Cat# BN00396 -30, -125 Acid Fast Bacteria Stain Kit

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Acid Fast Bacteria Stain Kit

PRODUCT CODES: Cat# BN00396 -30, -125

MANUFACTURER: Assay Genie (brand of Reagent Genie Ltd.)

ADDRESS: G1 The Steelworks, Foley Street, Dublin 1

EMERGENCY PHONE: +353 1 8879802

SECTION 2: HAZARDS IDENTIFICATION

Component	Description	Volume	Safety Information
Carbol Fuchsin Solution	Contains EtOH and Phenol	BN00396-30: 30 ml BN00396-125: 125ml	See below
Acid Alcohol Solution (0.5%)	Contains EtOH	BN00396-30: 2x30 ml BN00396-125: 500ml	See below
Light Green Solution	Liquid	BN00396-30: 30 ml BN00396-125: 125ml	No hazards

Ethanol:

Emergency Overview

GHS Classification: Flammable liquids (Category 2) Skin irritation (Category 2)

Eye irritation (Category 2B) Specific target organ toxicity - single exposure (Category 3)

GHS Label elements, including precautionary statements



Pictogram:

Signal word: Danger

H225 Highly flammable liquid and vapor Hazard statement(s):

H315+H320 Causes skin and eye irritation. H335 May cause respiratory irritation.

Precautionary statement(s): P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

HMIS Classification Health hazard: 2 Chronic health hazard: * Flammability: 3

Physical hazards: 0

NFPA Rating

Health Hazard: 2

Fire: 3

Reactivity Hazard: 0 **Potential Health Effects**

> Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. **Skin:** May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

Phenol:

Emergency Overview

OSHA Hazards: Target organ effect, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption, Corrosive, Mutagen

Target Organs: Central nervous system, Kidney, Liver, Pancreas, Spleen

Other hazards which do not result in classification: Rapidly absorbed through skin, Vessicant

GHS Classification: Acute toxicity, Oral (Category 3)

Acute toxicity, Inhalation (Category 3) Acute toxicity, Dermal (Category 3)

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Skin corrosion (Category 1B) Serious eye damage (Category 1) Germ cell mutagenicity (Category 2)

Specific target organ toxicity – single exposure (Category 2) Specific target organ toxicity – repeated exposure (Category 2)

Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements

Pictogram:

Signal word: Danger

Hazard statement(s): H301+H311 Toxic if swallowed or in contact with skin.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

H341 Suspected of causing genetic defects. H371 May cause damage to organs.

H373 May causes damage to organs through prolonged or repeated exposure.

H402 Harmful to aquatic life.

Precautionary statement(s): P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin

with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P307+P311 IF exposed: Call a POISON CENTER or doctor/physician. P310 Immediately call a POISON CENTER or doctor/physician.

HMIS Classification

Health hazard: 3 Fire hazard: * Flammability: 0 Physical hazards: 0

NFPA Rating

Health Hazard: 3

Fire: 2

Reactivity Hazard: 0 Potential Health Effects

Inhalation: Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin: Toxic if absorbed through skin. Causes skin burns.

Eyes: Causes eye burns. **Ingestion:** Toxic if swallowed.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula
Ethanol	64-17-5	200-578-6	46.07	C ₂ H ₆ O
Phenol	108-95-2	203-632-7	94.11	C ₆ H ₆ O

SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

Ethanol:

Condition of flammability: Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products: Hazardous decomposition products formed under fire conditions—see section 10.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhause ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: RT.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ethanol:

Components	CAS-No.	Value	Control parameters	Basis	
Ethanol	64-17-5	TWA	1,000 ppm	USA. ACGIH Threshold Limit Values (TLV)	
Remarks: U	Remarks: Upper respiratory tract irritation. Confirmed animal carcinogen with unknown relevance to humans.				
		TWA	1,000 ppm	USA. OSHA: TABLE Z-1 Limits for Air	
		TVVA	1,900 mg/m ³	Contaminants – 1910.1000	
		1,000 ppm	TWA	USA. Occupational Exposure Limits (OSHA): Table Z-1 Limits for Air	
		TVVA	1,900 mg/m ³	Contaminants	
The value in mg/m³ is approximate.					
		TWA	1,000 ppm 1,900 mg/m ³	USA. NIOSH recommended exposure limits	

