

MATERIAL SAFETY DATA SHEET**IDENTIFICATION OF PRODUCT (SUBSTANCE) AND SUPPLIER (1):**

Product Name: *Chlamydia trachomatis* Specimen Collection Kit

Product Number: 30706 (20 Specimen Collection Kits)

Intended Use: For the collection and transport of direct clinical specimens for the detection of *Chlamydia trachomatis* by immunofluorescence. Note: The cytology brush is for use on non-pregnant women only.

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
3 boulevard Raymond Poincaré
92430 Marnes-la-Coquette
Phone: +33 (0) 1 47 95 60 00 / Fax: +33 (0) 1 47 41 91 33
fds-msds.fr@bio-rad.com or fds.msds@bio-rad.com

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
3 Collection Devices (Swabs)	- 1 large swab on a plastic shaft. - 1 small swab on a wire shaft. - 1 cytology brush.
1 Slide	- Single-well glass slide.
Methanol Fixative, 1 ampule (0.5 mL)	- Methanol (undiluted) [CH ₃ OH], EC No 200-659-6, CAS# 67-56-1 [GHS / 2008/1272/EC Classification: DANGER! GHS02, GHS06, GHS08; H225, H301, H311, H331, H370; P210 + P240 + P243, P260; P307 + P311, P370 + P378; P405; P501] [EU Classification per 1999/45/EC: Highly Flammable: (F, Toxic: T; R 11-23/24/25-67; S 7/9-15-16-23-36/37/39-60.]

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):

[Component #] **Methanol** (undiluted) [CH₃OH], CAS# 67-56-1, EC No 200-659-6.

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

Label(s):

Signal Word:

Label Hazard Statement:

GHS02

GHS06

GHS08

DANGER!

H225: Highly Flammable liquid and vapor.

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H331: Toxic if inhaled.

H370: Causes damage to organs.

Supplemental Hazard – Statement:

None Specified

Precautionary Statement – Prevention:

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.

P260: Do not breathe 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.

Precautionary Statement – Response:

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303 + P361 + P352: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P307 + P311: IF exposed: Call a POISON CENTER or doctor/physician. *

P370 + P378: In case of fire: Use alcohol- resistant fire-fighting foams are the extinguishing media of choice for extinction. *

Precautionary Statement – Storage:

P405: Store locked up. *

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statement – Disposal:

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 product. Note that the information here is often based on data from the chemical raw material (LD₅₀, exposure limits, etc.) and that the product contains a significantly diluted concentration in an aqueous solution; thus, the assessment below has taken hazard reduction processing into consideration when possible. The GHS and EU classifications were made according to the latest editions and expanded upon from company and literature data. (Refer to the Key below.)

Chemical Ingredient	Data / Information
Methanol [Undiluted, CH ₃ OH in the methanol fixative ampule]	CAS#: 67-56-1 (100%) + EC No: 200-659-6 (100%) + Chemical Formula: CH ₃ OH (100%) + LD ₅₀ (oral-rat): 5628 mg/kg (100%) + LD ₅₀ (skin-rabbit): 15,800 mg/kg (100%) + PEL/TLV/TWA: 200 ppm (100%) + IATA/DOT ID: UN1230 + HMIS Codes: H=2, F=4, R=1 ++ EU Classification per 1999/45/EC: Highly Flammable: F, Toxic: T; R 11-23/24/25-67; S 7/9-15-16-23-36/37/39-60 ++ GHS / 2008/1272/EC Classification: DANGER! GHS02, GHS06, GHS08; H225, H301, H311, H331, H370; P210 + P240 + P243, P307 + P311, P370 + P378, P405; P501 ++ Methanol is a Highly Flammable liquid and vapor [H225] (F.P. 11 deg C; ignitable at 6%). Toxic if swallowed [H301]. Toxic in contact with skin [H311]. Toxic if inhaled [H331]. May cause injury, blindness or death by inhalation, ingestion or as absorbed through the skin, however industrial exposures are considered safe if concentrations are kept within the OSHA PEL exposure limit of 200 ppm. Contact can severely irritate skin and eyes. Do not breathe mist/vapours/spray [P260]. Causes damage to organs [H370]. Targets the central nervous system (CNS), eyes, liver and kidneys. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from heat, sparks and other sources of ignition — No smoking. Ground containers and bond when dispensing. Take precautionary measures against static discharge. [P210 + P240 + P243]



DANGER!

