

Material Safety Data Sheet

According to 91/155 EC

Printing date 24.07.2003

Reviewed on 23.07.2003

1 Identification of the substance/preparation and of the company/undertaking**Product details****Trade name: 450-BUV***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: 12124-97-9	ammonium bromide	≤ 2.5%
EINECS: 235-183-8		

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:** *Rinse with warm water.***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:***CO₂, 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)**Carbon dioxide (CO₂)**Aliphatic aldehydes*

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Protective equipment: *Wear self-contained respiratory protective device.*

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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:** *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.**Immediately remove all soiled and contaminated clothing**Wash hands before breaks and at the end of work.***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.*

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

Form: *Liquid*
Colour: *Blue*
Odour: *Mild*

Change in condition

Melting point/Melting range: *Undetermined.*
Boiling point/Boiling range: *104°C*

Flash point: *Not applicable.*

Danger of explosion: *Product does not present an explosion hazard.*

Vapour pressure at 20°C: *19 mm Hg*

Density at 20°C: *1.082 g/cm³*

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.*

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12 Ecological information**General notes:** Do not allow product to reach ground water, water course or sewage system.**13 Disposal considerations****Product:****Recommendation** Disposal must be made according to official regulations.**European waste catalogue**

16 10 02 | aqueous liquid wastes other than those mentioned in 16 10 01

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

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

Tel. (847)699-5755