

SAFETY DATA SHEET

Finished Product



Date-Issued: 8/4/2004
SDS Ref. No: 26-331770, 26-331930
Date-Revised: 11/8/2017
Revision No: 003

Paste Flux 26-331770, 26-331930

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Brand Name	26-331770, 26-331930
Product Description:	Petroleum Based Soldering Flux
Product Code	26-331770, 26-331930
Marketer Contact Information:	NTE Electronics, Inc. 44 Farrand Street Bloomfield, NJ 07003 973-748-5089
Emergency Phone:	CHEMTREC 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Physical Hazards	Not classified
Health Hazards	Acute Toxicity, Oral Category 4 Skin Corrosion/Irritation Category 1B Serious Eye Damage/Eye Irritation Category 1 Specific Target Organ Toxicity, Single Exposure Category 3 respiratory tract irritation
Environmental Hazards	Hazardous to the aquatic environment, acute hazard Category 1 Hazardous to the aquatic environment, long-term hazard Category 1
OSHA/HCS Status	Not classified

GHS Label Elements

Hazard Pictograms	Three GHS hazard pictograms are displayed in a row, each within a red diamond border. From left to right: 1. A pictogram showing liquid dripping from two test tubes onto a hand and a metal surface, representing Corrosion. 2. A pictogram showing a large black exclamation mark, representing a general Health Hazard. 3. A pictogram showing a dead tree and a dead fish, representing Harmful to the Environment.
Single Word	Danger
Hazard Statements	Harmful if swallowed. Causes severe skin burns and eye damage. May cause respiratory irritation. Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well ventilated area. Avoid release to the environment.
Response	Immediately call a poison center/doctor. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. DO NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present an easy to do. Continue rinsing.

SECTION 2. HAZARDS IDENTIFICATION (Cont'd)

Precautionary Statements (Cont'd)

Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with all local/regional/national/international regulations.

Hazard(s) Not Otherwise Classified (HNOC)

Conclusion/Summary	Contact with eyes may cause irritation.
---------------------------	---

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

Chemical Name	CAS Number	%
Petrolatum	8009-03-8	70 - 75
Zinc Chloride	7646-85-7	25 - 30

Composition Comments

Conclusion/Summary	All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume..
---------------------------	---

SECTION 4. FIRST-AID MEASURES

Ingestion	If swallowed, rinse mouth with water (only if the person is conscious). Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately.
Skin Contact	Remove and isolate contaminated clothing and shoes. Immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately. Wash clothing separately before reuse.
Eye Contact	Immediately flush eyes with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Most Important Symptoms/Effects, Acute and Delayed

Indication of Immediate Medical Attention and Special Treatment Needed	Treat symptomatically.
General Information	Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Dry chemical, foam, carbon dioxide.
Unsuitable Extinguishing Media:	None known.
Specific Hazards Arising from the Chemical:	Fire may produce irritating, corrosive and/or toxic gases.
Special Protective Equipment and Precautions for Firefighters	Firefighters should wear full protective clothing including self-contained breathing apparatus.
Fire Fighting Equipment/Instructions	Move containers from fire area if you can do it without risk.
Specific Methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General Fire Hazards	Will release small amounts of HCL upon decomposition.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spills cannot be contained.
Methods and materials for Containment and Cleaning Up	Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Neutralize with soda ash or sodium bicarbonate. Dilute with plenty of water. Dispose of in accordance with EPA regulations.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling	Wear appropriate personal protective equipment (See Section 8). Use only with adequate ventilation. Do not breathe fumes and dusts. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Observe good industrial hygiene practices.
Conditions for Safe Storage, Including any Incompatibilities	Store in plastic containers in cool area away from heat. Store away from incompatible materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

Occupational Exposure Limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Zinc Chloride (CAS 7646-85-7)	PEL	1mg/m ³	Fume

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Zinc Chloride (CAS 7646-85-7)	STEL	2mg/m ³	Fume
	TWA	1mg/m ³	Fume

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Zinc Chloride (CAS 7646-85-7)	STEL	2mg/m ³	Fume
	TWA	1mg/m ³	Fume

