



SAFETY DATA SHEET

SKASOL 461

Section 1: Identification

Product Identifier: SKASOL 461

Recommended Use: Cooling Tower Scale and Corrosion Inhibitor

Manufacturer's Name and Address: SKASOL Incorporated
1696 West Grand Avenue
Oakland, CA 94607-1607

Manufacturer's Telephone: (510) 839-1000

24 Hour Emergency Telephone (800) 424-9390

Section 2: Hazard(s) Identification

Hazard Classification: Corrosive



Signal Word: Warning

GHS Hazard Phrase(s):
H302: Harmful if swallowed
H312: Harmful in contact with skin
H318: Causes serious eye damage
H333: May be harmful if inhaled

GHS Precaution Phrase(s):
P262: Do not get in eyes, on skin, or on clothing
P264: Wash...thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P281: Use personal protective equipment as required

NFPA Rating

HEALTH	2
FIRE	0
REACTIVITY	0

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	Percent
2-Phosphonobutane-1,2,4-Tricarboxylic Acid (PBTC)	37971-36-1	3%
Hydroxyphosphono Acetic Acid	23783-26-8	2%
Proprietary Ingredients		95%
Total		100%

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.



Section 4: First-aid Measures

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. Wash with soap and water neutralize acidity.
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 or milk. Do not induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

Section 5: Fire-fighting Measures

Fire extinguishing materials:

Water	X	Foam	X	CO2	X	Dry Chemical	X	Other	
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Special fire fighting procedures: Wear full protective clothing and respiratory protection.

Unusual fire and explosion hazards: None.

Section 6: Accidental Release Measures

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 washed with plenty of water to a sewer connected to a waste treatment plant. Any DOT container is suitable for temporarily holding neutralized waste.

Section 7: Handling and Storage

Precautions to be taken in handling: Avoid contact. Do not eat or drink near container.



When not in use, drums should be tightly sealed.

Keep drum from freezing.

Avoid storing plastic containers outside in direct sunlight. Prolonged storage in direct sunlight may compromise the quality of the container.



Section 8: Exposure Controls / Personal Protection

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:	Safety glasses or chemical safety goggles. 
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.

Section 9: Physical and Chemical Properties

Appearance	Yellowish liquid	Upper/lower flammability limits	None
Odor	Organic odor	Vapor pressure	Not available
Odor threshold	Not available	Vapor Density	Not available
pH	1.0 - 3.0	Relative density	1.02 - 1.12
Melting Point or Range	Not applicable	Solubility in Water	Complete
Boiling Point or Range, °F	218	Auto ignition temperature, °F	None
Flash point, °F	none	Viscosity	Not Available
Evaporation Rate	Not available	Flammability	None



Section 10: Stability and Reactivity

Stability Stable Unstable
Hazardous polymerization: May occur Will not occur
Conditions to avoid: Do not mix with strong bases.
Incompatibility (materials to avoid): Strong bases.
Hazardous decomposition products: Heat.

Section 11: Toxicological Information

Toxicity Studies: No toxicity studies have been conducted on this product.
Acute: May cause burns with acute exposure.
Chronic: Same as acute, but with milder symptoms.
Acute oral toxicity Unknown
Acute inhalation toxicity Unknown
Acute dermal toxicity Unknown

Section 12: Ecological Information

Avoid release into the environment - harmful to aquatic organisms.

Section 13: Disposal Considerations

Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

Section 14: Transport Information

UN Number: UN1760
UN Proper Shipping Name: Corrosive liquids, N.O.S., (contains 2-Phosphonobutane-1,2,4-Tricarboxylic Acid, Hydroxyphosphono Acetic Acid)
Transport Hazard Class(es) 8
Packing Group II



SKASOL
INCORPORATED

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Water Treatment and Energy Management Services Since 1927

Section 15: Other Regulatory Information

Unknown

Section 16: Other Information

Date prepared or revised:

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Name of preparer:

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