

MATERIAL SAFETY DATA SHEET

IDENTIFICATION OF PRODUCT (SUBSTANCE) AND SUPPLIER (1):

Product Name: Pathfinder® Herpes Simplex Virus Types 1 and 2 DFA Specimen Collection Kit

Product Number: 25216 (20 packs)

Intended Use: These are optional purchased kit components, which are to be used exclusively with these Bio-Rad Laboratories kits: Pathfinder® Herpes Simplex Virus Types 1 and 2. Refer to the *Instructions for Use, Package Insert* for additional product information. *For the collection and transport of direct clinical specimens for the detection of Herpes Simplex Virus Types 1 and 2 by immunofluorescence.*

Supplier's Name: Bio-Rad Laboratories, Inc.

Address: 6565 185th Avenue NE
Redmond, WA 98052-5039, USA

Website: www.bio-rad.com

Phone Number: 1-800-2-BIORAD (1-800-224-6723); or 1-425-881-8300 (daytime PT)

Technical Information Contacts: Bio-Rad provides a toll free line for technical assistance, available 24 hours a day, 7 days a week. In the United States of America and Puerto Rico, call toll free 1-800-2-BIORAD (1-800-224-6723). Outside the U.S.A., please contact your regional Bio-Rad office for assistance. *Refer to section 16 for non-US local Bio-Rad agent contact information.*

Authorized Representative in the European Community: *FRANCE : Bio-Rad Laboratories*
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Emergency Phone Number: **This MSDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.** Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product. *Refer to section 16 for non-US local Bio-Rad agent contact information.*

HAZARDS IDENTIFICATION -- HAZARDOUS COMPONENTS (2):

This test kit should be handled only by qualified personnel trained in laboratory procedures and familiar with their potential hazards. Specific warnings are given in the instructions for use. The absence of a specific warning should not be interpreted as an indication of safety. Refer to Section 16 for the full text of each *Risk (R)* and *Safety (S)* statement provided below.

Component	Contents
2 Collection Devices (Swabs)	- 1 large swab on a plastic shaft. - 1 small swab on a wire shaft.
1 Slide	- Double-well glass slide.
1 Ampule of 0.5 mL Acetone Fixative	- Acetone (undiluted) [C ₃ H ₆ O], EC No 200-662-2, CAS# 67-64-1. [GHS / 2008/1272/EC Classification: DANGER! GHS02, GHS07; H225, H319, H336; EUH066; P210 + P240 + P243, P261; P312, P370 + P378; P405; P501] [EU Classification per 1999/45/EC: Highly Flammable: F, Irritant: Xi; R 11-36-66-67; S 7/9-15-16-24/25-26-36-60.]

Markings according to the *United Nations (UN) Globally Harmonized System (GHS) and European Community (EC) 2008/1272/EC guidelines:*

This product has been conservatively classified and labeled in accordance with applicable *United Nations (UN) GHS* and related *European Community (EC) 2008/1272/EC* guidelines. The following regulated hazardous chemical concentrations are found in product component(s):

[Fixative Component] Acetone (undiluted) [C₃H₆O], CAS# 67-64-1, EC No 200-662-2.

GHS / 2008/1272/EC Classification [* denotes precautionary statements included on the product label]:





<u>Label(s):</u>	GHS02 GHS07
<u>Signal Word:</u>	DANGER!
<u>Label Hazard Statement:</u>	H225: Highly Flammable liquid and vapor. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.
<u>Supplemental Hazard Statement:</u>	EUH066: Repeated exposure may cause skin dryness or cracking.
<u>Precautionary Statement – Prevention:</u>	P210 + P240 + P243: Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. * P241: Use explosion-proof electrical / ventilating / lighting / equipment. P261: Avoid breathing dust/fume/ gas/mist/vapours/spray.* P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/protective clothing/eye protection/face protection.
<u>Precautionary Statement – Response:</u>	P312: Call a POISON CENTER or doctor/physician if you feel unwell. * P305 + P351: IF IN EYES: Rinse cautiously with water for several minutes. P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P370 + P378: In case of fire: Alcohol- resistant fire-fighting foams are the extinguishing media of choice for extinction. *
<u>Precautionary Statement – Storage:</u>	P405: Store locked up. * P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
<u>Precautionary Statement – Disposal:</u>	P501: This material and its container must be disposed of as hazardous waste. *

COMPOSITION / INFORMATION ON INGREDIENTS -- HAZARDOUS COMPONENTS (3):

The following information is furnished for those product hazardous constituents that require regulatory control or disclosure at the concentration found in the kit product. Note that the information here is often based on data for the chemical raw material (LD₅₀, exposure limits, etc.), and that the product contains significantly diluted concentration in aqueous solutions; thus, the assessment below has taken hazard reduction processing into consideration. The GHS and EU classifications were made according to the latest editions and expanded upon from company and literature data. (Refer to Key below.)