Biological Limit Values	No biological exposure limits noted for ingredient(s)
Exposure Guidelines	Use personal protective equipment are required. Keep working clothes separately.
Appropriate Engineering Controls	Good general ventilation (typically 10 air changer per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection	Wear approved safety glasses or goggles.
Skin Protection	Hand Protection: Wear protective gloves. Other: Wear suitable protective equipment.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont'd)

CONTROL PARAMETERS (Cont'd)

Individual Protection Measures, such as Personal Protective Equipment (Cont'd)

Respiratory Protection	Use a respirator when local exhaust or ventilation is not adequate to keep exposures below the OEL. In a confined space a supplied respirator may be required. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.
Thermal Hazards	Wear appropriate thermal protective clothing, when necessary.

General Hygiene Considerations

Conclusion/Summary	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants..
---------------------------	--

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Reddish Brown Paste
Physical State	Semi-Solid
Form	Paste
Color	Reddish Brown
Odor	Slight Petroleum Odor.
Odor Threshold	Not Available.
pH	Not Available.
Melting Point/Freezing Point	+100°F (+37.78°C)
Initial Boiling Point and Boiling Range	Not Available.
Flash Point	+360.0° to +430.0°F (+182.2° to +221.1°C)
Evaporation Rate	Not Applicable.
Flammability (Solid, Gas)	Not Available.
Lower and Upper Flammable Limits	Not Available.
Lower and Upper Explosive Limits	Not Available.
Vapor Pressure	Not Available.
Vapor Density	Not Applicable.
Relative Density	0.9
Solubility (Water)	Not Soluble in Water
Partition Coefficient: n-octanol/water	Not Available.
Auto-Ignition Temperature	Not Available.
Decomposition Temperature	Not Available.
Viscosity	Not Available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical Stability	Material is stable under normal conditions.
Possibility of Hazardous Reactions	Hazardous polymerization does not exist.
Conditions to Avoid	Avoid contact with incompatible materials.
Incompatible Materials	Strong oxidizing agents. Chlorine. Turpentine. Potassium. Cyanides. Sulfides. Powdered Zinc..
Hazardous Decomposition Products	Chlorine. Hydrogen Chloride. Carbon Monoxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation	Corrosive to the respiratory tract.
Skin Contact	Causes skin burns.
Eye Contact	Causes serious eye damage.
Ingestion	Harmful if swallowed. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

SECTION 11. TOXICOLOGICAL INFORMATION (Cont'd)**Symptoms Related to the Physical, Chemical and Toxicological Characteristics**

Conclusion/Summary	Causes skin and eye burns.
---------------------------	----------------------------

Information on Toxicological Effects

Acute Toxicity	Causes burns. Harmful if swallowed. Exposure to high levels of zinc chloride fume may cause pulmonary edema.
-----------------------	--

Components	Species	Test Results
-------------------	----------------	---------------------

Zinc Chloride (CAS 7646-85-7)		
-------------------------------	--	--

Acute		
--------------	--	--

Oral/		
-------	--	--

LD50		
------	--	--

Mouse		
-------	--	--

350mg/kg		
----------	--	--

Skin Corrosion/Irritation

Conclusion/Summary	Causes skin burns.
---------------------------	--------------------

Serious Eye damage/Eye Irritation

Conclusion/Summary	Causes serious eye damage.
---------------------------	----------------------------

Respiratory or Skin Sensitization

Respiratory Sensitization	Not classified.
----------------------------------	-----------------

Skin Sensitization	Not classified.
---------------------------	-----------------

Germ Cell Mutagenicity

Conclusion/Summary	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
---------------------------	--

Carcinogenicity

Conclusion/Summary	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
---------------------------	---

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive Toxicity

Conclusion/Summary	Not classified.
---------------------------	-----------------

Specific Target Organ Toxicity

Single Exposure	May cause respiratory tract irritation.
------------------------	---

Repeated Exposure	Not classified.
--------------------------	-----------------

Aspiration Hazard

Conclusion/Summary	Not likely, due to the form of the product.
---------------------------	---

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

Conclusion/Summary	Very toxic to aquatic life with long lasting effects.
---------------------------	---

Components	Species	Test Results
-------------------	----------------	---------------------

