

Material Safety Data Sheet
(WAM S-240)



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INFOTRAC: 800-535-5053
Product Number: WCRT1BC-SF
Control Number:

PO Box 1700
Snohomish, WA USA 98291

Emergency Phone Number:
(800) 535-5053

SECTION I - IDENTIFICATION

Product Name: WAM S-240
Synonyms: Water Treatment Compound
Chemical Family: Secondary alkylamine
Formula: Proprietary
Product Description: Condensate Treatment

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Ingredient	Percent	CAS Number	PEL
Morpholine	>1%	110-91-8	20 mg/m ³
Diethylethanolamine	>1%	100-37-8	10 mg/m ³

SECTION III - PHYSICAL/CHEMICAL DATA

Form: Liquid
Color: Colorless
Odor: Amine
Boiling Point: >100 °C @ 760 mmHg
Freeze Point: <0 °C @ 760 mmHg
Vapor Pressure: No data available
Vapor Density (Air=1): No data available
Specific Gravity: 1.003
Density lb./gal (kg/L): 8.37 (1.00)
pH(neat): 11.0 to 12.0
pH(1% solution): 9.6 to 10.6
Solubility in Water: Complete
Evaporation Rate: No data available
Volatility including Water: 100%

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Molecular Weight: Blend, not applicable

SECTION IV – FIRE AND EXPLOSION DATA

Flashpoint: Not flammable.
Autoignition: Not available
Lower Flammability Limit (In Air, %):.....No data available.
Upper Flammability Limit (In Air, %):No data available.
Explosion Limits: No data available
Lower Explosion Limit (In Air, %):No data available
Upper Explosion Limit (In Air, %): No data available.
Extinguishing Media: Water fog or spray, Foam, Dry Powder, Carbon Dioxide (CO₂).
Special Fire Fighting Procedures: Wear NIOSH-approved self-contained breathing apparatus. Use water spray to keep containers cool and to knock down fumes.
Unusual Fire and Explosion Hazards:Dangerous when exposed to heat or flames. Can react with oxidizing materials. Emits toxic gases when heated to decomposition.

SECTION V – REACTIVITY DATA

Stability: Stable under normal conditions.
Hazardous Polymerization: Hazardous polymerization does not occur.
Incompatibility: Mineral Acids
Hazardous Decomposition Products:Carbon dioxide and carbon monoxide; Oxides of Nitrogen

SECTION VI – HEALTH DATA

Threshold Limit Value: 10 mg/m³ (as morpholine)
OSHA PEL: 10 mg/m³ (as morpholine)
Listed Carcinogen: This product contains no known or suspected carcinogens.
Medical Conditions Aggravated by Overexposure:Acute Overexposure Effects: This material is corrosive to the body tissues. Skin contact with the liquid or vapors/mists may result in dermatitis and deep burns. Eye contact may result in burns or permanent injury. Ethylenediamine vapors may be irritating to the eyes, nose and respiratory tract and may produce hypersensitivity. Direct contact with the skin may be highly corrosive and may cause burns to the skin. Direct contact with the eyes may be corrosive and may cause permanent eye damage. Acute exposures to N-ethylmorpholine to 50 ppm have been known to produce irritation to the eyes, nose and throat along with olfactory fatigue in humans. Corneal edema has also been reported in workers exposed up to 40 ppm. Acute exposures may also produce distortion in vision with drowsiness and optical halos. Acute overexposure to morpholine vapors results in respiratory irritation and transient eye irritation.

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Temporary foggy vision has been reported. Morpholine caused tearing of the eyes, increased saliva, and tremors in rats and rabbits at lethal doses. 2-Methoxyethanol is rapidly absorbed if inhaled or if skin contact occurs. If ingested or absorbed, 2-methoxyethanol is toxic to the central nervous system, blood and reproductive system. Dizziness, weakness headache, nausea, diarrhea, and fatigue can occur after acute overexposure. Chronic Overexposure Effects: Repeated skin contact may produce sensitization. Repeated inhalation overexposure may produce liver, lung and kidney injury. Repeated gavage exposure to experimental animals have been known to produce liver, kidney, uterine and eye effects such as cataracts, conjunctivitis, cloudy cornea and retinal atrophy.

Inhalation: Breathing mist or spray may cause damage to the upper respiratory tract and lung tissue.

Ingestion: Causes severe burns to mucous membranes of the mouth, throat, esophagus, and stomach.

Eyes: Causes eye burns

Skin (Dermal): Causes severe burns with deep ulceration.

SECTION VII – FIRST AID

Breathing (Inhalation): Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Immediate medical attention is required.