Chemical Ingredient	Data / Information
Acetone [Undiluted] DANGER! <i>CONTINUED ON NEXT PAGE</i>	CAS#: 67-64-1 (100%) ++ RTECS#: AL3150000 (100%) ++ EC No: 200-662-2 (100%) ++ Chemical Formula: C ₃ H ₆ O ++ Flash Point: 0°F / -18°C ++ LD ₅₀ (oral-rat): 5,800 – 6,700 mg/kg ++ LC ₅₀ (inhalation-rat): 50,100 mg/m ³ /8H ++ LD ₅₀ (skin-rabbit): > 16,000 mg/kg ++ STEL: 750 ppm ++ PEL (TWA): 1,000 ppm ++ TLV/TWA: 500 ppm ++ IATA/DOT ID: UN1090 ++ IDLH: 2,500 ppm ++ HMIS Codes: H=2, F=4, R=1 ++ RCRA Code: U002, D001 ++ EU Classification per 1999/45/EC: Highly Flammable: F, Irritant: Xi; R 11-36-66-67; S 7/9-15-16-24/25-26-36-60 ++ GHS / 2008/1272/EC Classification: DANGER!; GHS02, GHS07; H225, H319, H336; EUH066; P210 + P240 + P243, P261; P312, P370 + P378; P405; P501 ++ Acetone is a highly flammable liquid and vapor [H225] (LEL is 2.5 % and UEL is 12.8% v/v in air) and is a skin and severe eye irritant [H319]; contact may cause eye injury. Acetone can suppress the respiratory and central nervous systems. May cause drowsiness and dizziness [H336]. Repeated exposure may cause skin dryness or cracking [EUH066]. Avoid breathing mist/vapours/spray [P261]. Wear protective gloves/protective clothing/eye protection/face protection. Call a POISON CENTER or doctor/physician if you feel unwell [P312]. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Use only outdoors or in a well-ventilated area. Keep away from heat, sparks and other sources of ignition— No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge [P210 + P240 + P243].

Chemical Ingredient	Data / Information
<p>Acetone [Undiluted]</p>   <p>DANGER!</p> <p><i>CONTINUED</i></p>	<p>Keep container tightly closed. Use explosion-proof electrical / ventilating / lighting / equipment. Ground containers and bond when dispensing or if use could potentially cause a static discharge situation. In case of fire: Use alcohol-resistant fire-fighting foams are the extinguishing media of choice for extinction [P370 + P378]. Acetone may react violently with increased risk of fire, in contact with strong oxidizers, like hydrogen peroxide, strong reducing agents and bases. Store locked up [P405]. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Spent acetone waste is considered a RCRA flammable hazardous waste; therefore this material and/or its container must be disposed of as hazardous waste, and in accordance with local, regional, national and international regulations [P501]. Handle appropriately with the requisite Good Laboratory Practices.</p> <p>EU Labelling Classification for 100% chemical concentration per Table 3.2 of 2008/1272/EC - from Annex I to Directive 67/548/EEC: Highly Flammable: F, Irritant: Xi R 11: Highly Flammable. R 36: Irritating to eyes. R 66: Repeated exposure may cause skin dryness or cracking. R 67: Vapours may cause drowsiness or dizziness. S (2-): Keep out of the reach of children. S 9: Keep container in a well-ventilated place. S 16: Keep away from sources of ignition – No smoking. S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</p>

Key:

+ The Kit Concentration was not tested; the values refer to the solution concentration as tested, designated by percentage within parentheses.
 ++ The Kit Concentration was tested or the values given were estimated for the general diagnostic laboratory usage of the kit reagent dilution.

NE: Not Established or Unknown (unable to locate data); typically for concentrate form unless otherwise specified.

