

**Material Safety Data Sheet**

According to 91/155 EC

Printing date 27.06.2003

Reviewed on 27.06.2003

**1 Identification of the substance/preparation and of the company/undertaking****Product details****Trade name:** 1701

Application of the substance / the preparation Soldering flux

**Manufacturer/Supplier:**Kester  
515 E. Touhy Ave.  
Des Plaines, IL 60018Tel.(847) 297-1600  
Fax.(847) 390-9338**Further information obtainable from:**

MSDS Coordinator:

Tel. (847) 699-5755

**Information in case of emergency:**

CHEMTREC 24-Hour Emergency Response Telephone Number:

(800) 424-9300

CHEMTREC 24-Hour Emergency Response Telephone Number (Outside US and Canada):

(703) 527-3887

**2 Composition/information on ingredients****Chemical characterization****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 110-15-6 EINECS: 203-740-4	succinic acid	<input checked="" type="checkbox"/> Xi; R 36	2.5-10%
CAS: 143-24-8 EINECS: 205-594-7	bis(2-(2-methoxyethoxy)ethyl) ether	<input checked="" type="checkbox"/> Xn; R 19-43-62	≤ 2.5%

**3 Hazards identification****Hazard description:** Not applicable.**Information concerning particular hazards for human and environment:**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**4 First-aid measures****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.**After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.**5 Fire-fighting measures****Suitable extinguishing agents:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**Special hazards caused by the substance, its products of combustion or resulting gases:**

In case of fire, the following can be released:

Carbon monoxide (CO)

(Contd. on page 2)

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(Contd. of page 1)

*Carbon dioxide (CO<sub>2</sub>)**Aliphatic aldehydes***Protective equipment:** *Wear self-contained respiratory protective device.***6 Accidental release measures****Person-related safety precautions:** *Ensure adequate ventilation***Measures for environmental protection:** *Do not allow to enter sewers/ surface or ground water.***Measures for cleaning/collecting:***Absorb with clay, diatomaceous earth, dry sand, or other inert material. Do not use combustible materials such as sawdust. Place in a chemical waste container. Flush residual with water.***7 Handling and storage****Handling:****Information for safe handling:** *Ensure good ventilation/exhaustion at the workplace.***Information about fire - and explosion protection:** *Keep respiratory protective device available.***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:***Protect from frost.**Store in cool, dry conditions in well sealed receptacles.***8 Exposure controls/personal protection****Additional information about design of technical facilities:** *No further data; see item 7.***Ingredients with limit values that require monitoring at the workplace:***The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.***Personal protective equipment:****General protective and hygienic measures:***Keep away from foodstuffs, beverages and feed.**Wash hands before breaks and at the end of work.**Store protective clothing separately.***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*

(Contd. on page 3)

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(Contd. of page 2)

*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:***Tightly sealed goggles**Safety glasses***9 Physical and chemical properties****General Information**

**Form:** *Liquid*  
**Colour:** *Colourless*  
**Odour:** *Odourless*

**Change in condition**

**Melting point/Melting range:** *0°C*  
**Boiling point/Boiling range:** *100°C*

**Flash point:** *Not applicable.***Danger of explosion:** *Product does not present an explosion hazard.***Density at 20°C:** *1.020 g/cm<sup>3</sup>***Solubility in / Miscibility with water:** *Fully miscible.***10 Stability and reactivity****Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.***Materials to be avoided:** *Strong acids, strong oxidizers.***Dangerous reactions** *No dangerous reactions known.***Dangerous decomposition products:**

*Carbon monoxide and carbon dioxide*  
*Aldehyde*

**11 Toxicological information****Acute toxicity:****Primary irritant effect:***on the skin: Possible local irritation by contact with flux or fumes.**on the eye: Smoke during soldering can cause eye irritation.***Sensitization:** *No sensitizing effects known.*

(Contd. on page 4)

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(Contd. of page 3)

**Additional toxicological information:**

*The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.*

**12 Ecological information****General notes:**

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

**13 Disposal considerations****Product:****Recommendation**

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

**Waste disposal key:** 161002

**Uncleaned packaging:**

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

**14 Transport information****Land transport ADR/RID (cross-border)**

**ADR/RID class:** -  
*Not regulated.*

**Maritime transport IMDG:**

**IMDG Class:** -  
*Not regulated.*

**Marine pollutant:** No

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

**ICAO/IATA Class:** -  
*Not regulated.*

**15 Regulatory information****Hazard-determining components of labelling:**

*succinic acid*

**Special labelling of certain preparations:**

*Safety data sheet available for professional user on request.*

(Contd. on page 5)

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(Contd. of page 4)

**National regulations:****Technical instructions (air):**

Class	Share in %
Water	93.5
III	2.5

**Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.**16 Other information**

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*Relevant R-phrases*

19 May form explosive peroxides.

36 Irritating to eyes.

43 May cause sensitisation by skin contact.

62 Possible risk of impaired fertility.

**Department issuing MSDS:** Product Safety**Contact:** Heather Holich, MSDS Coordinator

Tel. (847)699-5755