mg/m ³ TWA
Zinc Oxide	15 mg/m ³ Limits for air contaminants	2 mg/m ³ TLV
Ammonium Chloride	10.0 mg/m ³	10.0 mg/m ³ TLV
Tin	2 mg/m ³	2 mg/m ³ TLV
Antimony	0.5 mg/m ³	0.5 mg/m ³ TLV

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

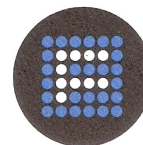
Handle with gloves that are chemical and acid impervious. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance (physical state, color, etc.)	Grey paste
Odor	None
Odor threshold	Not Applicable
pH	Not Applicable
melting point/freezing point	Not Applicable
initial boiling point and boiling range	~212 ° F @ 760 mm Hg
flash point	>230
evaporation rate	Not Applicable
flammability (solid, gas)	Not Applicable
upper/lower flammability or explosive limits	None
vapor pressure	Not Applicable
vapor density	Not Applicable
Specific gravity	3.55 H ₂ O =1 @ 72° F
Solubility	Partly in water

9.2 Other safety information

Use full protective equipment normally used in a braze/welding operation so as to prevent any contact. Review operations to avoid contact with hazardous gas, liquids, or solids.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

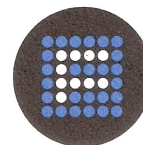
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10.5 Incompatible materials

Strong acids

10.6 Hazardous decomposition products

In the presence of water and heat, HCl and ZnO



SECTION 11: TOXICOLOGICAL INFORMATION
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11.1 Component toxicity

Components	LC50/Inhalation	LC50/Dermal	LD50/Oral
Ammonium chloride	No data available	No data available	1650 mg/kg/Rat
Zinc Oxide	2500 mg/m ³ Mouse	No data available	7950 mg/kg / Mouse
Zinc Chloride	No data available	No data available	350 mg/kg/Rat
2-aminoethanol hydrochloride	No data available	4053 mg/kg/Mouse	No data available
Antimony	No data available	No data available	7000 mg/kg/Rat

11.2 Effects of Acute Overexposure:

- a. Inhalation: No data available
- b. Eyes: No data available
- c. Skin Contact: No data available
- d. Ingestion: No data available

11.3 Primary Route of Exposure:

No data available

11.4 Effects of Chronic Exposure:

No data available

11.5 Target Organs:

No data available

11.6 Reproductive Effects

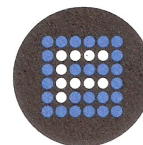
No data available

11.7 Carcinogenicity:

Carcinogenicity (Tin) - Rat - Implant
 Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.
 Tumorigenic: Tumors at site or application.

Carcinogenicity (Tin) - Mouse - Implant
 Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.
 Tumorigenic: Tumors at site or application.

Carcinogenicity (Antimony) - Rat - Inhalation
 Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.



SECTION 12: ECOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Components	LC50/96hr/48hr/24hr	EC50/96/48hr/24hr	Bioaccumulation Concentration Factor	No Observable Effect Concentration/96hr
Zinc Oxide	1.1 mg/l mg/L (fish)	0.098 mg/L (water flea, 48hr)	No data available	No data available
Zinc Chloride	2.2 mg/l (carp)	0.2 mg/l (water flea, 48 hr)	21000	No data available
Ammonium Chloride	209.00 mg/l	161 mg/L (water flea, 48hr)	No data available	No data available
Antimony	6.2-8.3 mg/l (minnow)	No data available	No data available	6.2 mg/l (minnow)

12.2 Persistence and degradability

No data available

12.3 Bio-accumulative potential

BCF factor (Zinc Chloride): 21000

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

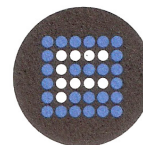
13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of in accordance with all federal, state, and local regulations.

**SECTION 14: TRANSPORT INFORMATION**

UN Number: 1840
UN Proper shipping name: Zinc Chloride Solution Mixture
Transport Hazard class: Class 8 – Corrosive material 49
CFR 173.136
Packing group, if applicable: PGIII
Marine pollutant (Yes/No): Yes

Unless your shipments qualify for an exemption, you must mark the products with the marine pollutant mark and add the words "Marine Pollutant" to the product's basic description on your bill of lading.

Special precautions which a user needs to be aware of or needs to comply with in connection with transport either within or outside their premises. EGR Guide No. 154

SECTION 15: REGULATORY INFORMATION**CERCLA Reportable Quantities**

The product contains Zinc Chloride - Reportable Quantity- 1000 lbs.

SARA Title III Section 311/312 Hazard Categories:

Acute Health Hazard
Chronic Health Hazard

SARA Title III 313 Reportable Substances

If listed below components are 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:

Zinc Chloride 7646-85-7
Zinc Oxide 1314-13-2
Zinc Compounds N982
Antimony 7440-36-0

SAFETY DATA SHEET



FORCE
INDUSTRIES
DIVISION

Massachusetts Right to Know Components

Component	CAS
Zinc Chloride	7646-85-7
Zinc Oxide	1314-13-2
Ammonium Chloride	12125-02-9
Antimony	7440-36-0
Tin	7440-31-5

Pennsylvania Right to Know Components

Component	CAS
Zinc Chloride	7646-85-7
Zinc Oxide	1314-13-2
Ammonium Chloride	12125-02-9
2-Aminoethanol hydrochloride	2002-24-6
Antimony	7440-36-0
Tin	7440-31-5

New Jersey Right to Know Components

Component	CAS
Zinc Chloride	7646-85-7
Zinc Oxide	1314-13-2
Ammonium Chloride	12125-02-9
2-Aminoethanol hydrochloride	2002-24-6
Antimony	7440-36-0
Tin	7440-31-5

California Proposition 65

This product contains no compounds subject to the reporting and labeling requirements of Proposition 65

USA - TSCA (TOXIC SUBSTANCE CONTROL ACT):

All raw materials used in this product are listed on TSCA Inventory.



SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Toxicity (Oral) – Category 4	Acute toxicity (oral), Category 4
Acute Toxicity (Inhalation) – Category 4	Acute toxicity (inhalation), Category 4
Acute Aquatic – Category 1	Hazardous to the aquatic environment - Acute Hazard, Category 1
Chronic Aquatic – Category 1	Hazardous to the aquatic environment- Chronic Hazard, Category 1
Skin Corrosion 1B	Skin corrosion/irritation, Category 1B
Serious Eye Damage – Category 1	Eye Damage/Eye Irritation, Category 1
Specific target organ toxicity – single exposure – category 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
Specific target organ toxicity – repeated exposure – category 3	Specific target organ toxicity – repeated exposure, Category 3, may cause damage to all organs
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H410	Very toxic to aquatic life

HMIS:**Health:** 1**Flammability:** 0**Reactivity:** 0**PREPARATION INFORMATION:** Technical Service Department, Force Industries Division

DISCLAIMER: The data set forth in these sheets are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. Force Industries makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereon. Force Industries warrants only that its products conform to their published specifications and no other express warranty is made with regards thereof. We do not guarantee favorable results, and we assume no liability in connection with the use of the products. They are intended for use by persons having technical skill and knowledge, at their own discretion and risk.