Abbreviations for component HMIS hazard ratings are as follows: H=Health, F=Flammability, R=Reactivity.

GHS = Globally Harmonized System

RTECS # - Registry of Toxic Effects of Chemical Substances number

PEL - Permissible Exposure Limit (Occupational Exposure Limit)

TLV/TWA – Threshold Limit Value / Time-Weighted Average

STEL - Short Term Exposure Limit

IDLH - Immediately Dangerous to Life or Health

Related product information:

- ◆ Refer to section 2 for the full text of each GHS /2008/1272/EC statement coded above.
Refer to section 16 for the full text of each Risk (R) and Safety (S) statement provided above.
- ◆ Handle the glass slide with care, especially if it breaks, as glass can cut.
- ◆ According to the concept of Universal Precautions (29 CFR 1910.1030) all human blood and certain human body fluids must be treated as if known to be infectious for HIV, HBV and other bloodborne pathogens; individual patient samples being tested represent a heightened, unknown hazard.

EMERGENCY FIRST AID MEASURES (4):
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Health Effects:	Symptoms of overexposure may include headache, dizziness, congestion and breathing difficulty. Repeated exposure may cause skin dryness or cracking. Skin contact may result in dermatitis. Causes serious eye irritation; risk of damage to eyes. Vapors may cause drowsiness or dizziness.
Eye Contact:	Flush eyes with copious water for at least 15 minutes. Ensure adequate flushing by separating the eyelids with fingers while flushing with water. OBTAIN MEDICAL ATTENTION.
Skin Contact:	Remove contaminated clothing. Flush skin with copious water and wash affected area with soap and water.
Inhalation:	Remove person from exposure area to fresh air. If breathing becomes difficult, immediately call for emergency medical assistance. Treat symptomatically and supportively.
If Swallowed:	If ingested, rinse out mouth thoroughly with water, provided the person is conscious, and OBTAIN MEDICAL ATTENTION. Call a physician or the local poison control center. Treat symptomatically and supportively. If vomiting occurs, keep head lower than hips to prevent aspiration.

FIREFIGHTING MEASURES (5):

Extinguishing Media:	Use extinguishing media appropriate for the surrounding fire: dry chemical, foam, carbon dioxide or water. Water spray may be used to cool fire, dilute to a non-flammable mixture and/or protect response personnel attempting to stop a leak. Water may be ineffective because it will not cool acetone to below its flash point. Alcohol-resistant firefighting foams are the extinguishing media of choice.
Hazardous Decomposition Products:	Oxides of carbon may form when heated to decomposition.
Special Firefighting Procedures:	Conventional firefighting full protective equipment (with NIOSH-approved self-contained breathing apparatus) and procedures appropriate for the surrounding fire should be sufficient.

ACCIDENTAL RELEASE MEASURES (6):

- ◆ Avoid direct contact with skin, eyes, mucous membranes and clothing by wearing appropriate lab personal protective equipment (PPE) including gloves, lab coat and eye/face protection.
- ◆ In the event of a hazardous material spill, contain the spill if it is safe to do so and immediately move to a safe area, free from potential aerosols, to decontaminate and/or safely remove any contaminated clothing, as necessary. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Isolate the hazard area and ventilate if appropriate. In case of inadequate ventilation wear respiratory protection.
- ◆ Ensure that appropriate spill cleanup materials and PPE are available and used. Use only non-sparking tools. Eliminate sources of ignition if safe to do so. Have extinguishing agent available in case of fire.
- ◆ Follow established laboratory policy and applicable CDC/NIH biosafety and/or OSHA/WISHA hazardous material spill and/or NFPA/Fire Code guidelines for appropriate hazardous chemical and/or biological material spill response and cleanup.
- ◆ Wear appropriate PPE. Immediately, and on-site if possible, deactivate flammable material spills with a *solvent adsorbent* product, using non-sparking tools. Absorb spillage to prevent material damage. Avoid release to the environment.
- ◆ Clean the spill area with water and wipe dry. Spills can also be absorbed with an appropriate inert material (e.g. spill pillows, acid absorbent pads, etc.), which are secured in an appropriate, labeled, sealed container. Material used to absorb the spill may require hazardous material waste disposal. Infectious, chemical and laboratory wastes must be handled and discarded of in accordance with all local, regional, national and international regulations.
- ◆ Broken slides contaminated with blood or other human source or potentially infectious material must be handled as *Sharps* per 29 CFR 1910.1030, OSHA Bloodborne Pathogen and other regulations; however, dispose of this material in accordance with local, regional and national regulations. Slides processed with material that is not of human origin and is not pathogenic to humans, if broken, can typically be handled as normal uncontaminated broken glass labware; however, dispose of this material in accordance with local, regional, national and international regulations.
- ◆ Refer to Sections 8 and 13 for more specifics.

