MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Dille-Koppanyi Reagent**
PRODUCT NUMBER(S): **905 (1006320), 7605 (1006032)** **DATE:** **November 6, 2012**

TRADE NAME: Narcotest & NarcoPouch®
GENERAL USE: Presumptive Test Kit for Barbiturates
CHEMICAL FAMILY: Cobalt Salt+Isopropyl Amine in IPA.
PRODUCT DESCRIPTION:
1st Ampoule – Slight pink color with odor of acetic acid first ampoule. Clear liquid with odor of Isopropylamine (ammonical odor) second ampoule.

MANUFACTURED FOR:
Safariland LLC

DATE PREPARED: **November 6, 2012**
SUPERSEDES: **November 1, 2011**

ADDRESS (NUMBER, STREET, P.O. BOX)
13386 International Parkway

TELEPHONE NUMBER FOR INFORMATION / Customer Service
800-347-1200

(CITY, STATE AND ZIP CODE) COUNTRY
Jacksonville, FL 32218 **USA**

CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER
ChemTel INC. **1-800-255-3924** North America Toll Free
01-813-248-0585 International

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Irritation of eyes, nose, and throat. Splashes in the eyes or on the skin will cause severe skin burns. Inhalation of acid vapors may be injurious to the lungs. Repeated or prolonged exposure to solutions of acid may cause irritation of the skin.

Acetic acid: Causes severe digestive and respiratory tract burns. Causes severe eye and skin burns. Lachrymator (substance which increases the flow of tears). May be harmful if absorbed through the skin. Combustible liquid and vapor. May cause central nervous system depression. May cause reproductive and fetal effects. Target Organs: Kidneys, central nervous system, teeth.

Isopropylamine: Extremely flammable liquid and vapor. Vapor may cause flash fire. Causes eye and skin burns. Causes digestive and respiratory tract burns. Harmful if swallowed, inhaled, or absorbed through the skin. Target Organs: Eyes, skin, mucous membranes.

Cobaltous acetate: Warning! Possible cancer hazard. May cause cancer based on animal data. Causes eye irritation. May cause allergic respiratory and skin reaction. May be harmful if swallowed. May cause skin and respiratory tract irritation. May cause lung damage. Hygroscopic (absorbs moistur
Target Organs: Respiratory system, eyes, skin.

POTENTIAL HEALTH EFFECTS

INHALATION:

Irritation of throat. Inhalation of acid vapors and or Isopropylamine may be injurious to the lungs and with repeated inhalation chronic irritation/inflammation of nose, throat, and bronchial tubes. Isopropylamine irritates mucous membranes and respiratory tract, and causes severe irritation, blisters, and burns on prolonged contact.

SKIN:

Irritation and or burns by direct contact. Delayed onset contact dermatitis is also possible with chronic repeated exposure to both ampoule 1 and ampoule 2 chemicals.

EYES:

Chronic irritation of eyes, corneal burns are possible with exposure to Isopropylamine. (Ampoule 2).

INGESTION:

Severe irritation and ulceration of the gastrointestinal tract. Vomiting and diarrhea are also symptoms.

CARCINOGENICITY:

NTP? **No** IARC MONOGRAPHS? **Yes, CAS# 6147-53-1.** OSHA REGULATED? **No**

CALIFORNIA Prop. 65? **No**
ESIS? **Yes, CAS#6147-53-1, Cobaltous Acetate, EINECS- NR, Limited evidence of carcinogenic effect.**

SECTION 3 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Isopropanol 1st ampoule	**98**	**67-63-0**	**200-661-7**	**F, Xi**	**R11,R36,R67**
Cobaltous Acetate Tetrahydrate 1st ampoule.	**0.5**	**6147-53-1**	**Not referenced**	**Xn**	**R22,R40,R42/43**
Acetic Acid: 1st ampoule	**0.2**	**64-19-7**	**200-580-7**	**C**	**R34**
Isopropanol, 2nd Ampoule	**95%**	**67-63-0**	**200-661-7**	**F, Xi, Xn**	**R11,R36,R67**
Isopropylamine: 2nd Ampoule (cap)	**5%**	**75-31-0**	**200-860-9**	**F+, Xi**	**R12, R36/37/38**

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SECTION 4 - FIRST AID MEASURES

INHALATION:
Remove to fresh air, apply CPR if victim is unconscious, administer oxygen, seek immediate medical attention.

EYES:
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek immediate medical attention.

