

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 02/13/2017

Reviewed on 02/13/2017

## 1 Identification

- **Product identifier**
- **Trade name:** TDM by HPLC, INT STND 5
- **Article number:** 1955985
- **Application of the substance / the mixture** In-Vitro-laboratory reagent or component
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier**  
Bio-Rad Laboratories (Canada) Ltd.  
2403 Guenette Street  
Montreal, Quebec H4R 2E9  
Phone: (514) 334-4372  
Freephone: 1 (800) 361-1808  
Fax: (514) 334-0872
- **Information department:**  
Technical Support:  
E-mail: [cdg\\_canada\\_salesmarketing@bio-rad.com](mailto:cdg_canada_salesmarketing@bio-rad.com)
- **Emergency telephone number:**  
GBK Gefahrgut Büro GmbH  
Tel.: 0049(0)6123-84463

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Flammable Liquids - Category 3 H226 Flammable liquid and vapour.
- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02

- **Signal word** Warning
- **Hazard statements**  
Flammable liquid and vapour.
- **Precautionary statements**  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Use explosion-proof [electrical/ventilating/lighting] equipment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Ground and bond container and receiving equipment.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Hazard description:**
- **WHMIS-symbols:**  
B3 - Combustible liquid



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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	2	Fire = 2
REACTIVITY	0	Reactivity = 0

## 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

### · **Dangerous components:**

75-05-8	acetonitrile	3-7% w/w
	Flammable Liquids - Category 2, H225;  Acute Toxicity (Oral) - Category 4, H302; Acute Toxicity (Dermal) - Category 4, H312; Acute Toxicity (Inhalation) - Category 4, H332; Eye Irritation - Category 2A, H319	

## 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.

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- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· <b>Components with limit values that require monitoring at the workplace:</b>	
75-05-8 acetonitrile	
EL	Long-term value: 20 ppm
	Skin
EV	Long-term value: 20 ppm
	Skin

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

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

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· **Body protection:** Protective work clothing

### 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· <b>Form:</b>	Fluid
· <b>Color:</b>	Colorless
· <b>Odor:</b>	Characteristic
· <b>Odor threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	81 °C

· **Flash point:** >55 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 524 °C

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Not determined.

· **Explosion limits:**

· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.

· **Vapor pressure at 20 °C:** 23 hPa

· <b>Density at 20 °C:</b>	0,99 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

· **Solubility in / Miscibility with**

· **Water:** Fully miscible.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.

· **Other information** No further relevant information available.

### 10 Stability and reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

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· **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
- Water hazard class 2 (Self-assessment): hazardous for water
- Do not allow product to reach ground water, water course or sewage system.
- Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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**14 Transport information**

· UN-Number	UN1993
· DOT, TDG, IMDG, IATA	
· UN proper shipping name	Flammable liquids, n.o.s. (Acetonitrile)
· DOT	1993 Flammable liquids, n.o.s. (Acetonitrile), special provision 640E
· TDG	FLAMMABLE LIQUID, N.O.S. (ACETONITRILE)
· IMDG, IATA	
· Transport hazard class(es)	
· DOT	
	
· Class	3 Flammable liquids
· Label	3
· TDG, IMDG, IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, TDG, IMDG, IATA	III
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	30
· EMS Number:	F-E, S-E
· Stowage Category	A
· Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· TDG	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1993 FLAMMABLE LIQUIDS, N.O.S., SPECIAL PROVISION 640E (ACETONITRILE), 3, III

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## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

### · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

### · Section 313 (Specific toxic chemical listings):

75-05-8 | acetonitrile

### · TSCA (Toxic Substances Control Act):

75-05-8 | acetonitrile

7732-18-5 | water, distilled, conductivity or of similar purity

### · Canadian substance listings:

#### · Canadian Domestic Substances List (DSL)

75-05-8 | acetonitrile

7732-18-5 | water, distilled, conductivity or of similar purity

#### · Canadian Ingredient Disclosure list (limit 0.1%)

75-05-8 | acetonitrile

#### · Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

### · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

### · Hazard pictograms



GHS02

### · Signal word Warning

### · Hazard statements

Flammable liquid and vapour.

### · Precautionary statements

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

Use explosion-proof [electrical/ventilating/lighting] equipment.

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

Ground and bond container and receiving equipment.

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

Dispose of contents/container in accordance with local/regional/national/international regulations.

### · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### · Department issuing SDS:

Bio-Rad Laboratories GmbH

Heidemannstrasse 164

D-80939 Munich

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**· Contact:***Technical Support:**E-Mail: cts-ce@bio-rad.com***· Abbreviations and acronyms:***IMDG: International Maritime Code for Dangerous Goods**DOT: US Department of Transportation**IATA: International Air Transport Association**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**NFPA: National Fire Protection Association (USA)**HMIS: Hazardous Materials Identification System (USA)**WHMIS: Workplace Hazardous Materials Information System (Canada)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative***· \* Data compared to the previous version altered.**

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