Phenol:

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Components	CAS-No.	Value	Control parameters	Basis
Phenol	108-95-2	TWA	5 ppm	USA. ACGIH Threshold Limit Values (TLV)
Remarks:	Central nervous system impairment, upper respiratory tract irritation, lung damage. Substances for which there is a Biological Exposure Index or Indices. Not classifiable as a human carcinogen. Danger of cutaneous absorption.			
		TWA	5 ppm 19 mg/m³	USA. OSHA – Table Z-1 Limits for Air Contaminants – 1910.1000
	Skin notation.			
		STEL	5 ppm 19 mg/m³	USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants
	Skin designation. The value in mg/m³ is approximate.			
		TWA	5 ppm 19 mg/m³	USA. NIOSH recommended exposure limits
	Potential for dermal absorption. 15 minute ceiling value.			
		С	15.6 ppm 60 mg/m³	USA. NIOSH recommended exposure limits
	Potential for dermal absorption. 15 minute ceiling value.			

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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Eye protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Ethanol Phenol		
Appearance:	Clear liquid	Solid	
pH:	No data available	6.0	
Water Solubility:	Completely soluble	No data available	
Other Solubility:	No data available	No data available	
Boiling Point (°C):	78-80 °C (172.4-176 °F)	182 °C (360 °F)	
Melting Point (°C):	-144 °C (-227.2 °F)	40-42 °C (104-108 °F)	
Flash Point (°C):	14 °C (57.2 °F)	79.0 °C (174.2 °F) – closed cup	
Ignition Temperature (°C):	363 °C (685°F)	715 °C (1,319 °F)	
Density:	0.79 g/cm ³	1.071 g/ml at 25 °C (77 °F)	

SECTION 10:STABILITY AND REACTIVITY

Property	Ethanol	Phenol	
Chemical stability:	Stable under recommended storage conditions		
Conditions to avoid:	Heat, flames, sparks, direct sunlight	No data available	
Materials to avoid:	Alkali metals, ammonia, oxidizing agents, peroxides	Strong oxidizing agents, strong bases	
Hazardous decomposition products:	Carbon oxides	Carbon oxides	

SECTION 11: TOXICOLOGICAL INFORMATION

Ethanol:

Acute toxicity: LD50 Oral – rat – 7,060 mg/kg□ Remarks: Lungs, thorax, or respiration : other changes

LC50 Inhalation - rat - 10 h - 20000 ppm

Skin corrosion/irritation: Skin – rabbit – irritating to skin – 24 h

Serious eye damage/eye irritation: Eyes - rabbit - mild eye irritation - 24 h (Draize test)

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: Carcinogenicity – mouse – oral□ Tumorigenic: equivocal tumorigenic agent by RTECS criteria. Liver: tumors. Blood: Lymphomas including Hodgkin's disease.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or

confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated

carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

Reproductive toxicity: Reproductive toxicity – human – female – oral \square Effects on newborn: apgar score (human only), other neonatal measures or effects, and drug dependence.

Teratogenicity: no data available

Specific target organ toxicity – single exposure (GHS): Inhalation – may cause respiratory irritation.

Specific target organ toxicity - repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. **Skin:** May be harmful if absorbed through skin. Causes skin irritation.

Eves: Causes eve irritation.

Ingestion: May be harmful if swallowed.

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Signs and Symptoms of Exposure: Exposure may cause central nervous system depression, narcosis, and/or damage to the heart. To the

best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available
Additional information: RTECS: KQ6300000

Phenol:

Acute toxicity: LD50 Oral - rat - 317 mg/kg□ Remarks: Behavioral: convulsions or effect on seizure threshold.