SKIN:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention.

INGESTION:
If swallowed, give plenty of water to dilute substances, do not induce vomiting; if conscious, give large quantities of water immediately to dilute the Isopropylamine, or Acetic Acid. If vomiting occurs spontaneously keep the head below the waist to avoid aspiration. Call a physician immediately.

SECTION 5 - FIRE FIGHTING MEASURES

GENERAL HAZARDS:
Acetic Acid, 1st Ampoule is corrosive to reactive metals such as aluminum and magnesium with evolution of flammable hydrogen gas. Isopropylamine & Cobalt acetate emit toxic and irritating gases when involved in a fire.

EXTINGUISHING MEDIA:
Use extinguishing media such as water, foam, CO_2 or dry chemical for Isopropanol and Isopropylamine.

FIRE FIGHTING PROCEDURES:
Use NIOSH/MSA or European EN-149 approved respirators rated for acid gases Ampoule 1 or strong bases such as ammonia for Ampoule 2 fires, or SCBA equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Under fire conditions wearing NIOSH/MSA or European EN-149 approved respirators or SCBA's is required.

HAZARDOUS COMBUSTION PRODUCTS:
Acid contact with most metals corrodes them severely and forms flammable hydrogen gas. Contact of acid gas or liquid with any alkali or active metal may develop enough heat to cause a fire in adjacent combustible material.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Wear protective equipment; ventilate area; cover an Acetic Acid spill with sodium carbonate. Add water if necessary to form a slurry. Scoop up slurry. Can use ODV part number 910 soda ash. For Isopropylamine (ampoule 2), eliminate sources of ignition, absorb on paper towels or vermiculite and dispose as hazardous waste.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Store and handle according to packaged instructions. Store in cool, well ventilated area. Keep away from reactive materials and sources of ignition. Avoid breathing Isopropylamine/Isopropyl alcohol vapor and prevent vapor accumulation in enclosed areas.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

	NIOSH				**ACGIH**		OSHA	
HAZARDOUS COMPONENTS	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
Isopropanol 1st&2nd ampoules	**400**	**980**	**500**	**1225**	**200**	**500**	**400**	**980**
Cobaltous Acetate Tetrahydrate 1st ampoule.	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Acetic Acid 1st Ampoule	**10**		**50 IDLH**		**10**		**10**	**25**
Isopropylamine: 2nd Ampoule (cap)	**5**		**750 IDLH**		**5**		**5**	**12**

PERSONAL PROTECTION

RESPIRATORY PROTECTION:
NIOSH/MSA or European EN-149 approved acid gas respirator for a minor acetic acid spill clean-up or a NIOSH/MSA or European EN-149 approved ammonia vapor respirator for minor Isopropylamine spills.

PROTECTIVE GLOVES:
Impervious gloves (neoprene, nitrile) required when any contact potential with contents exists.

EYE PROTECTION:
Do not get in eyes, wear safety glasses with side shield splash protection or chemical goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
An eye wash fountain and safety shower should be readily available where the potential for contact exists.

WORK / HYGIENIC PRACTICES:
Wash thoroughly after handling. Be prepared to neutralize and absorb spilled acid, and to clean up toxic Isopropylamine.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR **1st Ampoule – Slight pink color with odor of Acetic Acid first ampoule. Clear liquid with odor of Isopropylamine (ammonical odor) second ampoule.**	VAPOR PRESSURE **478.0 mm Hg (Isopropylamine).**
VOC **NE** Volatility **NE**	SPECIFIC GRAVITY (WATER = 1) **0.694 (Isopropylamine).**
BOILING POINT / BOILING RANGE **33-34°C Isopropylamine.**	SOLUBILITY IN WATER **Soluble**
FLASH POINT **40-50°F for (Ampoule 2) (calculated)**	VISCOSITY **NA**
FLAMMABLE LIMITS Isopropylamine. LEL: **2.30%** UEL: **12%**	VAPOR DENSITY (AIR = 1) **2**
AUTO-IGNITION TEMPERATURE **399°C Isopropanol.**	EVAPORATION RATE BUTYL ACETATE = 1) **NE**

SECTION 10 - STABILITY AND REACTIVITY

STABILITY STABLE **X**	CONDITIONS TO AVOID: **Excessive heat, contact with incompatible materials, such as reactive metals, strong acids, and strong oxidizers.**

INCOMPATIBILITY (MATERIALS TO AVOID):
Acid contact with most metals corrodes them severely and forms flammable hydrogen gas. Contact of acid gas or liquid with any alkali or active metal may develop enough heat to cause a fire in adjacent combustible material.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
Toxic gases and vapors (such as oxides of nitrogen and carbon monoxide) may be released in a fire involving Isopropylamine. Metal fumes from strongly heated cobalt acetate are toxic and a possible cancer hazard.

