



## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME: NIK Test Q - # 6085</b>		<b>DATE: October 10, 2008</b>	
<b>PRODUCT NUMBER(S): 6085</b>			
TRADE NAME: Test Q – Ephedrine Order No. 6085 GENERAL USE: Presumptive Test Kit for Ephedrine. CHEMICAL FAMILY: Copper Salt+Isopropyl Amine in Methanol.  PRODUCT DESCRIPTION: 1st Ampoule – Clear, aqua liquid with vinegar odor first ampoule. Clear, colorless liquid second ampoule.			
<b>MANUFACTURED FOR: Safariland LLC</b>		<b>DATE PREPARED: October 10, 2008</b>	
		<b>SUPERSEDES: April 15, 2008</b>	
<b>ADDRESS (NUMBER, STREET, P.O. BOX)</b>		<b>TELEPHONE NUMBER FOR INFORMATION / Customer Service</b>	
<b>13386 International Parkway</b>		<b>904-741-5400</b>	
<b>(CITY, STATE AND ZIP CODE)</b>		<b>CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER</b>	
<b>Jacksonville, FL 32218</b>		<b>USA</b>	
			
		<b>1-800-255-3924</b> <b>01-813-248-0585</b> North America Toll Free      International	

## SECTION 2 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
<b>Copper Sulfate, 1st Ampoule</b>	<b>1</b>	<b>7758-98-7</b>	<b>231-847-6</b>	<b>(+Xn),(+N)</b>	<b>R22, R42/43, R50/53</b>
<b>Glacial Acetic Acid, 1st Ampoule</b>	<b>1</b>	<b>64-19-7</b>	<b>200-580-7</b>	<b>(+C)</b>	<b>R34</b>
<b>Methanol, 2nd Ampoule</b>	<b>&gt;90</b>	<b>67-56-1</b>	<b>200-659-6</b>	<b>(+F),(+T)</b>	<b>R11, R23/24/25, R39/23/24/25.</b>
<b>Isopropylamine, 2nd Ampoule</b>	<b>1-10</b>	<b>75-31-0</b>	<b>200-860-9</b>	<b>(+F),(Xi)</b>	<b>R12, R36/37/38</b>

Notes: Hazard symbols and risk phrases based on maximum listed concentration of each hazardous ingredient.

## SECTION 3 - 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. 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.

**Copper Sulfate: Warning!** Causes irritation and possible burns by all routes of exposure. Harmful if swallowed. Hygroscopic (absorbs moisture from the air). Severe marine pollutant. **Target Organs:** Blood, kidneys, liver.

**Methanol: Warning!** May be fatal or cause blindness if ingested. May be harmful if inhaled or absorbed through skin. May cause CNS depression, kidney and liver damage. Medical Conditions Aggravated by Exposure: Skin, eye, respiratory, liver, kidney, and CNS diseases.

### 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. Methanol causes Cough. Dizziness. Headache. Nausea. Weakness. Visual disturbance. May be harmful if inhaled.

**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). Methanol is toxic to eyes.

**INGESTION:**  
Severe irritation and ulceration of the gastrointestinal tract. Vomiting and diarrhea are also symptoms. Will cause CNS depression, kidney, liver and eye damage if ingested. Very toxic by ingestion! Shortness of breath. Vomiting. Convulsions. Unconsciousness. (Further see Inhalation).

**CARCINOGENICITY:**

NTP?	<b>No</b>	IARC MONOGRAPHS?	<b>No</b>	OSHA REGULATED?	<b>No</b>
CALIFORNIA Prop. 65?	<b>No</b>				
ESIS?	<b>No</b>				

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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 emits toxic and irritating gases when involved in a fire.

**EXTINGUISHING MEDIA:**  
Use extinguishing media such as water, foam, CO2 or dry chemical for Methanol 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 / Methanol vapor and prevent vapor accumulation in enclosed areas.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH			ACGIH		OSHA		
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
<b>Methanol, 2nd Ampoule</b>	<b>200</b>		<b>6000 IDLH</b>		<b>200</b>		<b>200</b>	
<b>Copper Sulfate, 1st Ampoule</b>		<b>1</b>	<b>NE</b>	<b>100 IDLH</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>
<b>Acetic Acid, 1st Ampoule</b>	<b>10</b>		<b>50 IDLH</b>		<b>10</b>		<b>10</b>	<b>25</b>
<b>Isopropylamine, 2nd Ampoule</b>	<b>5</b>		<b>750 IDLH</b>		<b>5</b>		<b>5</b>	<b>12</b>

