



MATERIAL SAFETY DATA SHEET

MIKE-O-BLUE AEROSOL

I. PRODUCT AND MANUFACTURER INFORMATION	
Product name	MIKE-O-BLUE, LAYOUT INK Aerosol
Chemical name	NA
Synonyms	NA
CAS number	NE
Manufacturer	Ashburn Chemical Technologies 2911 Rusk Houston, TX 77003
Emergency phone number	713-425-3000
Date of last revision	5/15/06

II. HAZARDOUS INGREDIENTS					
HAZARDOUS COMPONENT	CAS NUMBER	% Optional	OSHA PEL	ACGIH TLV	CHEMICAL AND/OR COMMON NAME(S)
N-Butyl Acetate	123-86-4		150ppm	150ppm	
Isopropyl Alcohol	67-63-0		400ppm	400ppm	
Nitrocellulose	9004-70-0		NE	NE	
Ethyl alcohol (Ethanol)	64-17-5		1000ppm	1000ppm	
Isobutanol	78-83-1		100ppm	50ppm	
Toluene	108-88-3	<1	200ppm	50ppm	
Propane	74-98-6		1000ppm	1000ppm	
N-butane	106-97-8		800ppm	800ppm	

III. PHYSICAL AND CHEMICAL CHARACTERISTICS	
Boiling Range	168-257 °F
Vapor pressure at 20 °C	ND
Vapor density (air = 1)	>1
Solubility in water	Insoluble
Appearance and Odor	Blue Liquid, solvent odor
Specific gravity (H ₂ O = 1.0)	0.92
Melting point	NA
Evaporation rate	Slower than ether
VOC	6.43 lbs/gal

IV. FIRE AND EXPLOSION HAZARD DATA		
Flash point (method used)	45 °F (TCC)	
Explosive limits (in Air % by volume)	LEL: 0.0	UEL: 12.7
Extinguishing media	Foam, Dry Chemical or CO ₂	
Special fire-fighting procedures or equipment	Containers can build up pressure if exposed to heat. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Fire Fighters should wear NIOSH approved self-contained breathing apparatus	
Unusual fire and explosion hazards	Empty containers retain product residue (liquid and vapor) and can be dangerous. Do not expose containers to heat, sparks, flame or other sources of ignition.	

V. REACTIVITY DATA	
Material is stable/unstable	Stable
Conditions to avoid	Do not store near oxidizers



Incompatibility (materials to avoid)	Alkaline materials, strong acids, and oxidizing materials
Hazardous decomposition or by-products	Thermal decomposition may form fumes of Carbon Monoxide and Carbon Dioxide
Hazardous polymerization will/will not occur	Will not occur.

VI. HEALTH HAZARD DATA	
Emergency Overview May be harmful or fatal if swallowed or inhaled.	
Threshold Limit Value	TLV for this product not established. Refer to the hazardous materials list for TLV of individual ingredients.
Primary route(s) of entry	Inhalation, Skin Contact, Ingestion, Eye Contact
Known Hazards Under 29 CFR 1910.1200	
Mutagenic (genetic defects)	NO
Reproductive	NO
Systemic	NO
Teratogenic (birth defects)	NO
Carcinogen listed in:	
NTP (National Toxicology Program)	NO
IARC Monographs	NO
OSHA	NO
Signs and symptoms of exposure	
Inhalation	Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache, or nausea. Excessive exposure may cause irritation to respiratory tract and can lead to central nervous system depression
Skin contact	Prolonged or repeated contact may cause skin irritation, drying or rash.
Eye contact	Causes eye irritation. Liquid, aerosol and vapors are irritating and can cause pain, tearing, reddening, and swelling accompanied by a stinging sensation.
Ingestion	Can cause gastrointestinal irritation, can cause mouth, throat, esophagus and stomach irritation, nausea, vomiting and diarrhea
Emergency first aid procedures	
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Call physician immediately.
Skin contact	Wash off thoroughly with soap and water. Remove contaminated clothing and launder before re-use. Discard contaminated leather gloves and shoes.
Eye contact	Flush with water for 15 minutes. Seek medical attention if irritation persists.
Ingestion	Do not induce vomiting. Seek medical attention immediately.
Medical conditions generally aggravated by exposure	Persons with pre-existing skin disorders should avoid contact with this product.
Effects of Overexposure	Chronic hazards. Reports have associated repeated and prolonged overexposure to solvents with permanent brain damage and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE		
Steps to take if released or spilled	Absorb with inert material (i.e. dry sand or earth), and then transfer to properly labeled chemical waste container.	
Waste disposal method	Use approved treatment, transporters and disposal sites in accordance with local, state and federal laws. Do not flush to storm or sanitary sewer.	
Precautions for handling and storing	Do not expose to heat or store at temperatures above 120°F. Launder contaminated clothing before reuse. Use as directed. Normal precautions common to good manufacturing should be followed in storage and handling.	
Other precautions	For industrial use only.	
Hazard ratings	NFPA	HMIS
Health	2	2



Flammability	4	4
Reactivity	1	1
Personal protection		B

VIII. CONTROL MEASURES	
Protective gloves (type and material)	Use chemical-resistant gloves in situations of overexposure.
Eye protection	Wear safety glasses or goggles.
Other protective clothing or equipment	Use approved bonding and grounding procedures.
Respiratory protection (specify type)	Use only with adequate ventilation. Use NIOSH approved respirator with organic vapor cartridge when airborne concentrations are expected to exceed exposure limits.
Ventilation and conditions	
Local	Yes
Mechanical	Recommended to control airborne levels to below the exposure guidelines. Lethal concentrations may exist in areas with poor ventilation. Use explosion-proof ventilation equipment.
Other	None
Work/hygienic practices	Do not wear contaminated clothing. Wash hands prior to eating, drinking, smoking or use of restroom and when leaving work.

IX. ADDITIONAL REGULATORY INFORMATION	
SARA hazard category (Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III))	Immediate (acute) health hazard, delayed (chronic) health hazard, Fire Hazard
Toxic chemical(s) subject to the supplier notification requirements of section 313 of the Superfund Amendment and Reauthorization Act of 1986 (SARA) and the requirements of 40 CFR part 372	Toluene 108-88-3
Ingredient(s) regulated under the Clean Air Act Section 112 hazardous air pollutants and subject to all reporting requirements of CERCLA (Superfund)	None
California Proposition 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986:	No Proposition 65 chemicals exist in this product

NA – not applicable NR – not reported ND – not determined NE – not established UN – unknown

The information presented in this MSDS has been compiled from sources deemed reliable. This MSDS is presented in good faith and believed to be accurate as of the effective date shown above. No warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ from one location to another. It is the responsibility of the buyer to insure compliance with federal, state, provincial and local laws and regulations.