HAZARDOUS POLYMERIZATION: **Will not occur.**	CONDITIONS TO AVOID: **None related to polymerization.**

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Isopropanol 1st&2nd ampoules	**67-63-0** **200-661-7**	**Oral, mouse: 3600 mg/kg**	**Inhalation, Mouse: 53000 mg/m3.**
Cobaltous Acetate Tetrahydrate 1st ampoule.	**6147-53-1** **NR**	**Oral, rat: LD50 = 708 mg/kg.**	**NE**
Acetic Acid 1st ampoule	**64-19-7** **200-580-7**	**Oral, rat: LD50 = 3310 mg/kg;**	**Inhalation, mouse: LC50 = 5620 ppm/1H**
Isopropylamine, 2nd Ampoule	**75-31-0** **200-860-9**	**Oral, rat LD50=111mg/kg**	**Inhalation rat LC50=4000ppm/4hour.**

SECTION 12 - ECOLOGICAL INFORMATION

For Isopropylamine: Ecotoxicity: Water flea Daphnia: EC50 = 91.5-91.6 mg/L; 48 Hr; Unspecified Based on the vapor pressure, isopropylamine should rapidly evaporate from dry surfaces, especially when present in high concn. such as in spill situations. The miscibility of isopropylamine in water suggests that adsorption and bioconcentration, in addition to volatilization, are not important fate processes. This is supported by low estimates for the bioconcentration factor (log BCF = 0.43) and soil adsorption coefficient (Koc = 33).
Environmental: Isopropylamine has the potential to bind to soil and partition from the water column to sediments and suspended solids. Limited data suggests isopropylamine should biodegrade rapidly in soil and water; however, it may be toxic to micro-organisms at high concn. isopropylamine is expected to exist almost entirely in the vapor phase in ambient air, where vapor phase reactions with photochemically produced hydroxyl radicals may be important (estimated half-life of 10 hrs).
For Acetic Acid: Ecotoxicity: Fish: Fathead Minnow: LC50 = 88 mg/L; 96 Hr; Static bioassay @ 18-22°CFish: Bluegill/Sunfish: LC50 = 75 mg/L; 96 Hr; UnspecifiedFish: Goldfish: LC50 = 423 mg/L; 24 Hr; UnspecifiedWater flea Daphnia: EC50 = 32-47 mg/L; 24-48 Hr; UnspecifiedBacteria: Phytobacterium phosphoreum: EC50 = 8.86-11 mg/L; 5,15,25 min; Microtox test If released to water or soil, acetic acid will biodegrade readily. Evaporation from dry surfaces is likely to occur. When spilled on soil, the liquid will spread on the surface and penetrate into the soil at a rate dependent on the soil type and its water content. Acetic Acid shows no potential for biological accumulation or food chain contamination.
Environmental: If released to the atmosphere, it is degraded in the vapor-phase by reaction with photochemically produced hydroxyl radicals (estimated typical half-life of 26.7 days). It occurs in atmospheric particulate matter in acetate form and physical removal from air can occur via wet and dry deposition.
Physical: Natural waters will neutralize dilute solutions to acetate salts.
For Cobaltous Acetate Tetrahydrate: Ecotoxicity: No data available. No information available.
Environmental: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Physical: No information available.

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SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Do not allow isopropylamine or isopropanol to enter a sewer because of the possibility of an explosion.