CONTINUED ON
NEXT PAGE

Chemical Ingredient	Data / Information
Methanol [Undiluted, CH ₃ OH in the methanol fixative ampule] <div style="text-align: center;">    </div> DANGER!	<p>In case of fire: Use alcohol- resistant fire-fighting foams are the extinguishing media of choice for extinction [P370 + P378]. Use explosion-proof electrical / ventilating / lighting / equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse. IF exposed: Call a POISON CENTER or doctor/physician [P307 + P311]. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Store locked up [P405]. Store in a well-ventilated place. Keep container tightly closed. Spent methanol 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 - <i>from Annex I to Directive 67/548/EEC</i>:</p> <p>Highly Flammable: F, Toxic: T R 11: Highly Flammable. R 23/24/25: Toxic by inhalation, in contact with skin and if swallowed. R 39/23/24/25: Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. S (1/2-): Keep locked up and out of the reach of children. S 7: Keep container tightly closed. S 16: Keep away from sources of ignition – No smoking. S 36/37: Wear suitable protective clothing and gloves. S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</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 (OEL)
- 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.
- ◆ Because these slides are made of glass, they could pose a slight physical cutting hazard, especially if broken or chipped.
- ◆ 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):

Health Effects:	Symptoms of overexposure may include headache, dizziness, congestion and breathing difficulty. Toxic by inhalation, in contact with skin and if swallowed. Causes damage to organs. Skin contact may result in dermatitis. Risk of damage to eyes. Vapors may cause drowsiness or dizziness. <i>Note: The cytology brush is for use on non-pregnant women only.</i>
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 may be appropriate. Water spray may be used to cool fire, dilute to a non-flammable mixture and/or protect response personnel attempting to stop a leak. <i>Water may be ineffective because it will not cool methanol to below its flash point. Alcohol-resistant firefighting foams are the extinguishing media of choice.</i>
Hazardous Combustion Products:	Oxides of carbon or nitrogen 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, eliminate sources of ignition if safe to do so. 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 appropriate inert materials (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 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, national and international 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 the kit components as specified on the product label and/or in the product instructions provided with the test kit.

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

For the collection and transport of direct clinical specimens for the detection of *Chlamydia trachomatis* by immunofluorescence.

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
Methanol	67-56-1	TWA – TLV	200 ppm 262 mg/m ³	1994-09-01	USA. ACGIH Threshold Limit Values (TLV)
		STEL	250 ppm 328 mg/m ³	1994-09-01	USA. ACGIH Threshold Limit Values (TLV)
		TWA – PEL	200 ppm 262 mg/m ³	1989-03-01	USA. OSHA Occupational Exposure Limits - 29 CFR 1910.1000 Z-1-A
		STEL	250 ppm 328 mg/m ³	1989-03-01	USA. OSHA Exposure Limits - 29 CFR 1910.1000 Z-1-A
		TWA	200 ppm 260 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 Sheet

