



# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME:</b> Psilocybin Reagent		<b>DATE:</b> August 1, 2011	
<b>PRODUCT NUMBER(S):</b> 929 (1006348), 7629 (1006052)			
<b>TRADE NAME:</b> Psilocybin/Mushroom Test <b>GENERAL USE:</b> Psilocybin/Mushroom Test <b>CHEMICAL FAMILY:</b> PDMB/HCl/ETOH <b>PRODUCT DESCRIPTION:</b> 1st Ampoule – Clear liquid; 2nd ampoule – Clear fuming liquid acid odor (Hydrochloric Acid).			
<b>MANUFACTURED FOR:</b> <b>Safariland LLC</b>		<b>DATE PREPARED:</b> August 1, 2011	
		<b>SUPERSEDES:</b> September 23, 2008	
<b>ADDRESS (NUMBER, STREET, P.O. BOX)</b> 13386 International Parkway		<b>TELEPHONE NUMBER FOR INFORMATION / Customer Service</b> 800-347-1200	
<b>(CITY, STATE AND ZIP CODE)</b> Jacksonville, FL 32218		<b>CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER</b>  1-800-255-3924      01-813-248-0585 North America Toll Free      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 dilute solutions of acid may cause irritation of the skin. Repeated or prolonged exposure to mists or vapors of Hydrochloric Acid may cause erosion of teeth, chronic irritation of the eyes, or chronic inflammation of the nose, throat, and bronchial tubes.

### POTENTIAL HEALTH EFFECTS

**INHALATION:**  
 Irritation of throat. Inhalation of acid vapors may be injurious to the lungs and with repeated inhalation chronic irritation/inflammation of nose, throat, and bronchial tubes.

**SKIN:**  
 Irritation and or burns by direct contact. Delayed onset contact dermatitis is also possible with chronic repeated exposure to all three ampoules.

**EYES:**  
 Chronic irritation of eyes, corneal burns are possible with exposure to Hydrochloric Acid.

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

**CARCINOGENICITY:**  
 NTP? **No**      IARC MONOGRAPHS? **No**      OSHA REGULATED? **No**  
 CALIFORNIA, Prop.65? **No**      **Ethanol-Reproductive toxicity Human Female Oral Route.**

## SECTION 3 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
<b>Ethanol, 1st ampoule</b>	<b>&gt;90</b>	<b>64-17-5</b>	<b>200-578-6</b>	<b>F</b>	<b>R11</b>
<b>p-Dimethylaminobenzaldehyde, 1st ampoule</b>	<b>3-6</b>	<b>100-10-7</b>	<b>202-819-0</b>	<b>Xn,</b>	<b>R22, R52/53</b>
<b>Hydrochloric Acid, 2nd Ampoule</b>	<b>100%</b>	<b>7647-01-0</b>	<b>231-595-7</b>	<b>C+, T, Xi</b>	<b>R23, R35, R37</b>

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

## 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 or milk of magnesia immediately to dilute the acidic solutions. If vomiting occurs spontaneously, keep the head below the waist to avoid aspiration. Call a physician immediately.

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## SECTION 5 - FIRE FIGHTING MEASURES

**GENERAL HAZARDS:**  
 Hydrochloric Acid, 2nd Ampoule is highly corrosive to most metals with evolution of flammable Hydrogen gas. The Ethanol in the first ampoule is highly flammable.

**EXTINGUISHING MEDIA:**  
 Use extinguishing media appropriate for surrounding fire and foam, CO<sub>2</sub> or dry chemical for Ethanol in Ampoule 1.

**FIRE FIGHTING PROCEDURES:**  
 Under fire conditions wearing NIOSH/MSA or European EN-149 approved SCBA's or acid gas=organic vapor respirators is required.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**  
 Toxic and corrosive fumes may form from heated ampoules.

**HAZARDOUS COMBUSTION PRODUCTS:**  
 Hydrogen Chloride gas, other organo-halogens, nitrogen oxides, and organic vapors.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**  
 Wear protective equipment; ventilate area; cover a Hydrochloric Acid spill with sodium carbonate. Add water if necessary to form a slurry. Scoop up slurry. Can use ODV part number 910 soda ash.

## 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. Avoid breathing vapor and prevent vapor accumulation in enclosed areas.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH			ACGIH		OSHA	
	TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>	TLV/TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm
<b>Ethanol, 1st ampoule</b>	<b>1000</b>	<b>1900</b>			<b>1000</b>		<b>1000</b>
<b>p-Dimethylaminobenzaldehyde, 1st ampoule</b>	<b>NE</b>		<b>NE</b>		<b>NE</b>		<b>NE</b>
<b>Hydrochloric Acid, 2nd Ampoule.</b>	<b>2</b>			<b>50 IDLH</b>		<b>2</b>	<b>5</b>

## PERSONAL PROTECTION

**RESPIRATORY PROTECTION:**  
 Not generally needed for field use as a test kit. NIOSH/MSA or European EN-149 approved acid gas respirator for a minor Hydrochloric Acid spill clean-up.

