

# MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND MANUFACTURER'S INFORMATION						
<b>NFPA Rating:</b> Health-2; Flammability-2; Reactivity-0; Special			<b>HHIS Rating:</b> Health-2; Flammability-2; Reactivity-0; Personal Protection <b>B</b>			
Manufacturer's Name: <b>Solutions USA</b> Address: 139 Altama Connector # 417 Brunswick, Ga 31525			<b>DOT Hazard Classification:</b> Non-Hazardous <b>Identity</b> (trade name as used on label): 5136 Boiler Treatment Compound			
Date Prepared: 06/01/93		Prepared By: ES		<b>MSDS Number:</b>		
Information Calls: 912-554-3700			NOTICE: JUDGEMENT BASED ON INDIRECT TEST DATA			
SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION						
<b>COMPONENTS-CHEMICAL NAMES AND COMMON NAMES</b> (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)		CAS Number	SARA III List	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
<b>Morpholine *</b>		110-91-8	NO	TWA 20 PPM	TWA 20 PPM	d
<b>Cyclohexylamine *</b>		108-91-8		Not Known	Not Known	
* Indicates hazardous ingredients which are toxic chemicals subject to the reporting requirements of Section 313 of the emergency planning and community right-to-know act of 1986 and of 40 CFR 372						
SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS						
<b>Boiling Point:</b> Not established		<b>Specific Gravity</b> (Water)=1: 0.89				
<b>Vapor Pressure:</b> PSIG @ 46		<b>Melting Point:</b> Not Applicable				
<b>Vapor Density</b> (Air = 1): N/D		<b>Evaporation Rate</b> (Butyl Alcohol = 1): slower				
<b>Solubility in Water :</b> complete		<b>pH of Concentrate:</b> 10.8 - 11.8				
<b>Appearance and Odor:</b> Amber, Amine Odor						
SECTION 3 - FIRE AND EXPLOSION HAZARD DATA						
<b>FLAMMABILITY as per USA FLAME PROJECTION TEST</b> Non-flammable		Auto Ignition Temperature N/A		Flammability Limits in Air by % in Volume: % LEL: N/A % UEL: N/A		
<b>FLASH POINT AND METHOD USED</b> (non-aerosols): Non-combustible			<b>SPECIAL FIRE FIGHTING PROCEDURES:</b> Keep containers cool Use Chemical Foam			
<b>EXTINGUISHER MEDIA:</b> Water Spray, Foam			<b>Unusual Fire &amp; Explosion Hazards:</b> Emits fumes of NOx			
SECTION 4 - REACTIVITY HAZARD DATA						
<b>STABILITY</b> (X) STABLE ( ) UNSTABLE			<b>HAZARDOUS POLYMERIZATION</b> ( ) WILL (X) WILL NOT OCCUR			
<b>Incompatibility</b> (Mat. to avoid): Oxidizers, Nitrocellulose			<b>Conditions to Avoid:</b> None			
<b>Hazardous Decomposition Products:</b> None						
SECTION 5 - HEALTH HAZARD DATA						
<b>PRIMARY ROUTES OF ENTRY:</b> ( ) INHALATION ( ) INGESTION ( ) SKIN ABSORPTION ( ) EYE ( ) NOT HAZARDOUS						
<b>ACUTE EFFECTS:</b>						
<b>Inhalation:</b> No						
<b>Eye Contact:</b>			<b>Skin Contact:</b> No			
<b>Ingestion:</b> Unlikely		<b>Carcinogenicity:</b> NTP: No		<b>IARC Monographs:</b> No <b>Osha Regualted:</b> No		
<b>Signs &amp; Symptoms of Exposure:</b> Redness of skin and eyes. Burning of eyes and skin.						
<b>CHRONIC EFFECTS:</b> May cause severe irritation of skin and eyes. Harmful if swallowed						
<b>Medical Conditions Generally Aggravated by Exposure:</b> None Known						
EMERGENCY FIRST AID PROCEDURES						
<b>Eye Contact:</b> Flush with water for 15 minutes. Get medical attention if irritation persists						
<b>Skin Contact:</b> Remove contaminated clothing. Wash with soap and water.						
<b>Inhalation:</b> Not likely. Flush nasal passages with water. If irritation develops, contact medical authorities.						
<b>Ingestion:</b> <b>DO NOT INDUCE VOMITING.</b> drink 3 to 4 glasses of water. Get immediate medical attention.						
SECTION 6 - CONTROL AND PROTECTIVE MEASURES						
<b>Respiratory Protection (specify type):</b> None required under normal conditions of storage and use.						
<b>Protective Gloves:</b> Rubber			<b>Eye Protection:</b> Glasses or goggles			
<b>Ventilation Requirements:</b> Do not spray in confined area. Do not breath mist.						
<b>Other Protective Clothing &amp; Equipment:</b> As required to prevent skin contact						
<b>Hygienic work Practices:</b> Wash hands after use.						
SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE						
<b>Steps To Be Taken If Material is Spilled Or Released :</b> Wipe, mop, or flush with water. Soak up with absorbent material.						
<b>Waste Disposal Methods:</b> Neutralize with soda ash or sodium bicarbonate. Flush with water						
<b>Precautions To Be Taken In Handling &amp; Storage:</b> Store in dry area. Keep container closed						
<b>Other Precautions &amp;/or Special Hazards:</b> KEEP OUT OF REACH OF CHILDREN. Read & follow label directions.						

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.

\*\* Chemical Listed as Carcinogen or Potential Carcinogen, (a) NTP (b) IARC Monograph (c) OSHA (d) Not Listed (e) Animal Data Only