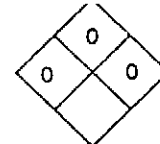


O.C.S. SYSTEMS



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MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

PRODUCT NAME: O.C.S. SYSTEMS IMMERSION CLEANER #NFH2002	
CHEMICAL NAME: Alkaline Degreaser	DATE PREPARED: 27-Jan-94
DEPARTMENT OF TRANSPORTATION	HAZARD CLASSIFICATION: None SHIPPING NAME: Cleaning Compound, Class 55

II. PHYSICAL DATA

BOILING POINT (F)	212F	VAPOR PRESSURE (mm Hg AT 20°C)	14.2
SPECIFIC GRAVITY (H ₂ O=1)	1.02	WATER SOLUBILITY	Completely
VAPOR DENSITY (air = 1)	0.62	Photochemically reactive (SCAQMD Rule 102)	No
PERCENT VOLATILE BY VOLUME (%)	94.3	EVAPORATION RATE BuAC=1	> 1
pH (of concentrate)	12.4	VOC (Calculated formula) SCAQMD Rules 443.1 & 1171	206 g/l (in concentrate) 23 g/l (at 8:1 dilution)
APPEARANCE AND ODOR: Colorless liquid, mild characteristic odor			

III. INGREDIENTS

MATERIAL	%	OSHA PEL	TLV (units)	HAZARD
2-butoxyethanol	<20	25ppm	120 mg/m ³	N/A
** CAS # 111-76-2	N/A	N/A	TWA-25ppm	N/A
CONTAINS NO CFC'S				

IV. FIRE & EXPLOSION HAZARD DATA

FLASH POINT (test method)	None/cc	FLAMMABLE LIMITS: None	LOWER: None	UPPER: None
EXTINGUISHING	NO FIRE HAZARD			
SPECIAL FIRE FIGHTING PROCEDURES	N/A			
UNUSUAL FIRE AND EXPLOSION HAZARDS	N/A			

V. HEALTH HAZARD DATA

TLV AND SOURCE	Not established
ACUTE EFFECTS OF OVEREXPOSURE	LD50 (for technical 2-butoxyethanol) for skin absorption on rabbits is 200 mg/kg: Oral LD for rats is 470 mg/kg. Lc50 (inhalation) for rats is 700 ppm in 7 hours.
SKIN CONTACT	May cause dryness and irritation
INHALATION	None
EYE CONTACT	Flush eyes with water for 15 minutes, lifting the lower and upper lids. Obtain attention if irritation persists.
CHRONIC EFFECTS OF OVEREXPOSURE	This is relatively innocuous substance not expected to cause harm. Should treatment ever be required, it would be directed at control of symptoms.
OTHER HEALTH HAZARDS	Ingestion may cause nausea and/or diarrhea

EMERGENCY AND FIRST AID PROCEDURES

SWALLOWING:	If swallowed drink warm water to dilute stomach contents, induce vomiting.
SKIN:	Flush thoroughly with soap and water. Dry and apply skin lotion.
INHALATION:	None
EYE:	Flush eyes with water for 15 minutes, lifting the lower and upper lids Obtain attention if irritation persists.
NOTES TO PHYSICIAN:	This is relatively innocuous substance not expected to cause harm. Should treatment ever be required, it would be directed at control of symptoms.

VI. REACTIVITY DATA

STABILITY	STABLE: Yes	UNSTABLE: No	CONDITIONS TO AVOID None
INCOMPATIBILITY	Avoid oxidizing materials.		
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS			None
HAZARDOUS POLYMERIZATION	May Occur No	WILL NOT OCCUR Yes	CONDITIONS TO AVOID: None

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED	Small Spills: Flush with water. Large Spills: Absorb with sawdust, sand or earth.
WASTE DISPOSAL METHOD	May be disposed of in sewer system. Consult local state, county or Federal regulations for applicable laws pertaining to your areas.

VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (type):	None
VENTILATION	If desired. Local exhaust is sufficient.
PROTECTIVE GLOVES	Use if long exposure is expected.
EYE PROTECTION	If splashing is expected use goggles
OTHER PROTECTIVE EQUIPMENT	Wear plastic apron if excessive splashing is expected. If clothing becomes soaked, remove, shower, and wash clothing.

IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Store in cool dry area. Prevent freezing, if frozen allow to thaw, stir well and re-use.
OTHER PRECAUTIONS	None