

# 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-3; Reactivity-0; Special-B Manufactured For: <b>K&amp;K CHEMICAL CO.</b> Address: 1303 Industrial Drive Royse City, TX 75189			<b>HMIS Rating:</b> Health-2; Flammability-3; Reactivity-0; Personal Protection-B <b>DOT Hazard Classification:</b> ORM-D <b>Identity (trade name as used on label)</b> <span style="float: right;"><b>DUET (A-110)</b></span>		
Date Prepared: 10/05/00      Prepared By: DL/IB Information Calls: (800)327-0646 <b>EMERGENCY RESPONSE NUMBER: 1(800)424-9300</b>			<b>MSDS Number:</b> 223      Revision: 9 NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA		
SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION					
COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
ETHANOL	64-17-5	No	1000	1000	d
SODIUM NITRITE	7632-00-0	No	N/E	N/E	d
AMMONIUM HYDROXIDE	1336-21-6	No	35	25	d
ISOBUTANE /PROPANE BLEND	75-28-5	No	800	800	d
	74-98-6	No	1000	1000	d
METHANOL	67-56-1	Yes	200	200	d
O-PHENYLPHENOL	90-43-7	Yes	NE	NE	e
<b>WARNING: This product contains a chemical or chemicals known to the State of California to cause cancer.</b>					
SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS					
<b>Boiling Point:</b> N/A			<b>Specific Gravity (H2O=1):</b> Concentrate Only = 0.880		
<b>Vapor Pressure:</b> PSIG @ 70 F (Aerosols) Max.60			<b>Vapor Pressure (Non-Aerosols)(mm Hg and Temperature):</b> N/A		
<b>Vapor Density (Air = 1):</b> N/E			<b>Evaporation Rate ( = 1):</b> N/E		
<b>Solubility in Water:</b> Soluble			<b>Water Reactive:</b> No		
<b>Appearance and Odor:</b> Clear, colorless spray, light airy fragrance.					
SECTION 3 - FIRE AND EXPLOSION HAZARD DATA					
<b>FLAMMABILITY</b> as per USA FLAME PROJECTION TEST (aerosols) NON-FLAMMABLE		<b>Auto Ignition Temperature:</b> N/E		<b>Flammability Limits in Air by % in Volume:</b> % LEL: N/E % UEL: N/E	
<b>FLASH POINT AND METHOD USED (non-aerosols):</b> N/A			<b>EXTINGUISHING MEDIA:</b> Foam, dry chemical, carbon dioxide, water.		
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b> Self-contained breathing apparatus.					
<b>Unusual Fire &amp; Explosion Hazards:</b> Do not expose aerosols to temperatures above 130 F or the container may rupture.					
SECTION 4 - REACTIVITY HAZARD DATA					
<b>STABILITY</b> [X] STABLE [ ] UNSTABLE			<b>HAZARDOUS POLYMERIZATION</b> [ ] WILL [X] WILL NOT OCCUR		
<b>Incompatibility (Mat. to avoid):</b> Oxidants, reducing agents, ammonium salts.			<b>Conditions to Avoid:</b> Open flame, welding arcs, heat, sparks.		
<b>Hazardous Decomposition Products:</b> CO, CO2.					
SECTION 5 - HEALTH HAZARD DATA					
<b>PRIMARY ROUTES OF ENTRY:</b> [X] INHALATION [ ] INGESTION [ ] SKIN ABSORPTION [ ] EYE [ ] NOT HAZARDOUS					
<b>ACUTE EFFECTS</b>					
<b>Inhalation:</b> Excessive inhalation of vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness.					
<b>Eye Contact:</b> Mild irritation.			<b>Skin Contact:</b> Possible mild irritation.		
<b>Ingestion:</b> Possible chemical pneumonitis if aspirated into lungs. Nausea.					
<b>CHRONIC EFFECTS:</b> (Effects due to excessive exposure to the raw materials of this mixture) Overexposure may cause kidney damage, liver abnormalities, brain damage.					
<b>Medical Conditions Generally Aggravated by Exposure:</b> May aggravate existing eye, skin, or upper respiratory conditions.					
EMERGENCY FIRST AID PROCEDURES					
<b>Eye Contact:</b> Flush with water for 15 minutes. If irritated, seek medical attention.					
<b>Skin Contact:</b> Wash with soap and water. If irritated, seek medical attention.					
<b>Inhalation:</b> Remove to fresh air. Resuscitate if necessary. Get medical attention.					
<b>Ingestion:</b> DO NOT INDUCE VOMITING. Drink two large glasses of water. Get immediate medical attention.					
SECTION 6 - CONTROL AND PROTECTIVE MEASURES					
<b>Respiratory Protection (specify type):</b> If vapor concentration exceeds TLV, use respirator approved by NIOSH in positive pressure mode.					
<b>Protective Gloves:</b> Latex, if skin easily irritated.			<b>Eye Protection:</b> Safety glasses recommended.		
<b>Ventilation Requirements:</b> Adequate ventilation to keep vapor concentration below TLV.					
<b>Other Protective Clothing &amp; Equipment:</b> None					
<b>Hygienic Work Practices:</b> Wash with soap and water before handling food. Remove contaminated clothing.					
SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE					
<b>Steps To Be Taken If Material Is Spilled Or Released:</b> Absorb with suitable medium. Incinerate or landfill according to local, state or federal regulations.					
<b>Waste Disposal Methods:</b> Aerosol cans when vented to atmospheric pressure through normal use, pose no disposal hazard.					
<b>Precautions To Be Taken In Handling &amp; Storage:</b> Do not puncture or incinerate containers. Do not store at temperatures above 130 F.					
<b>Other Precautions &amp;/or Special Hazards:</b> KEEP OUT OF REACH OF CHILDREN. Avoid food contamination. Avoid breathing vapors. Remove ignition sources. Do not use on polished wood furniture or rayon fabrics.					

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 [t] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only