Methanol [CAS# 67-56-1]:	
TWA (OEL-Australia)	200 ppm / 262 mg/m ³
STEL (OEL- Australia)	250 ppm / 328 mg/m ³ [JUL2008]
TWA (OEL-Belgium)	200 ppm / 266 mg/m ³
STEL (OEL-Belgium)	250 ppm / 333 mg/m ³ (skin) [MAR2002]
TWA (OEL-Denmark)	200 ppm / 260 mg/m ³ [OCT2002]
TWA - OEL-EC (European Union)	260 mg/m ³ / 200 mL/m ³ [FEB2006]
VME (OEL-France)	200 ppm / 260 mg/m ³
VLE (OEL-France)	1000 ppm / 1300 mg/m ³ [FEB2006]
MAK (OEL-Germany)	270 mg/m ³ / 200 mL/m ³ [2005]
OEL (OEL-Japan)	200 ppm / 260 mg/m ³ (skin) [APR2007]
TWA (OEL-Mexico)	200 ppm / 260 mg/m ³
STEL (OEL- Mexico)	250 ppm / 310 mg/m ³ [2004]
TWA (OEL-Sweden)	200 ppm / 250 mg/m ³ (skin)
STEL (OEL-Sweden)	250 ppm / 350 mg/m ³ (skin) [JUN2005]
MAK-W (OEL-Switzerland)	200 ppm / 260 mg/m ³ (skin)
KZG-W (OEL-Switzerland)	800 ppm / 1040 mg/m ³ (skin) [DEC2006]
TWA (OEL-United Kingdom)	200 ppm / 266 mg/m ³ (skin)
TWA (OEL-United Kingdom)	250 ppm (skin) [2005]
TWA (United States)	200 ppm / 260 mg/m ³ (skin) [ACGIH - 1996]
PEL-TWA (United States)	200 ppm / 260 mg/m ³ [OSHA 29,1910.1000,1994]

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.
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.
- 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 Methanol Component:***

- Appearance: Clear, colorless, volatile liquid with a mild, characteristic alcohol odor.
- Odor: A mild, characteristic alcohol odor.
- pH: Not available; methanol is both a weak acid and a weak base.
- Boiling Point: 64.5°C (148°F).
- Melting Point: -98°C (-144°F).
- Flash Point: 11°C (52°F).
- Flammable Limits: LEL/LFL is 6%; UEL/UFL is 36% @ 25°C.
- Fire Hazard: 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 over a sufficient time.
- Autoignition Temperature: 464°C (867°F).
- Danger of Explosion: Closed containers may rupture violently when exposed to fire or excessive heat for sufficient time.
- Specific Gravity: 0.8 @ 20°C.
- Solubility: Miscible in water.
- Vapor Density (Air = 1): 1.1.
- Vapor Pressure (mm Hg): 97 mm Hg (12.8 kPa) @ 20°C.
- Evaporation Rate (BuAc=1): 5.9.
- Conversion Factor: 1 ppm = 1.308 mg/m³; 1 mg/m³ = 0.765 ppm at 25°C (calculated).
- No other standard characteristics applicable to the identification or hazards of the kit are known.

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: Incompatible with strong oxidizing agents (e.g. bromine, chlorine, nitric acid, perchloric acid, perchlorates, sodium hypochlorite, etc.), hydrogen peroxide, mineral acids (e.g. sulfuric) acid anhydrides, acid chlorides, metals (e.g. sodium, potassium, powdered aluminum or magnesium), isocyanates or phosphorus oxides - may react violently or explosively, with increased risk of fire or explosion. Dichloromethane becomes flammable in air at 27°C (100 kPa) in the presence of 0.6% methanol.
- 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:	Toxic by inhalation, in contact with skin and if swallowed. Causes damage to organs. Vapours may cause drowsiness or dizziness. May cause injury, blindness or death. However industrial exposures are considered safe if concentrations are kept within the regulatory exposure limit of 200 ppm. Skin contact may result in dermatitis.
Primary Irritant Effect:	Contact can severely irritate skin and eyes; prolonged contact may cause eye injury.
Other Acute Health Effects:	Targets the Central Nervous System (CNS), lungs, gastrointestinal tract, liver, kidneys and blood (large or prolonged dosages). Risk of serious damage to eyes. Because these 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:	Suspected reproductive toxin based on limited animal evidence.

