

----- MATERIAL SAFETY DATA SHEET -----

K-O-K Products

HEAT TRANSFER SOLUTION

STANLEY STEEMER(R) HEAT TRANSFER SOLUTION
 KOK PRODUCT #: 3548
 24-HOUR EMERGENCY PHONE #: 1-800-255-3924
 PREPARED: 07/10/98
 REVISION #: 002
 SUPERSEDES: 05/05/97
 HMIS RATING:
 HEALTH: 2*
 FLAMMABILITY: 2
 REACTIVITY: 0
 PERSONAL PROTECTION: B

 SECTION 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Stanley Steemer(R) Heat Transfer Solution
 PRODUCT USAGE: Carpet Stain Removal
 CHEMICAL NAME: Surfactants, Ammonia, Organic Acid,
 Solvents, Water Mixture
 CAS NUMBER: Mixture
 MANUFACTURER: K-O-K PRODUCTS, INC.
 700 S. 3B'S & K ROAD
 GALENA, OHIO 43021
 PHONE: (740) 548-0526
 DISTRIBUTOR: Stanley Steemer International, Inc.
 5500 Stanley Steemer Parkway
 Dublin, Ohio 43017
 Phone: (614) 764-2007

 SECTION 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Wt%
Oxalic acid	144-62-7	1
Ammonia	7664-41-7	1-3
Surfactants	Not applicable	1-5
Diethylene glycol monobutyl ether	112-34-5	1-5
Propylene glycol monobutyl ether	5131-66-8	1-5
Tetrasodium EDTA	64-02-8	<0.2

 SECTION 3 -- HEALTH HAZARDS AND FIRST AID

EYES: Can cause severe irritation; may cause burns. If symptoms develop, flush eyes gently with water for 15 minutes. Seek immediate medical attention.
 SKIN: Can cause severe irritation; prolonged contact may cause burns. Skin absorption is possible. If on skin, wash area immediately with soap and water. If symptoms develop, seek immediate medical attention.
 BREATHING: Exposure to vapor or mist may be harmful, and can irritate nose, throat, and lungs. If symptoms develop, move individual into fresh air. Seek medical attention.
 SWALLOWING: Exposure by this route can be harmful or fatal, causing severe irritation of the gastrointestinal tract, even burns. Oxalic acid is toxic by ingestion with an oral LD50 (rat) = 375 mg/kg. If swallowed, give large quantities of water. DO NOT induce vomiting. Seek immediate medical attention.
 OTHER HEALTH EFFECTS: This material (or a component) has been suggested as a cause of liver and/or kidney effects in animals. EDTA and its sodium salts have been reported to cause harm to an animal fetus, but only at levels that harm the mother. The relevance of these findings to humans is uncertain. Oxalic acid is toxic to humans if swallowed.
 PRIMARY ROUTES OF ENTRY: Inhalation, eye and skin contact, skin absorption. DO NOT get in eyes, on skin or clothing. DO NOT take internally.

 SECTION 4 -- FIRE FIGHTING MEASURES

FLASH POINT: >130 deg F.
 EXPLOSIVE LIMIT (%):
 LEL: 0.9
 UEL: 25
 HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, ammonia, oxides of nitrogen
 FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and travel along the ground; ignition by heat, pilot lights, etc. can occur.
 EXTINGUISHING MEDIA: Alcohol foam, CO2, dry chemical, water fog.
 FIRE FIGHTING INSTRUCTIONS: Wear self-contained breathing apparatus. Water and water fog will knock down evolved ammonia gas.

 SECTION 5 -- ACCIDENTAL RELEASE MEASURES

Absorb spill and transfer to containers for disposal in an approved landfill.

 SECTION 6 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	PEL	TLV
Oxalic acid	1.0 mg/cum	1.0 mg/cum
144-62-7	STEL 2.0 mg/cum	2.0 mg/cum
Ammonia	25 ppm	25 ppm
7664-41-7	STEL 35 ppm	35 ppm
Diethylene glycol monobutyl ether**	Not established	Not established
112-34-5	**Manufacturer recommends 35 ppm.	

EYE PROTECTION: Chemical splash goggles; face shield if possibility of splashing.
 SKIN PROTECTION: Chemical resistant gloves. To prevent skin contact, wear impervious clothing.
 RESPIRATORY PROTECTION: If any TLV or manufacturer recommendation exceeded, NIOSH approved air purifying respirator. Consult an industrial hygienist for proper mist and/or vapor cartridges.
 VENTILATION: General exhaust ventilation to maintain exposure below TLVs or manufacturer recommendation.

 SECTION 7 -- PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY: 0.96
 VAPOR PRESSURE: 420 mmHg @ RT (based on ammonia)
 VAPOR DENSITY: 0.6 (based on ammonia) (Air=1)
 BOILING POINT: 127 deg F (based on ammonia)
 EVAPORATION RATE: Approximately equal to ethyl ether (based on ammonia)
 pH: 10.5
 WATER SOLUBILITY: Soluble
 FREEZING POINT: Approximately 32 deg F
 ODOR AND APPEARANCE: Clear to hazy liquid; ammonia odor

 SECTION 8 -- STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur
 CHEMICAL STABILITY: Stable
 INCOMPATIBILITY: Strong oxidizers, strong acids and bases, chlorine bleach, bromine, furfuryl alcohol, reactive metals such as aluminum and zinc

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SECTION 9 -- STORAGE AND HANDLING

STORAGE TEMPERATURE: Do not store at temperatures above 120 deg F or below 60 deg F. KEEP OUT OF REACH OF CHILDREN.

GENERAL GUIDELINES: OBSERVE ALL SAFETY PRECAUTIONS. Keep from freezing. Containers of this material may be hazardous when emptied.

SECTION 10 -- DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal regulations.

SECTION 11 -- REGULATORY INFORMATION

SARA 313 (40 CFR 372.65):

Diethylene glycol monobutyl ether 1-5%
Ammonia 1-3%

CALIFORNIA PROPOSITION 65: No substances on the Prop 65 lists could be present at greater than trace amounts. These substances, if present, are impurities within a proprietary component.

NEW JERSEY RTK LABEL INFORMATION:

Water (CAS# 7732-18-5)
Oxalic acid (CAS# 144-62-7)
Ammonia (CAS# 7664-41-7)
Diethylene glycol monobutyl ether (CAS# 112-34-5)
Propylene glycol monobutyl ether (CAS# 5131-66-8)
Contents Partially Unknown

PENNSYLVANIA RTK LABEL INFORMATION:

Water (CAS# 7732-18-5)
Ethanedioic acid (CAS# 144-62-7)
Ammonia (CAS# 7664-41-7)
Diethylene glycol monobutyl ether (CAS# 112-34-5)
Propylene glycol monobutyl ether (CAS# 5131-66-8)
Partial contents are withheld as trade secret information.

DEPARTMENT OF TRANSPORTATION:

PROPER SHIPPING NAME: Non-regulated
HAZARD CLASSIFICATION: Non-regulated
FREIGHT DESCRIPTION: Compound Cleaning Liquid

SECTION 12 -- ADDITIONAL INFORMATION

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE, BUT IS NOT WARRANTED TO BE, WHETHER ORIGINATING FROM THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF THEIR NEED THAT THE INFORMATION IS CURRENT, APPLICABLE AND SUITABLE TO THEIR CIRCUMSTANCES.

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COMPAS Code: 37820141