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 SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
 

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002 TM9

## CHEMICAL PRODUCT IDENTIFICATION:

PRODUCT IDENTIFICATION. . . : 5BU-832L-AERO  
 PRODUCT CLASS . . . . . : LACQUER  
 TRADE NAME . . . . . :  
 PRODUCT USE . . . . . :

FORMULA IDENTIFICATION. . . : 5BU-832L-AERO  
 FORMULA VERSION NUMBER. . . : 1

PREPARED BY . . . . . : SAFETY DEPARTMENT  
 DATE OF ISSUE . . . . . : 08/03/2007  
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MSDS PREPARED FOR . . . . . : TM9 ORDNANCE PRODUCTS LLC  
 256 EAGLEVIEW BLVD, SUITE 143

CONTACT INDIVIDUAL. . . . . : EXTON PA 19341  
 PAUL VIENS

MSDS LAST PREPARED. . . . . :

## MANUFACTURER IDENTIFICATION :

NAME. . . . . : IVC NORTH INC / TI-KROMATIC  
 ADDRESS . . . . . : 2492 DOSWELL AVENUE

ST. PAUL MN 55108

TELEPHONE . . . . . : 651-644-4477  
 EMERGENCY CONTACT . . . . . : CHEM-TEL  
 EMERGENCY TELEPHONE. . . . . : 1-800-255-3924  
 INTERNATIONAL EMERGENCY. . . . . : 00-1-813-248-0585

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 SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS
 

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1

CAS# 1330-20-7  
 XYLENE

VAPOR PRESSURE: 5.100 MMHG @ 68F LEL 1.00

## EXPOSURE LIMIT:

ACGIH TLV/TWA: 100  
 ACGIH TLV/STEL: 150  
 OSHA PEL/TWA: 100  
 OSHA STEL: 150

SARA STATUS: THIS MATERIAL IS A SARA 313 REPORTABLE  
 HAP STATUS: THIS MATERIAL IS ON THE HAPS AND VHAPS LISTS

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2

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CAS# 67-63-0  
ISOPROPYL ALCOHOL

VAPOR PRESSURE: 33.000 MMHG @ 68F LEL 2.00

EXPOSURE LIMIT:  
ACGIH TLV/TWA: 400  
ACGIH TLV/STEL: 500  
OSHA PEL/TWA: 400  
OSHA STEL: 500

3

CAS# 763-69-9  
ETHYL 3-ETHOXYPROPIONATE

VAPOR PRESSURE: .670 MMHG @ 68F LEL 1.10

EXPOSURE LIMIT:  
ACGIH TLV/TWA: NOT ESTABLISHED  
OSHA PEL/TWA: NOT ESTABLISHED  
LD50: >5 G/KG {ORAL MALE RAT}  
SARA STATUS: THIS MATERIAL IS A SARA 313 REPORTABLE  
HAP STATUS: THIS MATERIAL IS ON THE HAPS AND VHAPS LISTS

4

CAS# 108-88-3  
TOLUENE

VAPOR PRESSURE: 22.000 MMHG @ 68F LEL 1.20

EXPOSURE LIMIT:  
ACGIH TLV/TWA: 100  
ACGIH TLV/STEL: 150  
ACGIH CEILING: 300  
OSHA PEL/TWA: 200  
OSHA STEL: 150  
OSHA CEILING: 300  
LC50: 8000 PPM/4H {RAT}  
LD50: 5.0 G/KG {RAT} 14 G/KG {RABBIT}  
SARA STATUS: THIS MATERIAL IS A SARA 313 REPORTABLE  
HAP STATUS: THIS MATERIAL IS ON THE HAPS AND VHAPS LISTS

5

CAS# 67-64-1  
ACETONE

VAPOR PRESSURE: 186.000 MMHG @ 68F LEL 2.80

EXPOSURE LIMIT:  
ACGIH TLV/TWA: 750  
ACGIH TLV/STEL: 1000  
OSHA PEL/TWA: 1000  
OSHA STEL: 1000

6

CAS# 108-10-1  
METHYL ISOBUTYL KETONE

VAPOR PRESSURE: 15.000 MMHG @ 68F LEL 1.20

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## EXPOSURE LIMIT:

ACGIH TLV/TWA: 50  
ACGIH TLV/STEL: 75  
OSHA PEL/TWA: 100  
OSHA STEL: 75  
SARA STATUS: THIS MATERIAL IS A SARA 313 REPORTABLE  
HAP STATUS: THIS MATERIAL IS ON THE HAPS AND VHAPS LISTS

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CAS# 74-98-6  
PROPANE

LEL 2.10

## EXPOSURE LIMIT:

OSHA PEL/TWA: 1000 PPM

8

CAS# 100-41-4  
ETHYL BENZENE

VAPOR PRESSURE: 3.700 MMHG @ 68F LEL 1.00

## EXPOSURE LIMIT:

ACGIH TLV/TWA: 100 PPM  
ACGIH TLV/STEL: 543 MG/M3  
OSHA PEL/TWA: 100 PPM  
OSHA STEL: 545 MG/M3  
SARA STATUS: THIS MATERIAL IS A SARA 313 REPORTABLE  
HAP STATUS: THIS MATERIAL IS ON THE HAPS AND VHAPS LISTS