### 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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<b>SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES</b>			
<b>APPEARANCE AND ODOR</b> 1st Ampoule – Clear, aqua liquid with vinegar odor first ampoule. Clear, colorless liquid second ampoule.		<b>VAPOR PRESSURE</b> NE	
VOC      NE      Volatility      NE		<b>SPECIFIC GRAVITY (WATER = 1)</b> NE	
<b>BOILING POINT / BOILING RANGE</b> 33-34°C Isopropylamine.		<b>SOLUBILITY IN WATER</b> Soluble	
<b>FLASH POINT</b> 50-60°F (10-15°C) Calculated		<b>VISCOSITY</b> NA	
<b>FLAMMABLE LIMITS</b> LEL: NE                      UEL: NE		<b>VAPOR DENSITY (AIR = 1)</b> 2	
<b>AUTO-IGNITION TEMPERATURE</b> NE		<b>EVAPORATION RATE BUTYL ACETATE = 1)</b> NE	
<b>SECTION 10 - STABILITY AND REACTIVITY</b>			
<b>STABILITY</b> STABLE <b>X</b>		<b>CONDITIONS TO AVOID:</b> Excessive heat, contact with incompatible materials, such as reactive metals, strong acids, and strong oxidizers.	
<b>INCOMPATIBILITY (MATERIALS TO AVOID):</b> 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.			
<b>HAZARDOUS DECOMPOSITION OR BYPRODUCTS:</b> Toxic gases and vapors (such as oxides of Nitrogen and Carbon Monoxide) may be released in a fire involving Isopropylamine.			
<b>HAZARDOUS POLYMERIZATION:</b> Will not occur.		<b>CONDITIONS TO AVOID:</b> None related to polymerization.	
<b>SECTION 11 - TOXICOLOGICAL INFORMATION</b>			
Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Methanol, 2nd Ampoule	67-56-1	Oral LD50 Rat = 5,600mg/Kg. Oral LDLo Human = 143mg/kg.	Inhalation LD-Lo Human=300ppm.
	200-659-6		
Copper Sulfate, 1st Ampoule	7758-98-7	Oral, mouse: LD50 = 43 mg/kg. Oral, rat: LD50 = 300 mg/kg.	NE
	231-847-6		
Acetic Acid, 1st Ampoule	64-19-7	Oral, rat: LD50 = 3310 mg/kg.	Inhalation, mouse: LC50 = 5620 ppm/1H
	200-580-7		
Isopropylamine, 2nd Ampoule	75-31-0	Oral, rat LD50 = 111mg/kg.	Inhalation rat: LC50 = 4000ppm/4hour.
	200-860-9		

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## 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 Methanol: Ecotoxicity:** Fish toxicity: Lepomis macrochirus LC50: 15400 mg/l/96 h (in soft water);  
 Daphnia toxicity: Daphnia magna EC50: >10000 mg/l/48 h;  
 Maximum permissible toxic concentration:  
 Algal toxicity: Scenedesmus quadricauda IC5: 8000 mg/l/8 d;  
 Bacterial toxicity: Pseudomonas putida EC5: 6600 mg/l/16 h;  
 Protozoa: Entosiphon sulcatum EC5: >10000 mg/l/72 h.

**For Acetic Acid: Ecotoxicity:** Fish: Fathead Minnow: LC50 = 88 mg/L; 96 Hr; Static bioassay @ 18-22°C Fish: Bluegill/Sunfish: LC50 = 75 mg/L; 96 Hr; Unspecified Fish: Goldfish: LC50 = 423 mg/L; 24 Hr; Unspecified Water flea Daphnia: EC50 = 32-47 mg/L; 24-48 Hr; Unspecified Bacteria: 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 Copper Sulfate: Ecotoxicity:** Fish: Rainbow trout: LC50 = 0.1-2.5 mg/L; 96 Hr; Unspecified Fish: Bluegill/Sunfish: LC50 = 0.6 mg/L; 48 Hr; 15 mg/L CaCO3 Fish: Bluegill/Sunfish: LC50 = 8.0 mg/L; 48 Hr; 68 mg/L CaCO3 Fish: Bluegill/Sunfish: LC50 = 10.0 mg/L; 48 Hr; 100 mg/L CaCO3 Fish: Bluegill/Sunfish: LC50 = 45.0 mg/L; 48 Hr; 132 mg/L CaCO3 In soil, Copper Sulfate is partly washed down to lower levels, partly bound by soil components, and partly oxidatively transformed. Copper has a strong affinity for hydrous iron and manganese oxides, clays, carbonate minerals, and organic matter. Sorption to these materials ... suspended in the water column & in the bed sediments, results in relative enrichment of the solid phase and reduction in dissolved levels.


