Material Safety Data Sheet

Page 1/7

Reviewed on 07/24/2013

Printing date 07/25/2013

1 Identification

· Product identifier

- · Trade name: <u>PV92 XC Loading Dye</u>
- · Catalog or product number: 9704814
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the preparation 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 lsg_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
- · 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: | | | | |
|--|-------------------|----------|--|--|
| 56-81-5 | glycerol | 20-35% | | |
| 2650-17-1 | Xylene cyanole FF | 0.1-1.0% | | |
| 7732-18-5 | water | 50-100% | | |
| Adultional information Family and the listed viels whereas refer to another 45 | | | | |

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

4 First-aid measures

· Description of first aid measures

· General information No special measures required.

(Contd. on page 2)

Material Safety Data Sheet

Printing date 07/25/2013

Reviewed on 07/24/2013

Trade name: PV92 XC Loading Dye

(Contd. of page 1)

Page 2/7

- 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 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: Dilute with plenty of water.

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 measures required.
- · 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.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

(Contd. on page 3)

USA -

Material Safety Data Sheet

Page 3/7

Trade name: PV92 XC Loading Dye

| Control novomotoro | (Contd. of page 2) | | | | |
|--|--|--|--|--|--|
| Control parameters Components with limit values that | require monitoring at the workplace: | | | | |
| 56-81-5 glycerol | | | | | |
| PEL () 15* 5** mg/m ³ *total dust **respirable fraction | EL () 15* 5** mg/m ³ | | | | |
| TLV () 10* ppm *Mist | TLV () 10* ppm | | | | |
| • Additional information: The lists the | at were valid during the creation were used as basis. | | | | |
| Breathing equipment: Not required. Protection of hands: Protective glov Material of gloves Synthetic gloves Penetration time of glove material | easures The usual precautionary measures for handling chemicals should be followed. res. be found out by the manufacturer of the protective gloves and has to be observed. | | | | |
| 9 Physical and chemical prope | rties | | | | |
| Information on basic physical and chemical properties General Information Appearance: | | | | | |
| Form: | Liquid | | | | |
| Color: | Colorless | | | | |
| · Odor: · Odour threshold: | Odorless Not determined. | | | | |
| · pH-value: | Not determined. | | | | |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: | undetermined undetermined | | | | |
| · 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: | 0.9 Vol % Not determined. | | | | |
| Upper: · Vapor pressure at 20 °C: | 23 hPa | | | | |
| · Density: | Not determined | | | | |
| · Density: · Relative density | Not determined Not determined. | | | | |
| | (Contd. on page 4) | | | | |

Material Safety Data Sheet

Reviewed on 07/24/2013

Trade name: PV92 XC Loading Dye

| | | (Contd. of page |
|------------------------------------|--|-----------------|
| · Vapour density | Not determined. | |
| Evaporation rate | Not determined. | |
| Solubility in / Miscibility with | | |
| Water: | Fully miscible | |
| Partition coefficient (n-octanol/w | ater): Not determined. | |
| Viscosity: | | |
| dynamic: | Not determined. | |
| kinematic: | Not determined. | |
| Solvent content: | | |
| Organic solvents: | 29.9 % | |
| Water: | 69.8 % | |
| Solids content: | 0.3 % | |
| 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: No irritant effect. 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)

USA

BIOTAD

Material Safety Data Sheet

Page 5/7

Reviewed on 07/24/2013

Trade name: PV92 XC Loading Dye

Printing date 07/25/2013

(Contd. of page 4)

LIS A

· 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

Hand over to hazardous waste disposers. 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.

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 | |
| · Special precautions for user | Not applicable. | |
| | | (Contd. on page 6) |

Material Safety Data Sheet

Page 6/7

Reviewed on 07/24/2013

Trade name: PV92 XC Loading Dye

Printing date 07/25/2013

| | (Contd. of page 5) | | | |
|--|--|--|--|--|
| · Transport in bulk according to Annex II of MARPOL73/78 | | | | |
| and the IBC Code | Not applicable. | | | |
| · Transport/Additional information: | Not dangerous according to the above specifications. | | | |
| · 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):

None of the ingredients is listed.

Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· 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.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· National regulations

• Technical instructions (air):

Class Share in %

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

· 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 MSDS: Environmental Health and Safety.

· Contact:

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

(Contd. on page 7)

Material Safety Data Sheet

Printing date 07/25/2013

Reviewed on 07/24/2013

Trade name: PV92 XC Loading Dye

(Contd. of page 6) Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000 • 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.

USA