



SKASOL INCORPORATED

1696 West Grand Avenue, Oakland, CA 94607-1607 Tel (510) 839-1000 - Fax (510) 839-1090

Commercial and Industrial Water Treatment Programs Since 1927

Product Information:

Trade Name (as labeled):	SKASOL 460
Manufacturer's Name:	Skasol Incorporated
Address (complete mailing address):	1696 West Grand Avenue Oakland, California 94607-1607
24 Hour Emergency Telephone:	(800) 424-9300
Information Telephone:	(510) 839-1000
Date prepared or revised:	May 26, 2006
Name of preparer:	Michelle Navasca

Hazardous Ingredients:

Chemical Name	CAS Number	Percent	Limits in Air ACGIH TLV	(give units) OSHA PEL	Other (specify)
2-Phosphonobutane-1,2,4-Tricarboxylic Acid (PBTC)	37971-36-1	<20%	not established		

Physical Properties:

Vapor Density:	Not available	Melting Point or Range:	Not applicable
Specific Gravity:	1.05	Boiling Point or Range, °F:	218
Solubility in Water:	Complete	Evaporation Rate:	Not available
Vapor pressure:	Not available		
Appearance and Odor:		Clear amber, organic odor.	
How to detect this substance:		Low pH will cause irritation.	

Fire and Explosion:

Flash point, °F (give method):	None
Auto ignition temperature, °F:	None

Flammable limits in air, volume %:	None	lower (LEL)	upper (UEL)
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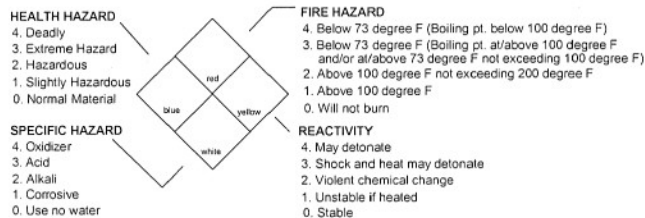
Fire extinguishing materials:

Water	<input checked="" type="checkbox"/>	Foam	<input checked="" type="checkbox"/>	CO ₂	<input checked="" type="checkbox"/>	Dry Chemical	<input checked="" type="checkbox"/>	Other	
Special fire fighting procedures:	Wear full protective clothing and respiratory protection.								
Unusual fire and explosion hazards:	None.								

Health Hazard Information:

Symptoms of overexposure for each potential route of exposure.

Inhaled:	Mist or liquid will cause major irritation of the respiratory tract. Large amounts will cause burning from acidic contents.
Contact with skin or eyes:	Causes severe burning to eyes. Skin is more resistant, but prolonged exposure can cause irritation.
Absorbed through skin:	Not absorbed.
Swallowed:	Will cause burning damage to mouth, esophagus, stomach, etc



Health Hazard	2
Fire Hazard	0
Reactivity Hazard	0
Specific Hazard	3



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Health Hazard Information (continued):

Health effects or risks from exposure:

Acute:	2-Phosphonobutane-1,2,4-Tricarboxylic Acid will cause burns with acute exposure.
Chronic:	Same as acute, but with milder symptoms.

First Aid Emergency Procedures:

Eye Contact:	Immediately flush with plenty of water, raising eyelids often to help irrigation and continue for at least 15 minutes. Get medical assistance.
Skin Contact:	Flush with plenty of water. Remove contaminated clothing. If skin is sticky, acidity is still present. Continue flushing until stickiness is gone.
Inhaled:	Remove to fresh air. If not breathing give artificial respiration (preferably mouth to mouth). Call a physician or poison control center.
Swallowed:	If conscious drink large quantities of water. Do not induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

Suspected cancer agent?

<input checked="" type="checkbox"/>	No: This product's ingredients are not found in the lists below.
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<input type="checkbox"/>	Federal OSHA	<input type="checkbox"/>	National Toxicology Program	<input type="checkbox"/>	International Assoc. For Research On Cancer
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Medical Conditions Aggravated By Exposure	Not Known
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Reactivity Data:

Stability:

<input checked="" type="checkbox"/>	Stable	<input type="checkbox"/>	Unstable
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Conditions to avoid:	Do not mix with strong bases.
Incompatibility (materials to avoid):	Strong bases.
Hazardous decomposition products:	Heat.

Hazardous polymerization:	<input type="checkbox"/>	May occur	<input checked="" type="checkbox"/>	Will not occur
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Conditions to avoid:	Not known
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Spill, Leak and Disposal Procedures:

Spill response procedures:	Dike area to contain the spill. Small spills may be flushed and diluted with lots of water and washed to a sewer connected to a waste treatment plant.
Preparing wastes for disposal:	Larger spills should be contained and neutralized with dilute base to a neutral pH (6.0 - 9.0) before washing with plenty of water to a sewer connected to a waste treatment plant. Any DOT container is suitable for temporarily holding neutralized waste.

Special Handling Information:

Ventilation and Engineering Controls:	Local exhaust ventilation should be sufficient to minimize employee exposure to mist below OSHA PEL
Respiratory Protection:	When conditions require it, use a respirator approved by NIOSH/MSHA with a dust/mist filter. Respiratory protection programs must meet or exceed the requirements of Title 29 CFR 1910.134
Eye Protection:	Close fitting chemical safety goggles with a face shield if needed.
Gloves:	Nitrile, neoprene or natural rubber.
Other Clothing and equipment	Rubber boots with safety toes, rubber aprons, plastic hard hats should be used when necessary to prevent skin contact.
Work practices, hygienic practices:	Protective clothing and use of equipment must be in accordance with Title 29 CFR Sections 1910.132 and 1910.133
Other Handling and Storage Needs:	Provide emergency eye wash stations and emergency shower facilities near use and handling areas.
Measures during Maintenance:	Chemical feed pumps should be routinely washed out with water. Plastic tubing and fittings should be frequently inspected for leaks and clogs. As with all automatic equipment, be certain that the power is disconnected before performing any adjustments or repairs. Use all above precautions.
Disclaimer:	All information, recommendations and suggestions appearing in this MSDS concerning the use of our products are based upon tests and data believed to be reliable. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals reading this information must exercise their independent judgment when determining its appropriateness for a particular purpose.