HANDLING AND STORAGE INFORMATION (7):

Handling: This test kit should be handled only by qualified personnel trained in laboratory procedures and familiar with their potential hazards. Follow proper Good Laboratory Practices and safety guidelines for handling chemical, biological and laboratory hazards. Do not smoke, eat, or drink in areas where patient samples and kit reagents are handled. Wash your hands after use. Wear appropriate personal protective equipment (PPE) including gloves, lab coat or equivalent and eye/face protection. Keep containers tightly closed; avoid splashing, spills and the generation of aerosols. Handle all specimens, materials and equipment used to perform the operations as though they were capable of transmitting infectious disease, as per Universal Precautions. All personal protective equipment should be removed before leaving the work area. Refer to Section 8 for more specifics. Avoid release to the environment. Do not allow undiluted product hazardous chemical ingredient or large quantities of it to reach ground water or water course. Consult with your Environmental Health & Safety Office for assistance.

Storage: Store kits at room temperature prior to use.

Caution, consult accompanying documents. Read and follow all the Precautions and Warnings in the kit product instructions.

To be used exclusively with the Bio-Rad Laboratories kits: Pathfinder® Herpes Simplex Virus Types 1 and 2.

EXPOSURE CONTROL / PERSONAL PROTECTION MEASURES (8):
Control Parameters – Component chemicals with limit values that require monitoring at the workplace:

Chemical *	CAS-No.	Value	Control parameter	Update	Basis
Acetone	67-64-1	TWA – TLV	500 ppm 1,188 mg/m ³	1997-05-21	USA. ACGIH Threshold Limit Values (TLV)
		STEL	750 ppm 1,782 mg/m ³	1997-05-21	USA. ACGIH Threshold Limit Values (TLV)
		TWA	750 ppm 1,800 mg/m ³	1989-03-01	USA. OSHA Occupational Exposure Limits - 29 CFR 1910.1000 Z-1-A
		STEL	1,000 ppm 2,400 mg/m ³	1989-03-01	USA. OSHA Exposure Limits - 29 CFR 1910.1000 Z-1-A
		TWA	1,000 ppm 2,400 mg/m ³	1993-06-30	USA. OSHA Permissible Exposure Limits (PEL) - 29 CFR 1910.1000 Air Contaminants

* Sources of key data used to compile the Safety Data Sheet: Raw Material Vendor Safety Data Sheets

Acetone [CAS# 67-64-1]:	
TWA (OEL-Australia)	500 ppm / 1185 mg/m ³
STEL (OEL- Australia)	1000 ppm / 2375 mg/m ³ [JUL2008]
TWA (OEL-Belgium)	500 ppm / 1210 mg/m ³
STEL (OEL-Belgium)	1000 ppm / 2420 mg/m ³ [MAR2002]
TWA (OEL-Denmark)	250 ppm / 600 mg/m ³ [OCT2002]
TWA - OEL-EC (European Union)	500 ppm / 1210 mg/m ³ [FEB2006]
VME (OEL-France)	500 ppm / 1210 mg/m ³ [FEB2006]
MAK (OEL-Germany)	1200 mg/m ³ / 500 mL/ m ³ [2005]
OEL (OEL-Japan)	200 ppm / 470 mg/m ³ [APR2007]
TWA (OEL-Mexico)	1000 ppm / 2400 mg/m ³
STEL (OEL- Mexico)	1260 ppm / 3000 mg/m ³ [2004]
TWA (OEL-Sweden)	250 ppm / 600 mg/m ³
STEL (OEL-Sweden)	500 ppm / 1200 mg/m ³ [JUN2005]
MAK-W (OEL-Switzerland)	500 ppm / 1200 mg/m ³
KZG-W (OEL-Switzerland)	1000 ppm / 2400 mg/m ³ [DEC2006]
TWA (OEL-United Kingdom)	500 ppm / 1210 mg/m ³
TWA (OEL-United Kingdom)	1500 ppm [2005]
PEL-TWA (United States)	1000 ppm / 2400 mg/m ³ [OSHA 29,1910.1000,1994]
TWA (United States)	500 ppm / 1188 mg/m ³ [ACGIH - 1997-05-21]
STEL (United States)	750 ppm / 1800 mg/m ³ [ACGIH – 2010]

Additional information: The lists that were valid during the creation were used as basis.