Zinc Chloride (CAS 7646-85-7)		
-------------------------------	--	--

Aquatic		
----------------	--	--

Crustacea		
-----------	--	--

EC50		
------	--	--

American or Virginia Oyster (Crassostrea Virginica)		
--	--	--

0.1511 – 0.2782mg/l, 48 hours		
-------------------------------	--	--

Fish		
------	--	--

LC50		
------	--	--

Rainbow Trout, Donaldson Trout (Oncorhynchus Mykiss)		
---	--	--

0.101 – 0.197mg/l, 96 hours		
-----------------------------	--	--

Persistence and Degradability

Conclusion/Summary	No data is available on the degradability of this product.
---------------------------	--

SECTION 12. ECOLOGICAL INFORMATION (Cont'd)**Bioaccumulative Potential**

Conclusion/Summary	No data available.
---------------------------	--------------------

Mobility in Soil

Conclusion/Summary	No data available.
---------------------------	--------------------




Other Adverse Effects

Conclusion/Summary	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
---------------------------	---

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Instructions	Dispose waste and residues in accordance with applicable federal, state, and local regulations.
Local Disposal Regulations	Dispose of in accordance with local regulations.
Hazardous Waste Code	D002: Waste Corrosive material [pH ≤2 or ≥12.5, or corrosive to steel]
Waste from Residues/Unused Products	Dispose in accordance with all applicable regulations.
Contaminated Packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

SECTION 14. TRANSPORT INFORMATION

	DOT Classification	IMDG	IATA
UN Number	UN1760	UN1760	UN1760
UN Proper Shipping Name	Corrosive liquids, n.o.s (Zinc Chloride RQ = 3953 LBS)	Corrosive liquids, n.o.s (Zinc Chloride)	Corrosive liquids, n.o.s (Zinc Chloride)
Transport Hazard Class(es)	8 	8 	8 
Packing Group	III	III	III
Environmental Hazards	Marine Pollutant: Yes	Marine Pollutant: Yes	Yes
EmS	-	F-A, S-B	-
ERG Code	-	8L	8L
Special Provisions	IB3, T7, TP1, TP28	-	-
Packaging Exceptions	154	-	-
Packaging Non-Bulk	203	-	-
Packaging Bulk	241	-	-

Special Precautions for User	Read safety instructions, SDS and emergency procedures before handling.
-------------------------------------	---

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code	Not Available
---	---------------

SECTION 15. REGULATORY INFORMATION**U.S. Federal Regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.
CERCLA Hazardous Substance List (40 CFR 302.4)	Zinc Chloride (CAS 7646-85-7) LISTED

SECTION 15. REGULATORY INFORMATION (Cont'd)**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

Hazard Categories	Immediate Hazard – Yes Delayed Hazard – No Fire Hazard – No Pressure Hazard – No Reactivity Hazard - No
--------------------------	---

SARA 302 Extremely Hazardous Substance

Classification	Not Listed
-----------------------	------------

SARA 311/312 Hazardous Chemical

Classification	Yes
-----------------------	-----

SARA 313 (TRI Reporting)

Chemical Name	CAS Number	% by wt.
Zinc Chloride	7646-85-7	25 - 30

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	Not regulated.
Safe Drinking Water Act (SDWA)	No regulated.

US State Regulations

US. Massachusetts RTK – Substance List	Zinc Chloride (CAS 7646-85-7)
US. New Jersey Worker and Community Right-to-Know Act	Zinc Chloride (CAS 7646-85-7)
US. Pennsylvania Worker and Community Right-to-Know Law	Zinc Chloride (CAS 7646-85-7)
US. Rhode Island RTK	Zinc Chloride (CAS 7646-85-7)
US. California Proposition 65	Not listed.

International Inventories

Country(s) or Region	Inventory Name	On Inventory (Yes/No) *
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

* A “Yes” indicates this product complies with the inventory requirements administered by the governing country(s).
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16. OTHER INFORMATION

Hazardous Material Information System (U.S.A.)

Health	3
Flammability	1
Physical Hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the national Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J.J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

)
Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health, and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 system to classify chemicals does so at their own risk.

Further Information

This information above is believed to be accurate and represents the best information currently available to us. However, neither NTE nor any of its subsidiaries make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.