SECTION 14 - TRANSPORT INFORMATION

GROUND SHIPMENT WITHIN USA (DOT):

PROPER SHIPPING NAME: **None - Exempted Qty.**

CLASS/ PACK GROUP/ LABELING: **Class 3 with Excepted Qty. marking on package. No class 3 abel required.**

NOTES: **When shipped under 49CFR173.4a, This product is exempt from other labeling and waybill requirements.**

GROUND SHIPMENTS TO AND WITHIN CANADA (TDG):

PROPER SHIPPING NAME: **None - Limited Quantity (within Canada), See above for US to Canada**

CLASS/ PACK GROUP/ LABELING: **Phrase "Ltd. Qty." on package. No additional requirements.**

NOTES: **TDG only used for shipment within Canada, shipments from the US can follow DOT regulations. See TDG Sections 1.17 and 9.**

AIR SHIPMENTS (ICAO/IATA):

PROPER SHIPPING NAME: **None - (Classified under UN1219 Isopropanol Solution - Excepted Qty. E2)**

CLASS/ PACK GROUP/ LABELING: **Class 3 with Excepted Qty. marking on package. No class 3 abel required.**

NOTES: **This product is exempt from other labeling and waybill requirements.**

OCEAN SHIPMENTS (IMDG):

PROPER SHIPPING NAME: **None**

CLASS/ PACK GROUP/ LABELING: **Class 3 with Excepted Qty. marking on package. No class 3 label required.**

NOTES: **Shipping Paper required with statement "Dangerous Goods in Excepted Quantities" and number of packages.**

ALL SHIPMENTS EXCEEDING EXCEPTED QUANTITY / ALTERNATIVE SHIPPING INFORMATION:

PROPER SHIPPING NAME: **UN 3316, Chemical Kit**

CLASS/ PACK GROUP/ LABELING: **Class 9, Pack Group III. Miscellaneous Label**

NOTES: **Full documentation required.**

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, TDG & UN information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping. **Information above does not account for overpacks or outer packings with multiple hazardous materials; consult shipper when multiple materials are shipped. Consult regulations for maximum outer packaging and overpack requirements**

SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): **Ingredients are listed.**

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):

Acute Health:	**Yes**	Chronic Health:	**Yes**
Fire:	**Yes**	Sudden Release of Pressure:	**No**
Reactive:	**No**		

313 REPORTABLE INGREDIENTS: This material contains Cobalt (II) acetate, tetrahydrate (listed as Cobalt compounds), 0.5%, (CAS# 6147-53-1) and 2-propanol (Isopropanol) CAS#67-63-0 98% which are subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

CERCLA (USA - Comprehensive Response Compensation and Liability Act): **CAS# 64-19-7: 5000 lb final RQ; 2270 kg final RQ.**

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: **None listed.**

State Right to Know: **Cobaltous Acetate Tetrahydrate: NJ,PA, ; Isopropanol: NJ,PA ; Isopropyl Amine (2-Aminopropane):MA,NJ,PA, Acetic Acid: MA,NJ,PA.**

CIDL (Canadian Ingredient Disclosure List): **Listed.**

CDSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): **Listed on CDSL.**

EINECS (European Inventory of Existing Commercial Chemical Substances): **Cobaltous Acetate Tetrahydrate not referenced.**

WGK Water Quality Index: **2 (overall 2 ampoules).**

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SECTION 15 - REGULATORY INFORMATION (Continued)

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:
R11: Highly Flammable. **R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.** **R23: Toxic by inhalation.** **R34: Causes burns.** **R36/37/38: Irritating to eyes, respiratory system and skin.** **R40: Limited evidence of carcinogenic effect.** **R42/43: May cause sensitization by inhalation and skin contact.** **R67: Vapors may cause drowsiness and dizziness.**	 **(+Xn)/(+Xi):Harmful/Irritant**  **(+C): Corrosive**  **(+F): Highly Flammable**  **(+N) Dangerous for the environment**	**<u>For Ampoule #1:</u>** **S1: Keep out of the reach of children.** **S9: Keep container in a well ventilated place.** **S16: Keep away from sources of ignition-No smoking.** **S23: Do not inhale gas/fumes/vapor/spray.** **S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.** **S29: Do not empty into drains.** **S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.** **S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).** **<u>For Ampoule #2:</u>** **S1: Keep out of the reach of children.** **S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.** **S29: Do not empty into drains.** **S36/37: Wear suitable protective clothing and gloves.**

SECTION 16 - OTHER INFORMATION

Legend

N/A = Not Applicable | N/D = Not Determined | N/E = Not Established | N/R = Not Reported

HMIS HAZARD RATINGS	HEALTH:	**3**	0 = INSIGNIFICANT
	FLAMMABILITY:	**3**	1 = SLIGHT
	PHYSICAL HAZARD:	**1**	2 = MODERATE
	PERSONAL PROTECTIVE EQUIPMENT:	**H**	3 = HIGH
			4 = EXTREME

REVISION SUMMARY:

Revised 11/6/2012. LB Transport separated by type.

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