The following personal protective equipment (PPE) is recommended to prevent blood or other potentially infectious or hazardous materials from reaching the user's work or street clothes, skin, mouth, mucous membranes and eyes, and to prevent hazard inhalation, under normal conditions of use and for the time during which the protective equipment is utilized:

- Ventilation: Adequate lab ventilation is required.
- Eye / Face Protection: Wear ANSI approved safety glasses, goggles or face shield with safety glasses or goggles. Contact lenses should not be worn when handling lab hazards.
- Protective Gloves: Suitable gloves must be worn at all times when handling kit reagents or patient samples to provide skin protection from splash and intermittent contact. Synthetic gloves such as nitrile, neoprene and vinyl are recommended because they are sturdy, effective and contain no natural latex ingredients associated with latex glove allergic reactions. Disposable (single use) gloves should be changed often and never reused. Wash hands thoroughly after removing gloves.

Protective Clothing:	Wear a lab coat, clinic jacket, gown, apron and/or smock. Disposable clothing is strongly recommended when handling biohazardous material. If reusable clothing is used, procedures for handling potentially infectious laundry under the OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) are required.
Respiratory Protection:	Do not breathe mist / vapours / spray.
Other:	All personal protective equipment should be removed before leaving the work area and placed in an appropriately designated area or container for storage, processing, decontamination or disposal. Protective coverings such as plastic wrap, aluminum foil or imperviously-backed absorbent pads used to cover equipment and/or surfaces must be removed and replaced if they become overtly contaminated.
Note:	Occupational exposure limit values and health hazard data were given in Section 3. Environmental controls are included in the following sections.

PHYSICAL AND CHEMICAL PROPERTIES (9):

Information is for the Acetone Component:

Appearance:	Clear, colorless, volatile liquid.
Odor:	Mildly pungent, characteristic sweet, slight aromatic, fruity odor.
pH:	Not available; acetone is a very weak acid (pKa = 20)*
Boiling Point:	56.2°C (133.2°F) at 760 mm Hg*
Melting Point:	-95°C (-139°F)
Flash Point:	-17.8°C (0°F) (CC)
Flammable Limits:	LEL/LFL is 2.5%; UEL/UFL is 12.8% @ 25°C.
Fire Hazard:	Highly flammable. Dangerous fire and explosion hazard. Material will readily ignite at room temperature. Vapors are heavier than air and may travel a considerable distance to ignition source and flash back. Closed containers may rupture violently when exposed to fire or excessive heat for a sufficient amount of time.
Autoignition Temperature:	465°C (869°F)
Danger of Explosion:	Closed containers may rupture violently when exposed to fire or excessive heat for a sufficient amount of time.
Specific Gravity:	0.791 @ 20°C*
Solubility:	Miscible in water.
Vapor Density (Air = 1):	2.0*
Vapor Pressure (mm Hg):	180-180.5 mm Hg @ 20°C (24-24.7 kPa)*
Evaporation Rate (BuAc=1):	5.6*
Conversion Factor:	1 ppm = 2.37 mg/m ³ ; 1 mg/m ³ = 0.422 ppm @ 25°C (calculated)

No other standard characteristics are known to be applicable to the identification or hazards of the kit components.

* Data from CHEMINFO (CCOHS Issue 2003-4)

STABILITY AND REACTIVITY INFORMATION (10):

NOTE: Chemical reactions that could result in a hazardous situation (e.g. generation of flammable or toxic chemicals, fire or detonation) are listed here. Although not intended to be complete, an overview of important reactions involving common chemicals is provided to assist in the development of safe work practices.

Stability:	Stable under ordinary conditions of use and storage.
Conditions to Avoid:	Keep away from heat, sparks and other sources of ignition and incompatible material.
Materials to Avoid:	Acetone may react violently with increased risk of fire, in contact with strong oxidizers such as hydrogen peroxide, strong reducing agents and bases.
Hazardous Decomposition Products:	Oxides of carbon may form when heated to decomposition.