ECOLOGICAL INFORMATION (12):

Toxicity:	100% Methanol [CAS# 67-56-1]: Fish LC ₅₀ - <i>Oncorhynchus mykiss</i> (rainbow trout) – 19,000 mg/l - 96 h Daphnia EC ₅₀ - <i>Daphnia pulex</i> (Water flea) – 24,500 mg/l - 48 h <i>Source: Raw Material Vendor Safety Data Sheet</i>
Persistence and degradability:	The alcohol in this product is expected to evaporate quickly, be readily degraded in air (photochemically) and to moderately biodegrade when released in water or soil.
Bioaccumulation potential:	The alcohol in this product is expected to evaporate quickly, be readily degraded in air (photochemically) and to moderately biodegrade when released in water or soil.
Mobility in soil:	No information found.
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:

Any flammable **methanol** (closed-cup Flash Point of $\leq 60^{\circ}\text{C}/140^{\circ}\text{F}$) that 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 methanol are D001 (and U154 only if discarding the kit component as found in the kit); check your international, national, regional and local ordinances accordingly.

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 and disposal 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.

The air and land transportation information for this product when used as intended (discarded kit components and waste) is:

Component Methanol Fixative in this kit contains undiluted **methanol**; 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: **Methanol or Methyl Alcohol**

DOT Class: **3, 6.1**

Packing group: **II**

DOT ID Number: **UN 1230**

REGULATORY INFORMATION (15):

Composite HMIS Rating: Health: 2 Flammability: 3 Reactivity: 0

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 Safety and Health 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
Class D2B - Materials causing other toxic effects (toxic material)

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 1999/45/EC, 2001/59/EC, 2001/60/EC and 2006/102/EC).

Hazard Designation of Composite Product: HIGHLY FLAMMABLE: F



; TOXIC: T



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

Methanol (undiluted CH₃OH), CAS# 67-56-1, EC No 200-659-6, Flash Point: 11°C/52°F [Highly Flammable: F, Toxic: T; R 11-23/24-25-67; S 7/9-15-16-23-36/37/39-60].

OTHER INFORMATION (16):**Risk Phrases:**

- R 11 Highly flammable.
R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R 67 Vapours 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 23 Do not breathe vapour.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
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.

Department issuing MSDS: Environmental Health and Safety.

Contact: Redmond Operations, Environmental Health & Safety, 6565 185th Ave. NE, Redmond, WA 98052, USA,
Phone: 425-881-8300 (8 am to 5 pm PT), www.bio-rad.com

Contact Local Bio-Rad Agents for general information:

