

Transene Company Inc.

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Emergency Contact CHEMTREC 1-800-424-9300 24 hrs

MATERIAL SAFETY DATA SHEET

COPPER ETCHANT 49-1

CHEMICAL NAME & SYNONYMS

Copper Etchant 49-1 REV 1

DOT CLASS

NR

SARA TITLE 313

NO
TSCA-YES

HAZARDOUS INGREDIENTS

CITRIC ACID (C₆H₈O₇.H₂O)
(2-Hydroxyl-1,2,3 Propanetricarboxylic Acid)
HYDROGEN PEROXIDE (H₂O₂)

EXPOSURE LIMITS

500 MG/M³ (respirable dust)

1.5 MG/M³ (1 PPM)

FORMULA

CITRIC ACID (C₆H₈O₇.H₂O)
(2-Hydroxyl-1,2,3 Propanetricarboxylic Acid)
HYDROGEN PEROXIDE (H₂O₂)
WATER (H₂O)

%

<2%

< 1%

balance

F.W.

210.14

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CAS#

5949-29-1

7722-84-1

7732-18-5

PHYSICAL DATA

Soluble in water complete.

APPEARANCE & ODOR

Characteristic odor. Pleasant sour taste. Clear to slightly yellow solution.

REACTIVITY & CONDITIONS TO AVOID

Stable. No hazardous reactivity.

FIRE HAZARDS

Will be consumed in general fire. Avoid inhalation of smoke. NFPA # 0-1-0

EXTINGUISHER

Fight surrounding fire.

HEALTH HAZARDS

May cause skin and eye irritation. Toxicity for Citric Acid is very low. LD₅₀ (oral-rat) 6730 mg/kg. Eye rabbit 750 mg/24 hr. severe irritation. Poison intravenously LD₅₀ (ivn-mouse) 42 mg/kg. TLV/PEL not established. No evidence of carcinogenicity.

SPECIAL PRECAUTIONS

Wear goggles while handling.

FIRST AID:

Wash skin and eyes thoroughly with water after contact. If eye irritation persists, see a physician.

SPILLS & LEAKS

Sweep up. Wash area with water. Disposal to sanitary drain, incinerator or solid waste.

Prepared By: M.Hecht 3-28-00 Revised 9/0-5