Hazardous Polymerization: Has not been reported to occur.

TOXICOLOGICAL INFORMATION -- GENERAL COMPOSITE (11):

Refer to Sections 2 and 3 for the kit component concentrations. The composite toxicological information for this product is:

Acute Health Effects

Toxicity: Vapors may cause drowsiness or dizziness.

Primary Irritant Effect: Irritating to eyes.

Other Acute Health Effects: Can suppress the respiratory and central nervous systems. Vapors may cause drowsiness or dizziness. It is readily absorbed through the skin. Risk of damage to eyes. Repeated exposure may cause skin dryness or cracking.

Because the slides are made of glass, they could potentially pose a slight physical cutting hazard, especially if broken or chipped, so handle carefully, wear suitable gloves and/or other appropriate personal protective equipment and follow Good Laboratory Practices. Do not handle broken slides with unprotected hands.

Chronic Toxicity

Sensitization: No sensitization effect known.

Carcinogenicity: No carcinogenic effect known. No component, mixture or constituent has been classified as a carcinogen by NTP, IARC or OSHA.

Reproductive Hazard: No reproductive toxic effect known.

ECOLOGICAL INFORMATION (12):

Toxicity: **100% Acetone:**
Fish LC₅₀ - Oncorhynchus mykiss (rainbow trout) – 5,540 mg/l - 96 h
Daphnia EC₅₀ - Daphnia magna (Water flea) – 13,500 mg/l - 48 h
Source: Raw Material Vendor Safety Data Sheet

Persistence and degradability: When released into water, this material is expected to quickly evaporate and readily biodegrade. When released into air, this material is may be moderately degraded (photochemically and/or by photolysis) and is expected to be readily removed from the atmosphere by wet deposition.

Bioaccumulation potential: This material is not expected to significantly bioaccumulate or to be toxic to aquatic life.

Mobility in soil: When released into the soil, the **acetone** in this product is expected to leach into ground water or quickly evaporate and is expected to readily biodegrade.

PBT and vPvB assessment: No information found.

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

Avoid release to the environment.

DISPOSAL CONSIDERATIONS (13):

Disposal of hazardous and/or laboratory wastes, product or packaging must be conducted in accordance with all applicable local, regional, national and international regulations. This section specifies the general and United States RCRA requirements. Processing, use or contamination of the kit components may change waste management requirements and options. Contact your Environmental Health & Safety Office for your specific disposal procedures.

Recommended Product Disposal:

Whatever flammable **acetone** (closed-cup flash point of ≤ 60°C / 140°F) cannot be saved for recovery or recycling requires disposal as a flammable hazardous waste in an RCRA approved waste facility (or equivalent). The US RCRA Waste Disposal Codes for acetone are D001 (and U002 only if discarding the kit component as found in the kit); check your international, national, regional and local ordinances accordingly.



Pathfinder® Herpes Simplex Virus DFA Specimen Collection Kit

[Catalog 25216]

Broken slides contaminated with blood or other humans source or potentially infectious material must be handled as *Sharps* per 29 CFR 1910.1030, OSHA Bloodborne Pathogen and other regulations however, dispose of this material in accordance with regulation.

Do not allow undiluted product or large quantities of it to reach ground water or water course.

Recommended Unclean Packaging Disposal: Dispose of in accordance with all applicable local, regional, national and international regulations.

TRANSPORT INFORMATION (14):

Shipping of product, packaging and waste must be conducted in accordance with all applicable local, regional, national and international regulations. Processing, use or contamination of the kit components may change shipping requirements and options. Contact your Environmental Health & Safety Office for your specific shipping procedures.

Recommended air and land transportation information for discarded kit components and waste from this product when used as intended is:

Component **Acetone Fixative** in this kit contains undiluted **acetone**; thus, any discarded kit component or waste generated from its use, resulting in a flammable liquid (closed-cup [ASTM Standard D-93-79 or D-93-80 or D-3278-78] flash point of $\leq 60.5^{\circ}\text{C}$) must be transported as follows:

Proper Shipping name: **Acetone**

DOT Class: **3**

Packing group: **II**

DOT ID Number: **UN 1090**

REGULATORY INFORMATION (15):

Composite HMIS Rating: Health: 2 Flammability: 4 Reactivity: 1

California Proposition 65: The product does not contain listed substances.