Australia, Bio-Rad Laboratories Pty. Ltd., Level 5, 446 Victoria Road, Gladesville NSW 2111 • Phone 61-2-9914-2800 • Telefax 61-2-9914-2888
Austria, Bio-Rad Laboratories Ges.m.b.H., Hummelgasse 88/3-6, A-1130 Vienna • Phone 43-1-877-8901 • Telefax 43-1-876-5629 •
[\[techsupport.austria@bio-rad.com\]](mailto:techsupport.austria@bio-rad.com)
Belgium, Bio-Rad S.A.-N.V. Begoniastraat 5, B-9810 Nazareth Eke • Phone 3293855511 • Telefax 3293856554 • [\[Clinsupport.belgium@bio-rad.com\]](mailto:Clinsupport.belgium@bio-rad.com)
Brazil, Bio-Rad do Brasil, Praia de Botafogo, 440-3rd Floor, Botafogo, RJ CEP 22250-040, Rio de Janeiro • Phone 5521-3237-9400 •
Telefax 55 21 2527-3099
Canada, Bio-Rad Laboratories, Ltd., 2403 Guénette Street, Montréal, Québec H4R 2E9 • Phone 1-514-334-4372 or 1-800-361-1808 •
Telefax 1-514-334-4415
China, Bio-Rad Laboratories Shanghai Ltd. 3rd Floor, #18 Dong Fang Road, Bldg E, Poly Plaza, Pudong, Shanghai PRC • Phone 86-21-64260808 •
Telefax 86-21-64264988
Czech Republic, Bio-Rad spol. s r.o., Nad ostrovem 1119/7, 147 00 Prague 4 • Phone 420-241-430-532 • Telefax 420-241-431-642
Denmark, Bio-Rad Laboratories, Symbion Science Park, Fruebjergvej 3, DK-2100 Copenhagen East • Phone +45 44 52-10 00 • Telefax +45 44 52-10 01 •
[\[nordic_helpdesk@bio-rad.com\]](mailto:nordic_helpdesk@bio-rad.com)
Finland, Bio-Rad Laboratories, Linnanherrankuja 16, FIN-00950 Helsinki • Phone 358-9-804-22-00 • Telefax 3589-7597 5010
France, Bio-Rad, 3 boulevard Raymond Poincaré, 92430 Marnes-la-Coquette • Phone +33 (0)1 47 95 60 00 • Telefax +33 (0)1 47 41 91 33 •
[\[fds-msds.fr@bio-rad.com\]](mailto:fds-msds.fr@bio-rad.com) or fds.msds@bio-rad.com
Germany, Bio-Rad Laboratories GmbH, Heidemannstrasse 164, D-80939 Munich • Phone +49-(0)89-318840 • Telefax +49-(0)89-31884100 •
[\[diagnostics_germany@bio-rad.com\]](mailto:diagnostics_germany@bio-rad.com)
Greece, Bio-Rad Laboratories M.EPE, 2-4 Mesogeion Street, Fourth Floor 115 27 Athens • Phone 30-210-7774396 • Telefax 30-210-7774376
Hong Kong, Bio-Rad Pacific Ltd., Unit 1101, 11/F DCH Commercial Centre, 25 Westlands Road, Quarry Bay • Phone 852-2789-3300 •
Telefax 852 2789-1290
Hungary, Bio-Rad Hungary Ltd., Futó Street 47-53, H-1082 Budapest, Hungary • Phone 36-1-459-6100 • Telefax + 36-1-459-6101
India, Bio-Rad Laboratories (India) Pvt. Ltd., Bio-Rad House, 86-87, Udyog Vihar, Phase - IV, Gurgaon, Haryana 122 015 • Phone 91-124-4029300 •
Telefax 91-124-2398115
Israel, Bio-Rad Laboratories Ltd., 14 Homa Street, New Industrial Area, Rishon Le Zion 75655 • Phone 972-3-9636050 • Telefax 972-3-9514129
Italy, Bio-Rad Laboratories S.r.l., Via Cellini 18/A, 20090 Segrate, Milan • Phone +39 02 216091 • Telefax +39 02 21609398 •
[\[diagnostics_italy@bio-rad.com\]](mailto:diagnostics_italy@bio-rad.com)
Japan, Bio-Rad Laboratories K.K., Tennoz Central Tower 20F, 2-2-24 Higashi-Shinagawa, Shinagawa-ku, Tokyo 140-0002 • Phone 81-3-6361-7070 •
Telefax 81-3-5463-8483
Korea, Bio-Rad Korea Ltd., 10th Floor, Hyunjuk Building, 832-41, Gangnam-gu, Seoul 135-080 • Phone 82-2-3473-4460 • Telefax 82-2-3472-7003
Mexico, Bio-Rad, S.A., Avenida Eugenia 197, Piso 10-A, Col. Narvarte, Delegacion Benito Juarez, C.P. 03020 Mexico, D.F. •
