

## 1 Identification of the substance/mixture and of the company/undertaking

### Product identifier

**Trade name: SP-30 (2 OZ. container) ORM-D Consumer Commodity Exemption**

**Relevant identified uses of the substance or mixture and uses advised against** Soldering Flux

Application of the substance / the preparation Soldering flux

### Details of the supplier of the safety data sheet

This Safety Data Sheet has been updated in accordance with the Global Harmonized System (GHS).

#### Manufacturer/Supplier:

Kester

800 West Throntdale Ave.

Itasca, IL 60143

Tel (630) 616-4000

Fax (630) 616-4044

**Further information obtainable from:** SDS Coordinator (630) 616-6844

#### Emergency telephone number:

CHEMTREC 24-Hour Emergency Response Telephone Number : (800) 424-9300

CHEMTREC 24-Hour Emergency Response (Outside US & Canada) Telephone Number : (703) 527-3887

## 2 Hazards identification

### Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Skin Corr. 1B

H314

Causes severe skin burns and eye damage.



GHS09 environment

Aquatic Chronic 2 H411

Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4

H302

Harmful if swallowed.

STOT SE 3

H335+H336

May cause respiratory irritation. May cause drowsiness or dizziness.

### Label elements

**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05

GHS07

GHS09

Signal word *Danger*

Hazard-determining components of labelling:

zinc chloride

ammonium chloride

Hazard statements

H302

Harmful if swallowed.

H314

Causes severe skin burns and eye damage.

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H335+H336 May cause respiratory irritation. May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

### 3 Composition/information on ingredients

**Chemical characterization: Mixtures**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 8009-03-8 EINECS: 232-373-2	Petrolatum	50-100%
CAS: 7646-85-7 EINECS: 231-592-0	zinc chloride ⚠ Skin Corr. 1B, H314 ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ⚠ Acute Tox. 4, H302	10-25%
CAS: 12125-02-9 EINECS: 235-186-4	ammonium chloride ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	2.5-10%
CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity	2.5-10%

**SVHC**

This product does not contain any Substance of Very High Concern (SVHC) on the European Chemicals Agency (ECHA) candidate list.

### 4 First aid measures

**Description of first aid measures**

**General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:** Seek immediate medical advice.

**Information for doctor:**

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

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**5 Firefighting measures****Extinguishing media****Suitable extinguishing agents:***CO<sub>2</sub>, sand, extinguishing powder. Do not use water.**Use fire extinguishing methods suitable to surrounding conditions.***Special hazards arising from the substance or mixture***Hydrogen chloride (HCl)**In case of fire, the following can be released:***Advice for firefighters****Protective equipment:** *Wear self-contained respiratory protective device.***6 Accidental release measures****Personal precautions, protective equipment and emergency procedures***Wear protective equipment. Keep unprotected persons away.**Ensure adequate ventilation***Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.***Methods and material for containment and cleaning up:***Dispose contaminated material as waste according to item 13.**Ensure adequate ventilation.***Reference to other sections***See Section 7 for information on safe handling.**See Section 8 for information on personal protection equipment.**See Section 13 for disposal information.***7 Handling and storage****Handling:****Precautions for safe handling** *Thorough dedusting.***Information about fire - and explosion protection:** *No special measures required.***Conditions for safe storage, including any incompatibilities****Storage:***Requirements to be met by storerooms and receptacles: No special requirements.**Information about storage in one common storage facility: Not required.**Further information about storage conditions: Keep container tightly sealed.***Specific end use(s)** *No further relevant information available.***8 Exposure controls/personal protection****Additional information about design of technical facilities:** *No further data; see item 7.*

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**Control parameters**

**Ingredients with limit values that require monitoring at the workplace:**

**7646-85-7 zinc chloride**

WEL (Great Britain)	Short-term value: 2 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
PEL (USA)	Long-term value: 1 mg/m <sup>3</sup> Fume
REL (USA)	Short-term value: 2 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
TLV (USA)	Short-term value: 2 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
OEL (China)	Short-term value: 2 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
TLV (Taiwan)	Long-term value: 1 mg/m <sup>3</sup> fume

**12125-02-9 ammonium chloride**

WEL (Great Britain)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup>
REL (USA)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup>
TLV (USA)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup>
OEL (China)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup>
TLV (Taiwan)	Long-term value: 10 mg/m <sup>3</sup>

**Exposure controls**

**Personal protective equipment:**

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

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.

