

Printing date 06/26/2015 Reviewed on 06/12/2015

1 Identification

- · Product identifier
- · Trade name: DropletDigital Verification Reagents / Calibration Reagents FAM/HEX/VIC / Droplet Standards
- · Catalog or product number: 1863036, 1863053, 10028179, 10028391, 10028392, 10028393, 10028394
- Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories, Life Science Group 2000 Alfred Nobel Drive Hercules, California 94547

(510)741-1000

· Information department:

Technical services, customer support

Isg techserv us@bio-rad.com

· Emergency telephone number:

1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.

510-741-1000

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Additional information: Contact with acids may cause release of toxic gases
- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

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

· Listing of dangerous and non-hazardous components:	
Proprietary Reagent PW2	35-50%
Proprietary Reagent O	35-50%
Proprietary Reagent J11	5-10%
Non-ionic surfactant	0.1-1.0%
Proprietary Component A, inorganic salt	0.1-1.0%
Proprietary Reagent K	0.1-1.0%
Proprietary Reagent PW1	0.1-1.0%
	(Contd. on page 2)

(Contd. on page 2)



Printing date 06/26/2015 Reviewed on 06/12/2015

Trade name: DropletDigital Verification Reagents / Calibration Reagents FAM/HEX/VIC / Droplet Standards

(Contd. of page 1)

· Additional information For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

- · Description of first aid measures
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Induce vomiting and call for medical help.
- · 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

CO2, 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 Wear protective clothing.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

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

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.

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: According to product specification
- · 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.

HS



Printing date 06/26/2015 Reviewed on 06/12/2015

Trade name: DropletDigital Verification Reagents / Calibration Reagents FAM/HEX/VIC / Droplet Standards

(Contd. of page 2)

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 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.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.
- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

3 r mysicai and chemical properties
. Information on basic physical and cham

· Information on basic physical and chemical properties		
General Information		
· Appearance: Form:	Liquid	
Color:	Colorless	
· Odor:	Odorless	
· Odour threshold:	Not determined.	
· pH-value at 20 °C:	8.3	
· Change in condition		
Melting point/Melting range:	undetermined	
Boiling point/Boiling range:	100 ℃	
· Flash point:	Not applicable	
· Flammability (solid, gaseous)	Not applicable.	
· Ignition temperature:	400 °C	
· 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:	23 hPa	
· Density:	Not determined	

(Contd. on page 4)



Printing date 06/26/2015 Reviewed on 06/12/2015

Trade name: DropletDigital Verification Reagents / Calibration Reagents FAM/HEX/VIC / Droplet Standards

		(Contd. of page 3)
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not determined.	
· Partition coefficient (n-octanol/water): Not determined.		
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	48.7 %	
Solids content:	51.3 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity
- · 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.
- · 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: Irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- · 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.

(Contd. on page 5)



Printing date 06/26/2015 Reviewed on 06/12/2015

Trade name: DropletDigital Verification Reagents / Calibration Reagents FAM/HEX/VIC / Droplet Standards

(Contd. of page 4)

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Target organs: Not applicable.

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 1 (German Regulation) (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.

- · 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.

14 Transport information		
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void	
 UN proper shipping name DOT, ADR, ADN, IMDG, IATA 	Void	
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA · Class	Void	
· Packing group · DOT, ADR, IMDG, IATA	Void	
· Environmental hazards: · Marine pollutant:	No	
	No	(Contd. on



Printing date 06/26/2015 Reviewed on 06/12/2015

Trade name: DropletDigital Verification Reagents / Calibration Reagents FAM/HEX/VIC / Droplet Standards

(Contd. of page 5)

- · Special precautions for user
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

LIAL HAVE JELD CONTROL

Not applicable.

Not applicable.

UN "Model Regulation":

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

Proprietary Reagent D

- Section 313 (40CFR372.65):
- Proprietary Reagent SR 2

Proprietary Reagent D

· TSCA (Toxic Substances Control Act):

Proprietary Reagent PW2

Proprietary Reagent O

Proprietary Reagent J11

Proprietary Reagent K

Proprietary Reagent PW1

Proprietary Reagent KL

Proprietary Reagent SR 2

Proprietary Reagent MK10

Proprietary Reagent TL1

Proprietary Reagent D

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

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

None of the ingredients is listed.

- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	35-50

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



Printing date 06/26/2015 Reviewed on 06/12/2015

Trade name: DropletDigital Verification Reagents / Calibration Reagents FAM/HEX/VIC / Droplet Standards

(Contd. of page 6)

· 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: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- · Date of preparation / last revision 06/26/2015 / -
- · Abbreviations and acronyms:

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

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)

· * Data compared to the previous version altered.

110