Phone +52 (55) 5488-7670 • Telefax +52 (55) 1107-7246 • [\[cdg_mexico@bio-rad.com\]](mailto:cdg_mexico@bio-rad.com)
The Netherlands, Bio-Rad Laboratories B.V., Fokkerstraat 2-8, 3905 KV Veenendaal • Phone +31-318-540666 • Telefax +31-318542216
New Zealand, Bio-Rad New Zealand, 189 Bush Road Unit B, Albany, Auckland • Phone 6494152280 • Telefax 6494152284
Norway, Bio-Rad Laboratories, Johan Scharffenbergs vei 91, N-0694 Oslo • Phone 4723384130 • Telefax 4723384139
Poland, Bio-Rad Polska Sp. z o.o., Nakielska Str. 3, 01-106 Warsaw • Phone 48-22-3319999 • Telefax 48-22-3319988
Portugal, Bio-Rad Laboratories, Lda., Edifício Prime, Av. Quinta Grande, 53 – Fracção 3B Alfragide 26114-521 Amadora • Phone 351-21-472-7700 •
Telefax 351-21-472-7777 • [\[literature_cdg_portugal@bio-rad.com\]](mailto:literature_cdg_portugal@bio-rad.com)
Russia, Bio-Rad Laboratorii, Business Centre “West Bridge”, Leningradsky pr-t H.37A Bld. 14, 125167 Moscow • Phone 7-495-72114 04 •
Telefax 7-495-721-14-12
Singapore, Bio-Rad Laboratories (Singapore) Pte. Ltd., 27 International Business Park, #01-02 iQuest @IBP, Singapore 609924 • Phone 65-6415-3170 •
Telefax 656415-3189
South Africa, Bio-Rad Laboratories (Pty) Ltd., 34 Bolton Road, Parkwood, Johannesburg 2193 • Phone 27-11-442-85-08 • Telefax 27-11-442-85-25
Spain, Bio-Rad Laboratories, S.A., C/ Caléndula, 95, Edificio M. Miniparc II, El Soto de la Moraleja, 28109 Madrid • Phone 34-91-590-5200 •
Telefax 34-91-590-5211 • [\[ofertas_lsg_spain@bio-rad.com\]](mailto:ofertas_lsg_spain@bio-rad.com)
Sweden, Bio-Rad Laboratories A.B., Vintergatan 1, Box 1097, S-172 22 Sundbyberg • Phone 46-8-555-127-00 • Telefax 46-8-555-127-80 •
[\[nordic_helpdesk@bio-rad.com\]](mailto:nordic_helpdesk@bio-rad.com)
Switzerland, Bio-Rad Laboratories AG, Nenzlingerweg 2, CH-4153 Reinach BL • Phone 41-61-717-95-55 • Telefax 41-61-717-95-50 •
[\[service.switzerland@bio-rad.com\]](mailto:service.switzerland@bio-rad.com)
Thailand, Bio-Rad Laboratories Ltd., 1st & 2nd Floor, Lumpini I Bldg., 239/2 Rajdamri Rd., Lumpini, Pathumwan, Bangkok 10330 •
Phone 662-651-8311 • Telefax 662-651-8312
United Kingdom, Bio-Rad Laboratories Ltd., Bio-Rad House, Maxted Road, Hemel Hempstead, Herts HP2 7DX • Phone +44-(0)20-8328-2000 •
Telefax +44-(0)20-8328-2550 • [\[techsupport.uk@bio-rad.com\]](mailto:techsupport.uk@bio-rad.com)

This document was developed from information obtained from reputable sources, but does not purport to be all-inclusive. The data contained herein, which is based on our present knowledge and is intended for information purposes only, shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Regulatory requirements are subject to change and vary from one location to another; thus, it is the buyer's responsibility to ensure that its activities comply with international, national, regional and local laws and regulations. Bio-Rad Laboratories makes no warranty, expressed or implied, regarding the accuracy or completeness of these data or the results to be obtained from the use thereof. Since the use of this information and the conditions of use of the product are not within the control of Bio-Rad Laboratories, it is the user's obligation to determine the suitability of the information for the intended application and use appropriate safety procedures.