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This product is not considered a carcinogen under OSHA regulations  
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## SECTION 3 - HAZARDS IDENTIFICATION

HMIS Information Health - 2 Flammability - 4  
Reactivity - 0 Personal Protective Equipment - X

HAZARD INDEX: 4= Severe 3= Serious 2= Moderate 1= Slight 0= Minimal  
\*= Chronic health Hazard

HMIS ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

## SECTION 4 - FIRST AID MEASURES

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EYE CONTACT: Flush with luke warm water for 15 minutes. Seek Medical attention.

SKIN CONTACT: Flush with copious amounts of luke warm water. Remove contaminated clothing promptly. Seek medical attention.

INHALATION: Remove exposed individual to fresh air. Restore breathing if required. Seek medical attention.

INGESTION: Rinse mouth immediately. Give exposed individual 6 to 8 ounces of liquid.  
( NEVER GIVE ANYTHING BY MOUTH TO AN UNCONCIOUS PERSON )  
Do NOT induce vomiting unless advised by a physician.  
Seek medical attention immediately.

Remove contaminated clothing immediatly and do not wear it until it has been properly laundered.

## MEDICAL EXAMINATIONS:

Comprehensive preplacement and biennial medical examinations to be directed toward, but not limited to the liver, kidney, gastrointestinal disorders, skin irritation, and the central nervous system, may be considered.

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SECTION 5 - FIRE FIGHTING MEASURES  
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## FIRE AND EXPLOSIVE PROPERTIES OF THE CHEMICAL:

Flammability Classification . . . . .	:	
Flashpoint (F). . . . .	:	4.0-
Explosion Level . . . . .	:	Low - 1.0
		High - 13.2
Flammability Limits . . . . .	:	Lower - -N/A
		Higher - -N/A
Auto-Ignition Temperature. . . . .	:	-N/A

## EXTINGUISHING MEDIA:

Use CO2, DRY CHEMICAL, FOAM, or WATER FOG

## FIRE-FIGHTING PROCEDURES AND EQUIPMENTS:

Water spray may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Water may be ineffective in extinguishing a paint fire, therefore, use caution not to spread flames with stream of water.  
If water is used, fog nozzles are preferable.

Clear fire area of unprotected personnel. Do not enter confined space without helmet, face shield, bunker coat, gloves, rubber boots, and a

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positive pressure NIOSH-approved self-contained breathing apparatus.

OTHER:

Liquid and vapor states of this substance are dangerous fire hazards and moderate explosion hazards when exposed to heat or flames.

Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide and/or sulfur oxides.

Closed containers may explode (due to the build up of pressure) when exposed to extreme heat. Isolate from heat, electrical equipment, sparks, and open flame. Application to hot surfaces requires special precautions.

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SECTION 6 - ACCIDENTAL RELEASE MEASURES

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CLEAN-UP:

Stay upwind and away from spill or leak unless wearing appropriate protective equipment. Stop and/or contain discharge if it may be done safely. Keep all sources of ignition away. Ventilate area of spill. Use non-sparking tools for cleanup. Cover with inert material to reduce fume. Keep out of drains, sewer, or waterways. If large spill call spill response teams. Contact fire authorities. Notify local health and pollution agencies.

Do NOT flush to sewer, watershed, or waterway.

CONTAINMENT:

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SECTION 7 - HANDLING AND STORAGE

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Use in accordance with good industrial workplace practices; avoid unnecessary contact; wash thoroughly after handling; store in a dry area away from excessive heat.

HANDLING:

Bond and ground metal containers when transferring material.

Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

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Sprinkler fire protection is desirable in areas of storage, handling, and use.

SPECIAL COMMENTS:

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SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

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VENTILATION: Local exhaust to keep airborne levels below TLV.

PROTECTIVE GLOVES: Wear cotton gloves only

RESPIRATORY PROTECTION: NIOSH approved respirator as necessary.

EYE PROTECTION: Safety goggles if necessary to prevent product contact.

OTHER PROTECTIVE EQUIPMENT: Eye wash stations and emergency showers should be available.

EYE PROTECTION:

Avoid contact with eyes. Wear goggles if there is a likelihood of contact with the eyes.

Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Eyewash stations and safety showers should be readily available in use and handling area.

RESPIRATORY PROTECTION:

Use ventilation as required to control vapor, dust, and fumes. Avoid prolonged or repeated breathing of vapors. If exposure exceeds TLV, use a NIOSH approved respirator to prevent overexposure.

SKIN PROTECTION:

Protective gloves are required for prolonged or repeated contact. Wear resistant gloves such as natural rubber, neoprene, buna N, or nitrile. An apron should be worn to avoid skin contact.

Wash hands thoroughly before eating and using washroom.

