Safety Data Sheet acc. to OSHA HCS

Printing date 04/27/2016 Reviewed on 04/08/2016 **1** Identification · Product identifier Trade name: Coomassie Brilliant Blue R-250 Destain Soln · Catalog or product number: 1610438, 1610439, 1610438EDU, 1610439EDU · 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 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

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Acute Tox. 3 H331 Toxic if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 1 H370 Causes damage to organs.

· Label elements

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

· Hazard pictograms



- · Signal word Danger
- Hazard-determining components of labeling: methanol
- Hazard statements
 H225 Highly flammable liquid and vapor.
 H331 Toxic if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H370 Causes damage to organs.

· Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up.

P405

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 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:

		STOT SE 1, H370	
64-19-7 acetic	, C	Flam. Liq. 3, H226 Skin Corr. 1A, H314	10-20%
7732-18-5 water	r		50-100%

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.

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• 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

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.

8 Exposure controls/personal protection

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

· Control parameters

· Compo	onents with limit values that require monitoring at the workplace:
67-56-1	1 methanol
PEL ()	260 mg/m³, 200 ppm
REL ()	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV ()	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI
64-19-7	7 acetic acid, glacial
PEL ()	25 mg/m³, 10 ppm
REL ()	Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm
TLV ()	Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm
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· Ingredients with biological limit values:

67-56-1 methanol

BEI () 15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

· 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: 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

9 Physical and chemical prope	rties	
 Information on basic physical and General Information Appearance: 	chemical properties	
Form:	Liquid	
Color:	Colorless	
 Odor: Odor threshold: 	Acrid 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:	455 ℃	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	4.0 Vol %	
Upper:	44.0 Vol %	
· Vapor pressure at 20 °C:	128 hPa	
· Density at 20 °C:	0.92102 g/cm ³	
· Relative density	Not determined.	
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· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient (n-octanol/wa	ater): Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	45.7 %	
Water:	54.3 %	
· 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.

· Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values for hazardous components per OSHA criteria:

67-56-1 methanol

Oral LD50 5628 mg/kg (rat)

Dermal LD50 20000 mg/kg (rat)

64-19-7 acetic acid, glacial

Oral LD50 3310 mg/kg (rat)

· Primary irritant effect:

· on the skin: Irritant to skin and mucous membranes.

· on the eye: Irritant effect.

· Sensitization: No sensitizing effects known.

· Additional toxicological information:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

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· 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

· 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.

UN-Number DOT, ADR, IMDG, IATA	UN2924
UN proper shipping name	
DOT	Flammable liquids, corrosive, n.o.s. (Methanol, Acetic aci glacial)
ADR	2924 FLAMMABLE LIQUID, CORROSIVE, N.O. (METHANOL, ACETIC ACID, GLACIAL)
IMDG, IATA	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHANO ACETIC ACID, GLACIAL)

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Transport hazard class(es)	
DOT	
Class	3 Flammable liquids
Label	3, 8
ADR	
Class	3 Flammable liquids
Label	3+8
IMDG	
Class	3 Flammable liquids
Label	3/8
ΙΑΤΑ	
Class	3 Flammable liquids
Label	3 (8)
Packing group	
DOT, ADR, IMDG, IATA	III
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
EMS Number:	F-E,S-C
Segregation groups	Acids
Stowage Category	A
Stowage Code	SW2 Clear of living quarters.
Transport in bulk according to Annex II of MA	RPOL73/78
and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	Void
	Void
Remarks:	ERG 132
ADR	
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 2924 FLAMMABLE LIQUIDS, CORROSIVE, N.O.
	(METHANOL, ACETIC ACID, GLACIAL), 3 (8), III

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	endents and Reauthorization Act of 1986 - USA) FR355.30 / 40CFR355.40):
None of the ingredients	
Section 313 (40CFR3	72.65):
67-56-1 methanol	
TSCA (Toxic Substand	ces Control Act):
All ingredients are listed	1.
California Proposition	65:
Developmental Toxici	ty
67-56-1 methanol	
Carcinogenic categori	ies in the second s
EPA (Environmental P	rotection Agency)
None of the ingredients	is listed.
TLV (Threshold Limit	Value established by ACGIH)
None of the ingredients	is listed.
MAK (German Maximu	Im Workplace Concentration)
None of the ingredients	is listed.
NIOSH-Ca (National In	stitute for Occupational Safety and Health)
None of the ingredients	is listed.
National regulations	
Technical instructions	
	(air)

• 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 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 04/27/2016 / -

RIO-RAD

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· 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) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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 BEI: Biological Exposure Limit Flam. Liq. 2: Flammable liquids, Hazard Category 2 Flam. Liq. 3: Flammable liquids, Hazard Category 3 Acute Tox. 3: Acute toxicity, Hazard Category 3 Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1 • * Data compared to the previous version altered.

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