

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Wdađđđ

Product No: Ì H H

Version: 2.4 / EN

KIMBALL MIDWEST PART # 83-434
ULTRA-SIL SILVER PASTE

Print Date: 6.08.2015

Page 1 of 10

Revision date: 5.12.2014

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

1.1 Product identifier: Ultra-Sil High Strength Silver Bearing Solder Paste

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

1.2.1 Relevant identified uses

Solder Paste

1.3 Details of the supplier:

Supplier:

Kimball Midwest
4800 Roberts Road
Columbus, OH 43228
800-233-1294

1.4 EMERGENCY TELEPHONENUMBER: Chemtrec 800-424-9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Acute toxicity, Oral (Category 4), H302
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

2.2 Label elements

Hazard pictograms



Signal word:

Danger

Hazard statements:

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H410	Very toxic to aquatic life with long lasting effects

Precautionary statements:

P260	Do not breathe dust or mist
------	-----------------------------

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

KIMBALL MIDWEST PART # 83-434

ULTRA-SIL SILVER PASTE

Trade name: Ultra-Sil

Product No: 83-434

Version: 2.4 / EN

Page 2 of 10

Print date: 6.08.2015

Revision date: 5.12.2014

P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection
P301 + P312 + P330	If SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth
P301 + P330 + P331	If SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	If ON SKIN: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310	If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 + P310	If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately contact a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before use
P391	Collect spillage
P405	Store locked up
P501	Dispose of contents/containers to an approved waste disposal plant

Supplemental Hazard information (EU): None

2.3 Other hazards

None known

SECTION 3. Composition/information on ingredients

3.1.1 Description of the mixture:

Suspension

3.1.2 Hazardous ingredients

Substance name	CAS No.	INDEX No.	EC No.	Concentration	Classification according Regulation (EC) No. 1272 [CLP]	SCL and/or M-factor
Zinc chloride	7646-85-7		231-592-0	10-15%	Acute tox. 4; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1; H302, H314, H318, H410	
Ammonium chloride	12125-02-9	017-014-00-8	235-186-4	2-5%	Acute Tox. 4; Eye Irrit. 2A; Aquatic Acute2; Aquatic Chronic 2; H302, H319, H411	

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

KIMBALL MIDWEST PART # 83-434

ULTRA-SIL SILVER PASTE

Trade name: Ultra-Sil

Product No: 83-434

Version: 2.4 / EN

Page 3 of 10

Print date: 6.08.2015

Revision date: 5.12.2014

3.1.3 Additional information:

This mixture does not contain further substances fulfilling the criteria of hazard class "acute toxicity" according to CLP regulation.

SECTION 4: First aid measures

4.1

4.1.1 General information: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

4.1.1 Following inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

4.1.4 Following skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

4.1.2 Following eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

4.1.5 Following ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Ultra-Sil
Product No: 83-434
Version: 2.4 / EN

KIMBALL MIDWEST PART # 83-434
ULTRA-SIL SILVER PASTE
Page 4 of 10

Print date: 6.08.2015
Revision date: 5.12.2014

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Hydrogen chloride gas, Zinc/zinc oxides.

5.3 Advice for fire-fighters:

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Additional information:

No data available.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions:

6.3 Methods and material for containment and cleaning up

6.3.1 For containment: Keep in suitable, closed containers.

6.3.2 For cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel.

6.4 Reference to other sections: For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. Provide appropriate exhaust ventilation at places where dust may form. For precautions, see section 2.2.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Ultra-Sil

Product No: 83-434

Version: 2.4 / EN

KIMBALL MIDWEST PART # 83-434

ULTRA-SIL SILVER PASTE

Page 5 of 10

Print date: 6.08.2015

Revision date: 5.12.2014

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Highly hygroscopic. Keep in a dry place.

Hints on storage assembly:

Storage class: (TRGS 510): Non-combustible, corrosive hazardous material.

Materials to avoid:

7.3 Specific end uses:

Recommendations: Apart from uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.1.1 Occupational exposure limits:

Limit value type (country of origin)	Substance name	EC-No.	CAS-No.	Occupational exposure limit value		Monitoring and observation processes	Peak limitation	Source
				Long term	Short term			
TWA	Zinc chloride		7646-85- 7	1.000 mg/m ³	1.000 mg/m ³			OSHA Table Z-1
	Ammonium chloride		12125- 02-9	10.000 mg/m ³	10.000 mg/m ³			ACGIH (TLV)

8.2 Exposure controls

8.2.1 Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the workday.

