

Printing date 02/13/2017 Reviewed on 02/13/2017

1 Identification

· 1.1 Product identifier

Trade name: VMA by Column Test, REAG 1

· Article number: 1896052

· Application of the substance / the mixture In-Vitro-laboratory reagent or component

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Bio-Rad Laboratories, Inc 4000 Alfred Nobel Drive Hercules, California 94547

Phone: 510-724-7000

Toll-Free: 1-800-2-BIORAD (800-224-6723)

Fax: 510-741-6373

· Information department:

Technical Support:

Email: support@bio-rad.com · 1.4 Emergency telephone number: GBK Gefahrgut Büro GmbH

Tel.: 0049(0)6123-84463

2 Hazard(s) identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Acute Tox. 5 H333 May be harmful if inhaled.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

- · Hazard pictograms Void
- · Signal word Warning
- · Hazard statements

H333 May be harmful if inhaled.

· Precautionary statements

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

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



Health = 0Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



 $0 \quad Health = 0$

Fire = 0

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.



Printing date 02/13/2017 Reviewed on 02/13/2017

Trade name: VMA by Column Test, REAG 1

(Contd. of page 1)

3 Composition/information on ingredients

- · 3.2 Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

4 First-aid measures

- · 4.1 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.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- · 6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· 6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

6131-90-4 sodium acetate trihydrate	11 mg/m3
64-19-7 acetic acid	5 ppm
26628-22-8 sodium azide	0.026 mg/m ²
PAC-2:	•
6131-90-4 sodium acetate trihydrate	120 mg/m3
	35 ppm
64-19-7 acetic acid	



Printing date 02/13/2017 Reviewed on 02/13/2017

Trade name: VMA by Column Test, REAG 1

	(Contd. of page 2)
· PAC-3:	
6131-90-4 sodium acetate trihydrate	690 mg/m3
64-19-7 acetic acid	250 ppm
26628-22-8 sodium azide	5.3 mg/m3

7 Handling and storage

- · 7.1 Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · 7.2 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.
- · 7.3 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.
- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · 8.2 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.



Printing date 02/13/2017 Reviewed on 02/13/2017

Trade name: VMA by Column Test, REAG 1

(Contd. of page 3)

Physical and chemical proper	
9.1 Information on basic physical ar	nd chemical properties
General Information	
Appearance: Form:	Fluid
Color:	Colorless
Odor:	Odorless
Odor threshold:	Not determined.
pH-value at 20 °C (68 °F):	6.1
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)
Density at 20 °C (68 °F):	1.05 g/cm³ (8.76225 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/wate	r): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
9.2 Other information	No further relevant information available.

10 Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions

This product contains sodium azid. Sodium azid can react with copper, brass lead, and solder in piping system to form explosive compounds of lead azid and copper azid.

- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.

(Contd. on page 5)



Printing date 02/13/2017 Reviewed on 02/13/2017

Trade name: VMA by Column Test, REAG 1

(Contd. of page 4)

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

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:

May be harmful if inhaled.

- · Primary irritant effect:
- on the skin: Based on available data, the classification criteria are not met.
- on the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Based on available data, the classification criteria are not met.
- · 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.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

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

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

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

- · 13.1 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.

US



Printing date 02/13/2017 Reviewed on 02/13/2017

Trade name: VMA by Column Test, REAG 1

(Contd. of page 5)

14.1 UN-Number DOT, ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	Void	
14.4 Packing group DOT, ADR, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to Anno MARPOL73/78 and the IBC Code	ex II of Not applicable.	
UN "Model Regulation":	Void	

15 Regulatory information

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

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

26628-22-8 sodium azide

Section 313 (Specific toxic chemical listings):

26628-22-8 sodium azide

26628-22-8 sodium azide

· TSCA (Toxic Substances Control Act):

7447-40-7 potassium chloride 64-19-7 acetic acid

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

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

(Contd. on page 7)



Printing date 02/13/2017 Reviewed on 02/13/2017

Trade name: VMA by Column Test, REAG 1

(Contd. of page 6)

· TLV (Threshold Limit Value established by ACGIH)

26628-22-8 sodium azide

 $\overline{A4}$

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· 15.2 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

· Contact:

Technical Support:

E-Mail: cts-ce@bio-rad.com

Date of preparation / last revision 02/13/2017 / 6

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 5: Acute toxicity - Category 5

* Data compared to the previous version altered.