Carcinogenicity Categories: No component, mixture or constituent has been classified as a carcinogen by NTP (National Toxicity Program), IARC (International Agency for Research on Cancer), TLV-CAR (Threshold Limit Value established by ACGIH) or OSHA (Occupational Health and Safety Administration, U.S. Department of Labor).

National Regulations:

This SDS contains the required information in accordance with the **Workplace Hazardous Materials Information System (WHMIS) Canadian Standard** for the hazard classification criteria for this product.

Composite WHMIS Hazard Class: Class B2 - Flammable liquid

This SDS contains the required information for preparation in accordance with the **Mexican Standard (NOM-018-STPS-2000)** except that some of the sections were renumbered in accordance to GHS as follows:

Information required to be in **Section II** (data about the chemical substance) and **Section III** (identification of the dangerous chemical substance) are found in **Sections 2, 3 and 8.**

Information required to be in **Section IV** (physical and chemical properties) is found in **Section 9.**

Information required to be in **Section V** (fire and explosion risk) is found in **Section 5.**

Information required to be in **Section VI** (reactivity data) is found in **Section 10.**

Information required to be in **Section VII** (health risks) is found in **Section 11.**

Information required to be in **Section VIII** (directions for the case of leaks or spills) and **Section IX** (special protection for emergency situations) are found in **Section 4.**

Information required to be in **Section X** (transportation) is found in **Section 14.**

Information required to be in **Section XI** (ecology) is found in **Section 12.**

Information required to be in **Section XII** (special precautions) is found in **Section 8.**

Water hazard class: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Markings according to European Community 1999/45/EC, 2001/59/EC, 2001/60/EC, 2006/102/EC guidelines: This product has been classified and labeled in accordance with applicable European Community (EC) Directives (refer to 1999/45/EC, 2001/59/EC, 2001/60/EC and 2006/102/EC).

Hazard Designation of Composite Product: HIGHLY FLAMMABLE: F ; IRRITANT: Xi 

Hazard Determining Substance(s) of Labeling (rated under 1999/45/EC unless otherwise specified):

Acetone (undiluted C₃H₆O), CAS# 67-64-1, EC No 200-662-2, Flash Point: 0°F / -18°C [Highly Flammable: F, Irritant: Xi; R 11-36-66-67; S 7/9-15-16-24/25-26-36-60].

OTHER INFORMATION (16):

Risk Phrases:

- R 11 Highly flammable.
- R 36 Irritating to eyes.
- R 66 Repeated exposure may cause skin dryness or cracking.
- R 67 Vapors may cause drowsiness and dizziness.

Safety Phrases:

- S 7/9 Keep container tightly closed and in a well ventilated place.
- S 15 Keep away from heat.
- S 16 Keep away from sources of ignition. No smoking.
- S 24/25 Avoid contact with skin and eyes.
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 36 Wear suitable protective clothing.
- S 60 This material and its container must be disposed of as hazardous waste.

This test kit should be handled only by qualified personnel trained in laboratory procedures and familiar with their potential hazards.

Specific warnings are given in the instructions for use. The absence of a specific warning should not be interpreted as an indication of safety.

Sources of key data used to compile the Safety Data Sheet:

- Raw Material Vendor Safety Data Sheets
- Registry of Toxic Effects of Chemical Substances (RTECS)
- European Community (EC) 2008/1272/EC, 2010/453/EC, 2006/1907/EC Regulations
- EU Directives 1999/45/EC, 2001/59/EC, 2001/60/EC, 2006/102/EC
- United Nations (UN) Globally Harmonized System (GHS)
- International Agency for Research on Cancer (IARC)
- Threshold Limit Value established by American Conference of Governmental Industrial Hygienists (ACGIH)
- Occupational Safety and Health Administration, U.S. Department of Labor (OSHA)
- National Toxicity Program (NTP)
- National Institute for Occupational Safety and Health (NIOSH)
- Translation of Official Mexican Standard NOM-018-STPS-2000 [<http://www.ilpi.com/msds/other/mexico/nom018appc.html>]
- California Proposition 65

Additional information: The lists that were valid during the creation were used as basis.

This revision: Updated, reformatted and added new GHS information.

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