SAFETY DATA SHEET



Revision date 15-Sep-2023 Revision Number 1.2

1. Identification

Product identifier

Product Name Exact Diagnostics HPV

Other means of identification

Catalog Number(s) HPVP100, HPV16C, HPV18C, HPV68C, HPVNEG, HPVP200, HPVB200

UN/ID no UN1992

Recommended use of the chemical and restrictions on use

Recommended use In vitro diagnostic

Details of the supplier of the safety data sheet

Corporate Headquarters Manufacturer Address Legal Entity / Contact Address

Bio-Rad Laboratories Inc. **Exact Diagnostics** Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive 100 South Jones Street, Suite 100, 9500 Jeronimo Road Hercules, CA 94547 Fort Worth, Texas 76104 Irvine, California 92618 USA USA

USA

Technical Service 1(800) 854-6737

qsd.techservice@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC USA: 1 (800) 424-9300

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Specific target organ toxicity (single exposure)	Category 1
Flammable liquids	Category 3

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Toxic if swallowed

Toxic in contact with skin

Toxic if inhaled

Causes damage to organs Flammable liquid and vapor

AGHS / EN 1 / 11 Page



Appearance clear liquid Physical state Liquid Odor Alcohol

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

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

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor

Call a POISON CENTER or doctor if you feel unwell

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTER or doctor

IF SWALLOWED: Immediately call a POISON CENTER or doctor

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Unknown acute toxicity

Other information

May be harmful if inhaled. Harmful to aquatic life.

Contains human source material and / or potentially infectious components

3. Composition/information on ingredients

<u>Substance</u>

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
Methanol	67-56-1	50 - 100	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

AGHS / EN Page 2/11

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If breathing

has stopped, give artificial respiration. Get medical attention immediately. Immediate medical attention is required. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained

personnel should) give oxygen.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention. Contains human source material and / or potentially infectious

components. Call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Get immediate medical advice/attention. Wash with soap and water.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Get immediate medical advice/attention. Contains human source material and / or

potentially infectious components. Call a physician.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory

medical device. Do not breathe vapor or mist.

Most important symptoms and effects, both acute and delayed

Symptoms Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physiciansContains human source material and / or potentially infectious components.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Specific hazards arising from the

chemical

Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire

extinguishing water must be disposed of in accordance with local regulations.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

AGHS / EN Page 3/11

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See

section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Do not breathe

vapor or mist.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor

suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Do not allow into any

sewer, on the ground or into any body of water.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers. Use:. Disinfectant.

Clean contaminated surface thoroughly.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up. Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Methanol	STEL: 250 ppm	TWA: 200 ppm	IDLH: 6000 ppm

AGHS / EN Page 4/11

67-56-1	TWA: 200 ppm S*	TWA: 260 mg/m³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m³ (vacated) STEL: 250 ppm	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³
		(vacated) STEL: 230 ppm (vacated) STEL: 325 mg/m³ (vacated) S*	31EL. 323 Hig/III-

Biological occupational exposure limits

Chemical name	ACGIH
Methanol	15 mg/L - urine (Methanol) - end of shift
67-56-1	

Appropriate engineering controls

Engineering controls Showers

> Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Do not eat, drink or smoke when using this product. Contaminated work clothing should not **General hygiene considerations**

> be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Do not breathe vapor or mist. Follow universal and standard precautions for handling potentially

infectious materials.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid **Appearance** clear liquid Color clear Odor Alcohol

Odor threshold No information available

Remarks • Method **Property** Values

pН

71 °C / 159.8 °F Melting point / freezing point

Boiling point / boiling range No data available None known

Flash point 26 °C / 78.8 °F

Evaporation rate No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

AGHS / EN 5/11 Page

Exact Diagnostics HPV

Revision date 15-Sep-2023

No data available Vapor pressure None known Vapor density No data available None known Relative density No data available None known Water solubility No data available None known Solubility(ies) No data available None known **Partition coefficient** No data available None known 464 °C / 867.2 °F **Autoignition temperature**

No data available **Decomposition temperature** None known Kinematic viscosity No data available None known No data available None known Dynamic viscosity

Other information

Explosive properties No information available **Oxidizing properties** No information available Softening point No information available Molecular weight No information available **VOC** content No information available No information available **Liquid Density Bulk density** No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks. Excessive heat.

None known based on information supplied. Incompatible materials

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Specific test data for the substance or mixture is not available. Toxic by inhalation. (based Inhalation

on components). May be harmful if inhaled.