8.2.2 Personal protective equipment:

8.2.2.1 Eye / Face protection: Face shield with safety glasses. Use equipment for eye protection tested and approved under appropriate standards.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Ultra-Sil

KIMBALL MIDWEST PART # 83-434

Product No: 83-434

ULTRA-SIL SILVER PASTE

Print date: 6.08.2015

Version: 2.4 / EN

Page 6 of 10

Revision date: 5.12.2014

Hand protection: Handle with nitrile gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.

Body protection: Lab coat or smock.

Other skin protection measures: Wash thoroughly after handling.

8.2.2.2 Respiratory protection: Avoid breathing vapors. Where large amounts are used for soldering, use of a vent hood is required.

8.2.3 Environmental exposure controls: Prevent further leakage 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: Grey paste

Odor: Mild odor

	value	concentration	method	temperature	pressure	remark
pH	N/D					
Melting point/freezing point	N/D					
Initial boiling point/boiling range	N/D					
Flash point	N/D					
Evaporation rate	N/D					
Flammability (solid, gas)	N/D					
Upper/lower flammability or explosive limits	N/D					
Upper explosive limits	N/D					
Lower explosive limits	N/D					
Vapor pressure	N/D					
Vapor density	N/D					
Relative density	N/D					
Solubility(ies)	N/D					
Partition coefficient: n-octanol/water	N/D					
Auto-ignition temperature	N/D					
Decomposition temperature	N/D					
Viscosity						
Viscosity, dynamic	N/D					
Viscosity, cinematic	N/D					

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)

Trade name: Ultra-Sil

KIMBALL MIDWEST PART # 83-434
ULTRA-SIL SILVER PASTE

Product No: 83-434

Print date: 6.08.2015

Version: 2.4 / EN

Page 7 of 10

Revision date: 5.12.2014

Explosive properties	N/D					
Oxidizing properties	N/D					

N/D = No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available

10.2 Chemical stability Stable at normal conditions

10.3 Possibility of hazardous reactions No data available

10.4 Conditions to avoid: Exposure to moisture

10.5 Incompatible materials: Strong oxidizing agents

10.6 Hazardous decomposition products: See section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral – Rat – 350 mg/kg

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Ultra-Sil

KIMBALL MIDWEST PART # 83-434

Product No: 83-434

ULTRA-SIL SILVER PASTE

Print date: 6.08.2015

Version: 2.4 / EN

Page 8 of 10

Revision date: 5.12.2014

ACGIH: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive toxicity: No data available.

Specific target organs: No data available

SECTION 12: Ecological information

12.1 Toxicity:

12.1.1 Aquatic toxicity

Acute (short-term) fish toxicity

	Effect dose/ -concentration	Test duration	Species	Result/ Evaluation	Method	Remark
Zinc chloride	LC50	96h	Carp	0.4 – 2.2 mg/l		

Acute (short-term) toxicity to crustacea

	Effect dose/ -concentration	Test duration	Species	Result/ Evaluation	Method	Remark
Zinc chloride	EC50	48 h	Daphnia magna	0.2 mg/l		

Acute (short-term) toxicity to algae and cyanobacteria

	Effect dose/ -concentration	Test duration	Species	Result/ Evaluation	Method	Remark
Zinc chloride	LOEC	96 h	Psuedokirchneri ella subcapitata	12.5 mg/l		

Harmful to aquatic organisms.

12.2 Persistence and degradability

Biodegradation: No data available

Abiotic Degradation: No data available

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Ultra-Sil

Product No: 83-434

Version: 2.4 / EN

KIMBALL MIDWEST PART # 83-434

ULTRA-SIL SILVER PASTE

Page 9 of 10

Print date: 6.08.2015

Revision date: 5.12.2014

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)

	Species	Result	Method	Remark
Zinc chloride	<i>Pimephales promelas</i>	63 d		

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety 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

Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with local, state and national regulations.

Section 14: Transport information

Not regulated.

SECTION 15: Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements fo SARA Title III, Section 302

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, section 313:

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Ultra-Sil

Product No: 83-434

Version: 2.4 / EN

KIMBALL MIDWEST PART # 83-434

ULTRA-SIL SILVER PASTE

Page 10 of 10

Print date: 6.08.2015

Revision date: 5.12.2014

	CAS #	Revision Date
Zinc chloride	7646-85-7	2007-03-01

Massachusetts Right To Know Component

Zinc chloride	7646-85-7	2007-03-01
Ammonium chloride	12125-02-9	1994-04-01

Pennsylvania Right To Know Component

Zinc chloride	7646-85-7	2007-03-01
Ammonium chloride	12125-02-9	1994-04-01

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

SECTION 16: Other information

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

Acute tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Eye Dam.	Serious eye damage
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

HMIS Rating

Health hazard:	3
Chronic health hazard:	*
Flammability:	1
Physical hazard:	0

NFPA Rating

Health hazard:	3
Fire hazard:	1
Reactivity hazard:	0

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.