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Product Name:	SP30 (2 oz. or 1 lbs. container)		
Product Code:	SP-30		
MSDS Manufacturer Number:	SP-30 (2 oz./ 56.6 g. container)	3 1	>
Product Use/Restriction:	Flux		
Manufacturer Name:	Kester		
Address:	800 W. Thomdale Avenue Itasca, IL 60143		
General Phone Number:	(630)-616-4000	HMIS	
Customer Service Phone Number:	(800)-2KESTER (253-7837)	Health Hazard	3
CHEMTREC:	For emergencies in the US, call CHEMTREC: 800-424- 9300 Outside of the U.S. and Canada: (703) 527-3887	Fire Hazard	1
Website:	msds@kester.com	Reactivity	1
MSDS Creation Date:	August 15, 2008	Personal	x
MSDS Revision Date:	September 30, 2012	Protection	x

NFPA

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CA S#	Ingredient Percent	EC Num.
Non Hazardous	N/A	5 - 10 by weight	
Ammonium chloride	12125-02-9	1 - 5 by weight	
Petrolatum	8009-03-8	60 - 100 by weight	
Zinc Chloride	7646-85-7	10 - 30 by weight	

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:	DANGER! Corrosive. Irritant.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	
Eye :	Corrosive. Will cause eye burns, permanent tissue damage, and blindness.
Skin:	Contact causes severe skin irritation and possible burns. may cause permanent skin damage.
Inhalation:	May cause severe respiratory system irritation.
Ingestion:	Harmful if swallowed. Corrosive to the gastrointestinal tract.
Signs/Symptoms:	Depending on solution concentration, material may be corrosive to skin, mucous membranes and eyes. Vapors may cause respiratory irritation.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	May aggravate pre-existing respiratory disorders, allergy, eczema, or skin conditions.

SECTION 4 - FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for 15 to 20 minutes. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes.

	Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point:	221 °C (430 °F)
Lower Flammable/Explosive Limit:	Not applicable.
Upper Flammable/Explosive Limit:	Not applicable.
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Unsuitable Media:	Do not use a solid water stream as it may scatter and spread fire.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Hazardous Combustion Byproducts:	Oxides of carbon, oxides of nitrogen, aliphatic aldehydes, and other organic substances may be formed during combustion Zinc chloride hydrogen chloride
NFPA Ratings:	

NFPA Health:	3
NFPA Flammability:	1
NFPA Reactivity:	1
NFPA Other:	

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Avoid breathing vapor, aerosol or mist. Avoid contact with skin, eyes and clothing.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment:	Contain spills with an inert absorbent material such as soil, sand or oil dry.
Methods for cleanup:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

SECTION 7 - HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor and fumes. Use only in accordance with directions.
Storage:	No special storage conditions required.
Hygiene Practices:	Wash thoroughly after handling. Avoid inhaling vapors, mists, or fumes.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Safety glasses with side-shields.
Hand Protection Description:	Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data. Nitrile rubber or natural rubber gloves are recommended.
Respiratory Protection:	When ventilation is not sufficient to remove fumes from the breathing zone, a safety approved respirator or self- contained breathing apparatus should be worn.
PPE Pictograms:	🗢 🛰 🐑

EXPOSURE GUIDELINES Ammonium chloride :

Zinc Chloride :

Guideline ACGIH:

Guideline ACGIH:

TLV-TWA: 10 mg/m3 TLV-STEL: 20 mg/m3

TLV-TWA: 1 mg/m3 TLV-STEL: 2 mg/m3 PEL-TWA: 1 mg/m3

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Paste.
Color:	Amber.
Odor:	Mild chemical.
Boiling Point:	Not determined.
Melting Point:	49 °C (120 deg F)
Density:	1.05 g/cm³ (at 20 °C (68 °F))
Vapor Pressure:	1.0 hPa (1 mm Hg) (at 20 °C (68 °F))
Flash Point:	221 °C (430 °F)

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	No thermal decomposition if used according to specifications.
Incompatible Materials:	Oxidizing agents. Strong acids and alkalis.
Special Decomposition Products:	Carbon monoxide and carbon dioxide Hydrogen chloride (HCl) Zinc oxide

SECTION 11 - TOXICOLOGICAL INFORMATION

Non Hazardous :	
RTECS Number:	ZC0110000
Ingestion:	Oral - Rat LD50 : >90 mL/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ammonium chloride :	
RTECS Number:	BP4570000
Petrolatum :	
RTECS Number:	SE6780000
Zinc Chloride :	
RTECS Number:	ZH1400000
Ingestion:	Oral - Rat LD50: 350 mg/kg [Details of toxic effects not reported other than lethal dose value] Oral - Mouse LD50: 329 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

SECTION 14 - TRANSPORT INFORMATION

DOT Shipping Name: Non regulated.

SP30 (2 oz or 1 lbs. container) Revision:: 9/30/2012 DOT Exemption:

ORM-D Small quantity exemption

Non regulated.

IATA Shipping Name: DOT Pictograms:

ORM-D

Canadian Shipping Name:	Non regulated.
Canadian Hazard Class:	Non regulated.
Canadian Packing Group:	Non regulated.
Canadian Shipping Label:	Non regulated.
IMDG Shipping Name :	Non regulated.
ADR Shipping Name :	Non regulated.
RID Shipping Name :	Non regulated.
ICAO Shipping Name:	Non regulated.

SECTION 15 - REGULATORY INFORMATION

Canada Reg. Status:	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the
	information required by the Controlled Products Regulations.
Canada WHMIS:	Controlled - Class: D2B Toxic
Non Hazardous :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Ammonium chloride :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Petrolatum :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Zinc Chloride :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
GHS Pictograms:	

SECTION 16 - ADDITIONAL INFORMATION

General Use:	Flux
HMIS Health Hazard:	3
HMIS Fire Hazard:	1
HMIS Reactivity:	1
HMIS Personal Protection:	X
MSDS Creation Date:	August 15, 2008
MSDS Revision Date:	September 30, 2012
Disclaimer:	The information contained herein is based on data considered accurate and is offered solely for information, consideration and investigation. Kester extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The data on this Material Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process. All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and the necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Material Safety Data Sheet as a source for hazard information.

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