LD50 Oral – rat – 410-650 mg/kg LC50 Inhalation – rat – 900 mg/m³ – 8 h LD50 Dermal – rabbit – 630 mg/kg

Skin corrosion/irritation: Skin – rabbit – severe skin irritation – 24 h Serious eye damage/eye irritation: Eyes – rabbit – severe eye irritation

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: In vitro tests showed mutagenic effects.

Carcinogenicity: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP or

EPA classification.

IARC: 3 – Group 3: Not classifiable as to its carcinogenicity to humans (Phenol)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated

carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (GHS): no data available

Specific target organ toxicity - repeated exposure (GHS): May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: no data available

Potential Health Effects

Inhalation: Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin: Toxic if absorbed through skin. Causes skin burns.

Eyes: Causes eye burns. **Ingestion:** Toxic if swallowed.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been

thoroughly investigated.

Synergistic effects: no data available
Additional information: RTECS: SJ3325000

SECTION 12: ECOLOGICAL INFORMATION

Phenol:

Persistence and degradability: no data available

Toxicity:

Toxicity to fish LC50 - Leuciscus idus (Golden orfe) - 14.00-25.00 mg/l - 48 h

LC50 - Carassius auratus (Goldfish) - 36.10-68.80 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates ☐ EC50 – Daphnia magna (Water flea) – 12.00 mg/l – 24 h

EC 100 - Daphnia magna (Water flea) - 100.00 mg/l - 24 h

 $\underline{Toxicity\ to\ algae} \ \square\ EC50-Chlorella\ vulgaris\ (Freshwater\ algae) -370.00\ mg/l-96\ h$

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Observe all federal, state, and local environmental regulations.

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

Ethanol:

DOT (US): UN-number: 1170, Class: 3, Packing group: II; Proper shipping name: Ethanol; Marine pollutant: No; Poison inhalation hazard: No

IMDG: UN-number: 1170, Class: 3, Packing group: II; EMS-No: F-E, S-D; Proper shipping name: ETHANOL; Marine pollutant: No

IATA: UN-number: 1170, Class: 3, Packing group: II; Proper shipping name: Ethanol

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Phenol:

DOT (US): UN-number: 1671, Class: 6.1, Packing group: II; Proper shipping name: Phenol, solid; Reportable Quantity (RQ): 1000 lbs; Marine pollutant: No; Poison inhalation hazard: No

IMDG: UN-number: 1671, Class: 6.1, Packing group: II; EMS-No: F-A, S-A; Proper shipping name: PHENOL, SOLID; Marine pollutant: No

IATA: UN-number: 1671, Class: 6.1, Packing group: II; Proper shipping name: Phenol, solid

SECTION 15: REGULATORY INFORMATION

SARA 302 Components: SARA 302: <u>Phenol</u>, CAS-No. 108-95-2; Revision Date: 2007-07-01 **SARA 313 Components:** SARA 313: <u>Phenol</u>, CAS-No. 108-95-2; Revision Date: 2007-07-01

SARA 311/312 Hazards:

Ethanol: Fire Hazard, Acute Health Hazard, Chronic Health Hazard Phenol, Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components:

<u>Phenol</u>, CAS-No. 108-95-2; Revision Date: 2007-07-01 <u>Ethanol</u>, CAS-No. 64-17-5, Revision Date: 2007-03-01

Pennsylvania Right To Know Components: Ethanol, CAS-No. 64-17-5, Revision Date: 2007-03-01 Phenol, CAS-No. 108-95-2; Revision Date: 2007-07-01

New Jersey Right To Know Components:

Ethanol, CAS-No. 64-17-5, Revision Date: 2007-03-01 Phenol, CAS-No. 108-95-2; Revision Date: 2007-07-01

California Prop. 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

EU regulations

Component	Risk Phrases	Safety Phrases
Ethanol	R11, R20/21/22	S16, S36/37/39, S45
Phenol	R23/24/25, R34, R48/20/21/22, R68	S24/25, S26, S28, S36/37/39, S45

SECTION 16: OTHER INFORMATION

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Assay Genie shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.