



Product Information:

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| Trade Name (as labeled): | SKASOL 460 |
| Manufacturer's Name | Skasol Incorporated |
| Address (complete mailing address): | 1696 West Grand Avenue Oakland, California 94607-1607 |
| Emergency Telephone | (800) 424-9300 |
| Information Telephone | (510) 839-1000 |
| Evening Telephone | (415) 826-1119 |
| Date prepared or revised | August 30, 1995 |
| Name of preparer | David L. Marchman |

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 | 37971-36-1 | < 20% | not established | | |

Physical Properties:

| | | | |
|------------------------------|----------------------------------|----------------------------|----------------|
| Vapor Density | not available | Melting Point or Range | not applicable |
| Specific Gravity | 1.10 | Boiling Point or Range, °F | 218 |
| Solubility in Water | complete | Evaporation Rate | not available |
| Vapor pressure | not available | | |
| Appearance and Odor | Clear amber liquid, organic odor | | |
| How to detect this substance | Low pH will cause irritation | | |

Fire and Explosion:

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| Flash point, °F (give method) | none |
| Auto ignition temperature, °F | none |

| | | | | | |
|-----------------------------------|------|-------------|--|-------------|--|
| Flammable limits in air, volume % | none | lower (LEL) | | upper (UEL) | |
|-----------------------------------|------|-------------|--|-------------|--|

Fire extinguishing materials:

| | | | | | | | | | |
|-------------------------------------|--|------|---|-----------------|---|--------------|---|-------|--|
| Water | X | Foam | X | CO ₂ | X | Dry Chemical | X | 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.

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| 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

- 4. Deadly
- 3. Extreme Hazard
- 2. Hazardous
- 1. Slightly Hazardous
- 0. Normal Material

SPECIFIC HAZARD

- 4. Oxidizer
- 3. Acid
- 2. Alkal
- 1. Corrosive
- 0. Use no water



FIRE HAZARD

- 4. Below 73 degree F (Boiling pt. below 100 degree F)
- 3. Below 73 degree F (Boiling pt. at/above 100 degree F and/or at/above 73 degree F not exceeding 100 degree F)
- 2. Above 100 degree F not exceeding 200 degree F
- 1. Above 100 degree F
- 0. Will not burn

REACTIVITY

- 4. May detonate
- 3. Shock and heat may detonate
- 2. Violent chemical change
- 1. Unstable if heated
- 0. Stable

| | |
|-------------------|---|
| Health Hazard | 2 |
| Fire Hazard | 0 |
| Reactivity Hazard | 1 |
| Specific Hazard | 3 |

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Risk Management
Washoe County School District



Health Hazard Information (continued):

Health effects or risks from exposure:

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| 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:

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| 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, milk or sodium bicarbonate. 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. | | |
| <input type="checkbox"/> | Federal OSHA | National Toxicology Program | International Assoc. For Research On Cancer |
| Medical Conditions Aggravated By Exposure | | Not Known | |

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:

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| 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:

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| 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. |