Protection of hands:



Protective gloves

Material of gloves

Nitrile rubber, NBR

Natural rubber, NR

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety Glasses with Side Shields Required

**9 Physical and chemical properties**

**Information on basic physical and chemical properties**

**General Information**

Appearance:

Form: Pasty

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**Colour:** Amber coloured  
**Odour:** Mild  
**pH-value:** Not applicable.  
**Change in condition**  
*Melting point/Melting range:* 49°C (120 °F)  
 Undetermined.  
**Flash point:** > 100°C (> 212 °F)  
**Flammability (solid, gaseous):** Not determined.  
**Self-igniting:** Product is not selfigniting.  
**Danger of explosion:** Product does not present an explosion hazard.  
**Vapour pressure at 20°C (68 °F):** 1 hPa (1 mm Hg)  
**Density at 20°C (68 °F):** 1.05 g/cm<sup>3</sup> (8.762 lbs/gal)  
*Vapour density* Not applicable.  
**Solubility in / Miscibility with water:** Partly miscible.  
**Solvent content:**  
*Organic solvents:* 0.0 %  
*Water:* 7.7 %  
*Solids content:* 92.3 %

## 10 Stability and reactivity

### Reactivity

#### Chemical stability

*Thermal decomposition / conditions to be avoided:* No decomposition if used according to specifications.

**Possibility of hazardous reactions** No dangerous reactions known.

**Conditions to avoid** No further relevant information available.

**Incompatible materials:** Strong acids, strong oxidizers.

**Hazardous decomposition products:** Hydrogen chloride (HCl)

## 11 Toxicological information

### Information on toxicological effects

#### Acute toxicity:

*LD/LC50 values relevant for classification:*

#### 7646-85-7 zinc chloride

Oral | LD50 | 350 mg/kg (rat)

#### 12125-02-9 ammonium chloride

Oral | LD50 | 1650 mg/kg (rat)

*Primary irritant effect:*

*on the skin:*

Caustic effect on skin and mucous membranes.

Irritant to skin and mucous membranes.

*on the eye: Irritating effect.*

*Sensitization: Sensitization possible through inhalation.*

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## 12 Ecological information

### Toxicity

**Acquatic toxicity:** No further relevant information available.

### Ecotoxicological effects:

**Remark:** Toxic for fish

### Additional ecological information:

#### General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

### Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

## 13 Disposal considerations

### Waste treatment methods

#### Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

### Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

### Land transport ADR/RID (cross-border)



**ADR/RID class:** 8 Corrosive substances.

**Danger code (Kemler):** 80

**UN-Number:** 2331

**Packaging group:** III

**Hazard label:** 8

**Special marking:** Symbol (fish and tree)

**UN proper shipping name:** 2331 ZINC CHLORIDE, ANHYDROUS, mixture, ENVIRONMENTALLY HAZARDOUS

**Tunnel restriction code:** E

### Maritime transport IMDG:



**IMDG Class:** 8

**UN Number:** 2331

**Label:** 8

**Packaging group:** III

**EMS Number:** F-A,S-B

**Marine pollutant:** Yes

Symbol (fish and tree)

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**Segregation groups** Acids, heavy metals and their salts (including their organometallic compounds)  
**Proper shipping name:** ZINC CHLORIDE, ANHYDROUS, mixture

**Air transport ICAO-TI and IATA-DGR:**



**ICAO/IATA Class:** 8  
**UN/ID Number:** 2331  
**Label:** 8  
**Packaging group:** III  
**Proper shipping name:** ZINC CHLORIDE, ANHYDROUS, mixture  
**UN "Model Regulation":** UN2331, ZINC CHLORIDE, ANHYDROUS, mixture, ENVIRONMENTALLY HAZARDOUS, 8, III  
**Environmental hazards:** Product contains environmentally hazardous substances: zinc chloride  
**Special precautions for user:** Not applicable.  
**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

## 15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05 GHS07 GHS09

Signal word *Danger*

Hazard-determining components of labelling:

zinc chloride

ammonium chloride

Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H335+H336 May cause respiratory irritation. May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

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

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*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.*

**Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)*

*ICAO: International Civil Aviation Organization*

*ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*NFPA: National Fire Protection Association (USA)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*