B5 #572 41 Env Store

KYZEN CORPORATION

MATERIAL SAFETY DATA SHEET

OPTISOLV® OP7168

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	**OPTISOLV OP7168**
Manufacturer	Kyzen Corporation 430 Harding Industrial Drive Nashville, TN 37211
Information Phone	(615) 831-0888 www.kyzen.com
EMERGENCY PHONE (24 HOURS)	*CHEMTREC* (800) 424-9300
Effective Date	January 31, 2003
Supersedes Date	August 21, 2001

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS Number	OSHA PEL	ACGIH TLV	Approx. % by Wt.
Potassium Hydroxide	1310-58-3	2 mg/m^3 ceiling	2 mg/m^3 ceiling	1-10

No other ingredients identified by OSHA as hazardous are known to be present, or the ingredients present are below levels specified as hazardous by OSHA (29 CFR 1910.1200).

See Section 8 for exposure guidelines.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

High alkaline liquid. Irritating to the eyes, skin and mucous membranes.

Routes of Entry:	Inhalation: Yes	Skin Contact: Yes
	Skin Absorption: Yes	Ingestion: Yes

Potential Health Effects: Irritating to eyes, skin and respiratory system. May cause burns. Excessive exposure to vapor may cause dizziness, drunkenness, blurred vision, nausea, vomiting, headaches, irritation of the nose, mouth, throat and lungs, and possible burns to the respiratory tract. Harmful if ingested.

Chemical ingredients listed as a carcinogen or potential carcinogen:

National Toxicology Program:	None
IARC Monographs:	None
OSHA Regulated:	None

continued on page 2

SECTION 4: FIRST AID MEASURES

Emergency and First Aid Procedures for Overexposure:

Eye Contact: Immediately flush with water for 15 minutes while lifting eyelids and rolling eyes. Get immediate medical attention.

Skin Contact: Wash promptly with soap and water. May dry out skin. Get medical attention if irritation occurs. Remove contaminated clothing. Launder clothing before reuse.

Inhalation: Remove person to fresh air. If necessary, restore and support breathing. If breathing is difficult, oxygen should be given. Get medical attention.

Ingestion: Get immediate medical attention. If conscious and medical help is not readily available, give 1 to 2 glasses of water and keep at rest. Never attempt to give anything by mouth to an unconscious person. Induce vomiting only at the advice of a physician.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: None to boiling.

Flammable Limits in Air: None established for product as whole.

General Hazard: Caustic liquid.

Fire Fighting: Firefighters should have eye protection and wear self-contained breathing apparatus. Use water spray to cool containers exposed to fire.

Extinguishing Media: Alcohol foam, carbon dioxide, dry chemical, water spray for dilution to non-flammable mixture.

Hazardous Decomposition Products:
Combustion produces unidentified organics, oxides of carbon, carbon dioxide and carbon monoxide.

Unusual Fire and Explosion Hazards: Vapors are heavier than air and may travel to a source of ignition and flash back.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Material Release or Spill: Pick up spill on sand, earth or other non-combustible, absorbent material. Flush or wipe area with water to remove last traces. Collect wash water/material for disposal. Wear all appropriate personal protective equipment.

SECTION 7: HANDLING AND STORAGE

Handling and Storage: Store in cool, dry, well ventilated location away from incompatible materials. Do not store in open, unlabeled or mislabeled containers. Separate from oxidizers. Keep containers tightly closed. Avoid contact with skin, eyes and clothing. Avoid breathing mists and vapors. Avoid prolonged and repeated exposure. Use appropriate personal protective equipment. Do not wear contact lenses when working with this material. Do not smoke, eat or drink in handling areas.

continued on page 3

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protection: Under normal ventilated use conditions, personal respiratory protection is typically not required. If misting or vapors occur, use NIOSH approved organic vapor air purifying respirator. Use impervious chemical gloves. Long sleeves, aprons, or other protective clothing is suggested to avoid skin exposure. Use chemical safety goggles, face shield or safety glasses for eye protection. Do not wear contact lenses when working with this material. Have eye wash and safety shower readily available.

Workplace Exposure Guidelines: Avoid direct contact with this material. General ventilation and local exhaust are required to minimize or eliminate exposure to mists and vapors. Do not eat, drink, or smoke when working with this material.

Note: Personal protection information given is based upon the general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

Exposure Guidelines: Not established for product as whole.

Exposure Guidelines for Individual Components:

Potassium hydroxide, OSHA PEL 2 mg/m^3 ceiling, ACIGH TLV 2 mg/m^3 ceiling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear amber
Odor	Mild
Boiling Point	100-104°C
Solubility in Water	Complete
Specific Gravity	1.07-1.09
pH	>13 (100%) 12.0-13.2 (5%)

Volatile Organic Compounds (VOC), EPA Method 24: 161 g/L (100%)
16.1 g/L (10%)

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable
Hazardous Polymerization:	Will not occur
Incompatible Materials:	Oxidizers, strong acids
Conditions to Avoid:	Heat, sparks, flame or other sources of ignition.

Hazardous Decomposition Products:
Combustion produces unidentified organics, oxides of carbon, carbon dioxide, and carbon monoxide.

continued on page 4

SECTION 11: TOXICOLOGICAL INFORMATION

No information exists for product as whole.

Health Hazards (Acute, Subchronic and Chronic): *Proprietary alcohol:* Oral: Animal feeding studies at relatively high levels have demonstrated systemic toxicity in males with no reproductive effects noted in females. Dermal: Animal studies of this material have shown no effects at typical (short-term) exposure levels. These studies have shown that repeated, cumulative, high level dermal contact may cause decreased male fertility with no reproductive effects noted in females. Inhalation: Animal studies of this material have shown prolonged and repeated inhalation of saturation concentrations of alcohol showed weight loss and lowered sperm production in male rats, with no significant weight loss and no reproductive effects noted in female rats at any level. These same studies showed at moderately high levels, spasms and drunkenness-like symptoms were noted.

Potassium hydroxide: (CAS# 1310-58-3): Draize test, rabbit, skin: 50 mg/24H Severe: Oral, rat: LD50 = 273 mg/kg.

SECTION 12: ECOLOGICAL INFORMATION

No information exists for product as whole.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of Material: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Empty containers must be handled with care due to product residue. This material is not an EPA hazardous waste.

SECTION 14: TRANSPORT INFORMATION

D.O.T. Shipping Name: Compounds, Cleaning Liquid

D.O.T. Label: Non-hazardous, Non-flammable.

SECTION 15: REGULATORY INFORMATION

TSCA Status: All ingredients used in OPTISOLV® OP7168 are listed.

SARA Title III Status: The ingredients in this product have been reviewed according to the EPA Hazard Categories promulgated under Sections 302, 311, 312 and 313 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III). Listed below are the ingredients required to be reported under these specific sections:

Section 302: None Section 311/312: None Section 313: None

SECTION 16: OTHER INFORMATION

NFPA Rating:	H=2, F=1, R=0	Supersedes Date:	August 21, 2001
Effective Date:	January 31, 2003	Sections Revised:	2,3,8,9,11
Prepared By:	Kyzen Health & Safety		

This Material Safety Data Sheet adheres to ANSI standard ANSI Z400.1-1993.