Specific test data for the substance or mixture is not available. Eye contact

Skin contact Specific test data for the substance or mixture is not available. Toxic in contact with skin.

(based on components).

Specific test data for the substance or mixture is not available. Toxic if swallowed. (based on Ingestion

components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Coughing and/ or wheezing. Difficulty in breathing.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

AGHS / EN 6/11 Page

ATEmix (oral) 181.80 mg/kg
ATEmix (dermal) 545.50 mg/kg
ATEmix (inhalation-dust/mist) 0.911 mg/l
ATEmix (inhalation-vapor) 75.80 mg/l

Unknown acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methanol	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h
67-56-1			

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure Based on the classification criteria of the Globally Harmonized System as adopted in the

country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

STOT - repeated exposureNo information available.

Target organ effects Respiratory system, Eyes, Skin, Central nervous system, Gastrointestinal tract (GI).

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Methanol	-	LC50: =28200mg/L (96h,	-	-
67-56-1		Pimephales promelas)		
		LC50: >100mg/L (96h,		
		Pimephales promelas)		

AGHS / EN Page 7/11

1.050 40500 00700 #	
LC50: 19500 - 20700mg/L	
(96h, Oncorhynchus	
mykiss)	
LC50: 18 - 20mL/L (96h,	
Oncorhynchus mykiss)	
LC50: 13500 - 17600mg/L	
(96h, Lepomis	
macrochirus)	

Persistence and degradability

No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Methanol	-0.77
67-56-1	

Other adverse effects

No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental

legislation.

Contaminated packaging

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld

containers.

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT

UN/ID no UN1992

Proper shipping name FLAMMABLE LIQUIDS, TOXIC, N.O.S.

Transport hazard class(es) 3
Subsidiary class 6.1
Packing group III

Reportable Quantity (RQ) (Methanol Solution: RQ (kg)= 2270.00) Methanol Solution: RQ (lb)= 5000.00

Reportable quantity kg Methanol Solution: RQ (kg)= 4127.00

(calculated)

Special Provisions B1, IB3, T7, TP1, TP28

DOT Marine Pollutant NP

Description UN1992, FLAMMABLE LIQUIDS, TOXIC, N.O.S. (Methanol Solution), 3 (6.1), III

Emergency Response Guide 131

Number

TDG

UN/ID no UN1992

Proper shipping name FLAMMABLE LIQUID, TOXIC, N.O.S.

Transport hazard class(es) 3 Subsidiary class 6.1

AGHS / EN Page 8/11

Packing group III Special Provisions 16

Description UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S. (Methanol Solution), 3 (6.1), III

MEX

UN/ID no UN1992

Proper shipping name FLAMMABLE LIQUID, TOXIC, N.O.S.

Transport hazard class(es) 3
Subsidiary class 6.1
Packing group III

MEX Technical Name Methanol Solution

Description UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S. (Methanol Solution), 3 (6.1), III

Special Provisions 223, 274

IATA

UN number or ID number UN1992

UN proper shipping name Flammable liquid, toxic, n.o.s.

Transport hazard class(es) 3
Subsidiary hazard class 6.1
Packing group III

IATA Technical Name Methanol Solution

Description UN1992, Flammable liquid, toxic, n.o.s. (Methanol Solution), 3 (6.1), III

Special Provisions A3

IMDG

UN number or ID number UN1992

UN proper shipping name FLAMMABLE LIQUID, TOXIC, N.O.S.

Transport hazard class(es) 3
Subsidiary hazard class 6.1
Packing group III
EmS-No F-E, S-D
Special Provisions 223, 274
Marine pollutant NP

Description UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S. (Methanol Solution), 3 (6.1), III, (26°C

C.C.)

15. Regulatory information

International Inventories Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Methanol - 67-56-1	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

AGHS / EN Page 9/11

Revision date 15-Sep-2023

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Methanol 67-56-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Methanol - 67-56-1	Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Methanol	X	X	X
67-56-1			
Water	-	-	X
7732-18-5			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

1	16	Other	· infor	mation

NFPA Health hazards 3 Flammability 3 Instability 0 Special hazards - HMIS Health hazards 3 Flammability 3 Physical hazards 0 Personal protection X

Chronic Hazard Star Legend *= Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

U.S. Environmental Protection Agency Chemylew Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

A sut a France control (a FOL /a

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

AGHS / EN Page 10/11

Revision date 15-Sep-2023

Revision Note Reviewed existing information and made minor updates.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

AGHS / EN Page 11/11