Swallowing (Ingestion): Clean mouth with water, and afterwards drink plenty of water. If swallowed, seek medical advice immediately and show the doctor the container, label, or msds. Do not induce vomiting. Never give anything by mouth to an unconscious person. If a person vomits while lying on his back, place him in the recovery position.

Eyes: Remove contact lenses. Gently flush the eyes and surrounding areas, including under the eyelids, with lukewarm water for 15 minutes. If irritation persists, seek medical attention.

Skin (Dermal): Immediately wash the affected area with soap and water as a precaution. Get medical if skin irritation persists.

SECTION VIII – EMPLOYEE PROTECTION

Respiratory Protection: NIOSH approved organic vapor mask

Eye Protection: Chemical goggles. Always be aware of proximity of eye wash station.

Protective Gloves: Neoprene, rubber, or PVC gloves with gauntlets.

Protective Clothing: Neoprene, rubber or PVC boots and rain suit.

Ventilation Requirements: Adequate ventilation must be provided to maintain air concentration below the OSHA PEL.

Work/Hygiene Practices: An emergency eye wash and safety shower for first aid treatment of potential chemical burns should be available in the vicinity of exposure from any material release. Avoid contact with the skin, and breathing vapor, mists, or dusts. Do not eat, drink or smoke in the work area. Wash hands thoroughly before eating, drinking, smoking, chewing, or using the restroom facility.

Additional Measures: None known.

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SECTION IX – SPILL AND DISPOSAL DATA

Spill: Stop the source of the leak. Contain the spilled material with dikes, sandbags, and prevent run-off into surface waters or sewers. Clean or recover as much material as possible by using a vacuum or pump. Neutralize any remaining traces of material with any dilute inorganic acid such as hydrochloric, sulfuric, phosphoric, or acetic acid. The spill area should then be flushed with water followed by covering with sodium bicarbonate. Spills on dirt or sandy ground may be handled by removing the affected soils and placing them in approved containers. All clean-up material should be placed in approved containers, labeled and stored in a safe place prior to treatment or disposal. Caution: strong alkaline solutions may react violently with acids and water.

Waste Disposal: Hazardous Waste. Follow Federal and State Regulations.

RCRA Status: No data available RCRA Hazardous Waste Number: D001

SECTION X – TRANSPORTATION DATA

DOT Shipping Name: Industrial Process Compound, Water Treating, Liquid

DOT Hazard Label(s): None; Not regulated for transport

DOT Hazard Placard(s): None; Not regulated for transport

DOT Hazard Class: None; Not regulated for transport

UN/NA Number: none

Packaging Group: n/a

Reportable Quantity: Not Est

Emergency Response Guide Number:.....Unknown

SECTION XI – OTHER REGULATORY INFORMATION

TSCA Status: All components listed in TSCA inventory.

SARA Section 302: No data available

SARA Section 311: No Data Available

SARA Section 312: No data available

Sara Section 313: Not listed, No Threshold Amount

Clean Air Act: No data available

FDA: Acceptable for use in food processing plants as determined in 21CFR Section 173.310, Food and Drug.

USDA: This product is constructed with materials previously authorized by the USDA for use in federally inspected meat and poultry plants.

HMIS Health: 2

HMIS Flammability: 0

HMIS Reactivity: 0

HMIS Personal Protection: C

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SECTION XII – HANDLING AND STORAGE

Storage Requirements: Store in closed, properly labeled tanks or containers.
Handling Procedure: Store in a cool place away from ignition sources.
Conditions to avoid: Avoid extreme temperatures. Protect from freezing.

SECTION XIII – TOXICOLOGICAL AND ECOLOGICAL INFORMATION

Toxicity: Oral LD50, Rat - 1910 mg/kg; moderately toxic (as morpholine)
Toxicity: Dermal LD50, Rabbit - 500 mg/kg; moderately toxic (as morpholine)
Toxicity: Primary Skin Irritation - Rabbit; Corrosive (as morpholine)
Aquatic Toxicity Study: Golden Orfe, static 48 hour LC50 - 500 mg/l; practically non toxic (as morpholine)
Aquatic Toxicity Study: Daphnia Magna, 24 hr EC/LC50 - 100 mg/l; practically nontoxic (as morpholine)
Aquatic Toxicity Study: Algal, 72 hour EC/LC50 - 30 mg/l; slightly toxic (as morpholine)
BOD: No data available
COD: No data available

SECTION XIV – ADDITIONAL INFORMATION

Additional: The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures.

ABBREVIATIONS

ACGIH=American Conference of Governmental Industrial Hygienists
OSHA=Occupational Safety and Health Administration
TLV=Threshold Limit Value
PEL=Permissible Exposure Limit
TWA=Time Weighted Average
STEL=Short-Term Exposure Limit

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