**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.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE AND ODOR</b> 1st Ampoule – Clear liquid; 2nd ampoule – Clear fuming liquid acrid odor (Hydrochloric Acid).	<b>VAPOR PRESSURE</b> 212mm Hg @ 20° C (68°F) {Hydrochloric Acid}
VOC <b>NE</b> Volatility <b>NE</b>	<b>SPECIFIC GRAVITY (WATER = 1)</b> Dependent upon ampoule.
<b>BOILING POINT / BOILING RANGE</b> NR	<b>SOLUBILITY IN WATER</b> NR
<b>FLASH POINT</b> 56°F for Ethanol (Ampoule 1)	<b>VISCOSITY</b> NA
<b>FLAMMABLE LIMITS</b> LEL: NR                      UEL: NR	<b>VAPOR DENSITY (AIR = 1)</b> 1.3 (Hydrochloric Acid)
<b>AUTO-IGNITION TEMPERATURE</b> NR	<b>EVAPORATION RATE BUTYL ACETATE = 1)</b> NE

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## SECTION 10 - STABILITY AND REACTIVITY

**STABILITY** STABLE **X** **CONDITIONS TO AVOID:**  
 Excessive heat, light exposure, contact with incompatible materials.

**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:**  
 Hydrogen Chloride gas, nitrogen oxides, organo-halogens, and organic vapors.

**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)
Ethanol, 1st ampoule	64-17-5	Oral, mouse: LD50 = 3450 mg/kg.	NE
	200-578-6		
p-Dimethylaminobenzaldehyde, 1st ampoule	100-10-7	Oral, mouse: LD50 = 800 mg/kg.	NE
	202-819-0		
Hydrochloric Acid, 2nd Ampoule	7647-01-0	Oral, rabbit: LD50 = 900 mg/kg.	Inhalation, rat: LC50 = 3124 ppm/1H.
	231-595-7		

## SECTION 12 - ECOLOGICAL INFORMATION


Information for the combined ingredients is not available, but benzene derivatives such as p-dimethylamino-benzaldehyde are considered to be harmful to the environment. Hydrochloric Acid will dissolve soil components (especially carbonates), which will neutralize much of the acidity. There is expected to be no long-term accumulation of these materials. Ethanol is expected to evaporate rapidly and not bioaccumulate.

## 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.

## SECTION 14 - TRANSPORT INFORMATION

**PROPER SHIPPING NAME:** Not Regulated\* (USA Ground), Chemical Kit UN 3316 (Intl./Air/Sea)

<p><b>DOT HAZARD CLASS / Pack Group:</b> Not Regulated</p> <p><b>REFERENCE:</b></p> <p><b>UN / NA IDENTIFICATION NUMBER:</b> 2922</p> <p><b>LABEL:</b> Miscellaneous Materials (9)</p> <p><b>HAZARD SYMBOLS:</b></p> <div style="text-align: center;">  </div>	<p><b>IMDG HAZARD CLASS:</b> 9</p> <p><b>RID/ADR Dangerous Goods Code:</b> 9</p> <p><b>TDG Dangerous Goods Code:</b> 9</p> <p><b>Hazard Identification Number (HIN):</b> 90</p> <p><b>IATA HAZARD CLASS / Pack Group:</b> 9 / II</p> <p>* - Excepted Quantity under 49CFR173.4(b) for ground and rail shipments in the USA only.</p>
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**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):		<b>Ingredients are listed.</b>	
SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):			
Acute Health:	<b>Yes</b>	Chronic Health:	<b>Yes</b>
Fire:	<b>Yes</b>	Sudden Release of Pressure:	<b>No</b>
Reactive:	<b>No</b>		

**313 REPORTABLE INGREDIENTS:** This material contains Hydrogen Chloride (CAS# 7647-01-0 32-38%) 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): **AS# 7647-01-0: 5000 lb final RQ; 2270 kg final RQ.**

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

State Right to Know: **Ethanol: MA,NJ,PA, Hydrochloric Acid: MA,NJ,PA,RI, ; 4-Dimethylaminobenzaldehyde: NJ,PA.**





CCPR (Canadian Controlled Products Regulations): **Not Listed.**

CIDL (Canadian Ingredient Disclosure List): **Not listed.**

CDSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): **Not Listed on CDSL.**

EINECS (European Inventory of Existing Commercial Chemical Substances): **Referenced.**

WGK Water Quality Index: **2**

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:
R11: Highly Flammable. R22: Harmful if swallowed. R23: Toxic by inhalation. R32: Contact with acids liberates very toxic gas. R35: Causes severe burns. R37: Irritating to respiratory system. R38: Irritating to skin. R48/20/22: Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	 Xn/Xi - Harmful/Irritant   T-Toxic   C+ - Corrosive   F- Highly Flammable	S1/2: Keep locked up and out of the reach of children. S9: Keep container in a well ventilated place. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 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).

## SECTION 16 - OTHER INFORMATION

**Legend:** NA = Not Applicable ND = Not Determined NE = Not Established NR = Not Reported

<b>HMIS HAZARD RATINGS</b>	HEALTH:	<b>3</b>	0 = INSIGNIFICANT
	FLAMMABILITY:	<b>3</b>	1 = SLIGHT
	PHYSICAL HAZARD:	<b>1</b>	2 = MODERATE
	PERSONAL PROTECTIVE EQUIPMENT:	<b>C</b>	3 = HIGH
			4 = EXTREME

**REVISION SUMMARY:**  
 Revised 8/1/2011 to EU protocols, supersedes 9/23/2008 issue. LB/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.