**Environmental:** Copper is accumulated by plants and animals, but it does not appear to biomagnify from plants to animals. This lack of biomagnification appears common with heavy metals. In air, copper aerosols (in general) have a residence time of 2 to 10 days in an unpolluted atmosphere and 0.1 to > 4 days in polluted, urban areas.

## 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

<b>PROPER SHIPPING NAME:</b> Chemical kit, UN 3316	
<b>DOT HAZARD CLASS / Pack Group:</b> 9, PGII	<b>IATA HAZARD CLASS / Pack Group:</b> 9, PGII
<b>REFERENCE:</b> 49CFR	<b>IMDG HAZARD CLASS:</b> 9
<b>UN / NA IDENTIFICATION NUMBER:</b> UN 3316	<b>RID/ADR Dangerous Goods Code:</b> UN 3316, 9
<b>LABEL:</b> Miscellaneous dangerous goods.	<b>UN TDG Class / Pack Group:</b> UN 3316/ PGII
<b>HAZARD SYMBOLS:</b>	<b>Hazard Identification Number (HIN):</b> 886
	

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

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## 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**      Reactive: **No**  
 Fire: **Yes**      Sudden Release of Pressure: **No**

**313 REPORTABLE INGREDIENTS:** This material contains **Methanol CAS#67-56-1** which is 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. CAS# 67-56-1: 5000 lb final RQ; 2270 kg final RQ.**

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





CCPR (Canadian Controlled Products Regulations): **Listed.**

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): **Referenced.**

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

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:
<p><b>R11:</b> Highly flammable.  <b>R20/21/22:</b> Harmful by inhalation, in contact with skin and if swallowed.  <b>R23:</b> Toxic by inhalation.  <b>R34:</b> Causes burns.  <b>R23/24/25:</b> Toxic by inhalation, in contact with skin, and if swallowed.  <b>R36/38:</b> Irritating to eyes and skin.  <b>R36/37/38:</b> Irritating to eyes, respiratory system and skin.  <b>R42/43:</b> May cause sensitization by inhalation and skin contact.  <b>R39/23/24/25:</b> Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.  <b>R50/53:</b> Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p>	 (+Xn)/(+Xi): Harmful/Irritant   (+C): Corrosive   (+F): Highly Flammable   (+N): Dangerous for the environment	<p><b>S1:</b> Keep out of the reach of children.  <b>S7:</b> Keep container tightly closed.  <b>S9:</b> Keep container in a well ventilated place.  <b>S16:</b> Keep away from sources of ignition - No smoking.  <b>S23:</b> Do not inhale gas/fumes/vapor/spray.  <b>S26:</b> In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  <b>S29:</b> Do not empty into drains.  <b>S36/37/39:</b> Wear suitable protective clothing, gloves and eye/face protection.  <b>S45:</b> In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  <b>S53:</b> Avoid exposure - obtain special instructions before use.  <b>S61:</b> Avoid release to the environment. Refer to special instructions/safety data sheets.</p>

## SECTION 16 - OTHER INFORMATION

**Legend:** N/A = Not Applicable    N/D = Not Determined    N/E = Not Established    N/R = Not Reported

<p>HMIS HAZARD RATINGS</p>	<p>HEALTH: <b>3</b>                  FLAMMABILITY: <b>3</b>                  PHYSICAL HAZARD: <b>1</b>                  PERSONAL PROTECTIVE EQUIPMENT: <b>B</b></p>	<p>0 = INSIGNIFICANT                  1 = SLIGHT                  2 = MODERATE                  3 = HIGH                  4 = EXTREME</p>
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REVISION SUMMARY: Revised 10/10/2008 to GHS/EU protocols, supersedes 04/15/2008 issue. JTV.

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.