SPECIAL COMMENTS:

Personnel should avoid inhalation of vapors. Personal contact with the product should be avoided. Should contact be made, remove saturated clothing and flush affected skin areas with water. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in this sheet must be observed.

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NOTICE - Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance . . . . .	:	blue/gray
Odor . . . . .	:	Moderate Ketone
Odor Threshold . . . . .	:	-N/A
Physical State . . . . .	:	-N/A
pH . . . . .	:	-N/A
Vapor Pressure . . . . .	:	186.00
Vapor Density . . . . .	:	7.10
Boiling Range . . . . .	:	Lower - 44.0 Higher - 329.0
Freezing Point . . . . .	:	-N/A
Melting Point . . . . .	:	-N/A
Water Solubility . . . . .	:	-N/A
VOC {lbs/gal} Minus Exempt . . . . .	:	5.601
VOC {lbs/gal} Actual as Supplied . . . . .	:	2.482
VOC {g/L} . . . . .	:	671.16
Evaporation Rate . . . . .	:	6.000 {n-Butyl Acetate = 1}
Volatile by Weight . . . . .	:	87.9579
Volatile by Volume . . . . .	:	94.2957
Weight per Gallon . . . . .	:	7.0009 LB/GL
Coeff of Water-Oil Distribution . . . . .	:	-N/A
Mechanical Impact Explosion . . . . .	:	-N/A
Static Electricity Explosion . . . . .	:	-N/A

SECTION 10 - STABILITY AND REACTIVITY

Hazardous polymerization will not occur.

INCOMPATIBILITIES:

This raw material is incompatible with strong oxidizing agents, strong mineral acids, alkali metals, and halogens.

STABILITY/DECOMPOSITION:

Stable; hazardous decomposition not expected; thermal decomposition may produce toxic oxides of carbon and/or nitrogen.

CONDITIONS TO AVOID:

Contents are EXTREMELY FLAMMABLE. Keep away from heat, sparks and open flame.

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POLYMERIZATION:

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SECTION 11 - TOXICOLOGICAL INFORMATION

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EYE EFFECTS:

This product is severely irritating to eyes, Exposure may cause extensive corneal injury.

SKIN EFFECTS:

This product may cause skin irritation and drying/defatting or cracking, and dermatitis on repeated or prolonged exposure to skin.

ORAL EFFECTS:

Ingestion of this product will cause irritation of the gastrointestinal and may cause effect resembling those from inhalation of vapor.

SWALLOWING: single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects, swallowing large amounts may be harmful.

symptoms may include:

gastrointestinal irritation (nausea, vomiting, diarrhea)

INHALATION EFFECTS:

headaches, nausea, dizziness, and vomiting may occur from inhalation

This product is irritating to the upper respiratory tract.

OTHER:

Vapors of this product may cause irritation of the eyes, nose, throat, upper respiratory tract, mucous membranes, and skin.

This product is irritating to the mucous membranes.

Pulmonary edema may develop with inhalation of high concentrations of this material.

Chronic overexposure to this product may cause kidney and liver injury.

Routes of entry: inhalation; skin contact; eye contact.

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Prolonged exposure could cause CNS depression.

Aspiration can be a hazard if this material is swallowed

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

## SECTION 12 - ECOLOGICAL INFORMATION

## ECOTOXICOLOGICAL INFORMATION/ENVIRONMENTAL FATE:

No definitive information available on environmental impact if product is released to the environment.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of product in accordance with applicable local, county, state, and federal regulations.

Do not incinerate. Depressurize container.

## SECTION 14 - REGULATORY INFORMATION

This product contains the following 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:

## XYLENE

CAS# 1330-20-7 PCT BY WT: 2.4790

## ETHYL 3-ETHOXYPROPIONATE

CAS# 763-69-9 PCT BY WT: 7.5000

## TOLUENE

CAS# 108-88-3 PCT BY WT: 4.2690

## METHYL ISOBUTYL KETONE

CAS# 108-10-1 PCT BY WT: 2.0440

## ETHYL BENZENE

CAS# 100-41-4 PCT BY WT: .5890

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FEDERAL REGULATIONS:

The OSHA Hazard Communication Standard 1910.1200 and the Workplace Hazardous Materials Information System (WHMIS) require that the information contained on these sheets be made available to your workers. Instruct your workers to handle this product properly.

TSCA (Toxic Substance Control Act): All components of this product are listed on the TSCA Inventory.

CA PROPOSITION 65:

WARNING: This product contains a material known in the state of California to cause cancer.

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SECTION 15 - OTHER INFORMATION

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THE INFORMATION CONTAINED HEREIN IS INFORMATION RECEIVED FROM OUR RAW MATERIAL SUPPLIERS AND OTHER SOURCES AND IS BELIEVED TO BE RELIABLE. THIS DATA IS NOT TO BE TAKEN AS A WARRANTY OR REPRESENTATION FOR WHICH I.V.C. INDUSTRIAL COATINGS, INC. ASSUMES LEGAL RESPONSIBILITY.