BIO-33029 BIO-33030 BIO-33056

HyperLadder 100bp Safety Data Sheet



A Meridian Life Science® Company



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 12/4/2016 Revision date: 2/8/2017 Supersedes: 12/20/2016 Version: 1.2

SECT	ION 1: Identification of the	e substance/mixture and of the company/undertaking			
1.1.	Product identifier				
Produc	t form	: Mixture			
Produc	t name	: HyperLadder™ 100bp			
Cat. no).	: BIO-33056, BIO-33029, BIO-33030			
1.2.	Relevant identified uses of th	e substance or mixture and uses advised against			
1.2.1.	Relevant identified uses				
Industr	ial/Professional use spec	: Industrial use Professional use			
Use of	the substance/mixture	: Laboratory use			
1.2.2.	Uses advised against				
No add	litional information available				
1.3.	Details of the supplier of the	safety data sheet			
Bioline	Reagents Ltd.				
Humbe	er Road				
Londor	1				
NW2 6	EW				
United	Kingdom				
T: +44	(0)20 8830 5300				
F: +44	(0)20 8452 2822				
E-mail:	info.uk@bioline.com				
1.4.	Emergency telephone numbe	r			
Emerge	ency number	: +44 (0)1865 407 333 – English speaking (24 hours, 7 days)			
SECT	ION 2: Hazards identificat	ion			
2.1.	Classification of the substand	e or mixture			
Classi	fication according to Regulation	(EC) No. 1272/2008 [CLP]			
	Not classified				
Advers	se physicochemical, human heal	th and environmental effects			
	litional information available				
2.2.	Label elements				
	elling obligation.				
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2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).			

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First-aid measures after inhalation	: Remove to fresh air, keep the patient warm and at rest. If symptoms persist, obtain medical		
First-aid measures after skin contact	attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed		
	by warm water rinse. If symptoms develop, obtain medical attention.		
First-aid measures after eye contact	: Rinse immediately with plenty of water. Ensure that folded skin of eyelids is thoroughly washed with water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.		
First-aid measures after ingestion	 Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Give 100 - 200 ml of water to drink. If symptoms develop, obtain medical attention. 		
4.2. Most important symptoms and effe	· · · · · · · · · · · · · · · · · · ·		
Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.		
Symptoms/injuries after eye contact	: May cause slight irritation to eyes.		
-	al attention and special treatment needed		
Treat symptomatically.			
SECTION 5: Firefighting measures			
5.1. Extinguishing media	. Llas sutismuisking modia annancista far sumaundiag fire		
Suitable extinguishing media Unsuitable extinguishing media	 Use extinguishing media appropriate for surrounding fire. None known. 		
5.2. Special hazards arising from the su			
Fire hazard	: Not flammable.		
Hazardous decomposition products in case of fire	: None known.		
5.3. Advice for firefighters			
Firefighting instructions	: Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.		
Protection during firefighting	: As in any fire, wear self-contained breathing apparatus and full protective gear.		
SECTION 6: Accidental release mea	sures		
6.1. Personal precautions, protective ed	quipment and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures	: Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing.		
6.1.2. For emergency responders			
Protective equipment	: Wear suitable protective clothing and gloves.		
Emergency procedures	: Avoid contact with eyes, skin and clothing.		
Emergency procedures	: Avoid contact with eyes, skin and clothing.		
Emergency procedures 6.2. Environmental precautions			
Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product	t enters sewers or public waters.		
Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product 6.3. Methods and material for containmental precautions	t enters sewers or public waters. ent and cleaning up		
Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product	t enters sewers or public waters.		
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Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product 6.3. Methods and material for containm Methods for cleaning up	t enters sewers or public waters. ent and cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.		
Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product 6.3. Methods and material for containm Methods for cleaning up 6.4. Reference to other sections SECTION 8: Exposure controls/personal protect	t enters sewers or public waters. ent and cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.		
 Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product 6.3. Methods and material for containm Methods for cleaning up 6.4. Reference to other sections SECTION 8: Exposure controls/personal protect SECTION 7: Handling and storage 	t enters sewers or public waters. ent and cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.		
 Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product 6.3. Methods and material for containm Methods for cleaning up 6.4. Reference to other sections SECTION 8: Exposure controls/personal protect SECTION 7: Handling and storage 7.1. Precautions for safe handling 	t enters sewers or public waters. ent and cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal. tion. SECTION 13: Disposal considerations.		
Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product 6.3. Methods and material for containm Methods for cleaning up 6.4. Reference to other sections SECTION 8: Exposure controls/personal protect SECTION 7: Handling and storage 7.1. Precautions for safe handling Precautions for safe handling	t enters sewers or public waters. ent and cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.		
 Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product 6.3. Methods and material for containm Methods for cleaning up 6.4. Reference to other sections SECTION 8: Exposure controls/personal protect SECTION 7: Handling and storage 7.1. Precautions for safe handling Precautions for safe handling Hygiene measures 	 t enters sewers or public waters. ent and cleaning up Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal. tion. SECTION 13: Disposal considerations. Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. 		
 Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product 6.3. Methods and material for containm Methods for cleaning up 6.4. Reference to other sections SECTION 8: Exposure controls/personal protec SECTION 7: Handling and storage 7.1. Precautions for safe handling Precautions for safe handling Hygiene measures	 t enters sewers or public waters. ent and cleaning up Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal. tion. SECTION 13: Disposal considerations. Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. 		
 Emergency procedures 6.2. Environmental precautions Notify authorities if large amounts of the product 6.3. Methods and material for containm Methods for cleaning up 6.4. Reference to other sections SECTION 8: Exposure controls/personal protect SECTION 7: Handling and storage 7.1. Precautions for safe handling Precautions for safe handling Hygiene measures 7.2. Conditions for safe storage, included 	 t enters sewers or public waters. ent and cleaning up Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal. tion. SECTION 13: Disposal considerations. Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. ing any incompatibilities Keep only in the original container in a cool well ventilated place. Keep container closed when 		

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. Standard EN 374 - Protective gloves against chemicals. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough

Eye protection:

Wear safety glasses with side shields. Standard EN 166 - Personal eye-protection

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

Not required for normal conditions of use

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties					
Physical state	: Liquid				
Colour	: Colourless.				
Odour	: Odourless.				
Odour threshold	: No data available				
рН	: No data available				
Relative evaporation rate (butylacetate=1)	: No data available				
Melting point	: No data available				
Freezing point	: No data available				
Boiling point	: Not applicable.				
Flash point	: No data available				
Auto-ignition temperature	: No data available				
Decomposition temperature	: No data available				
Flammability (solid, gas)	: Not applicable				
Vapour pressure	: No data available				
Relative vapour density at 20 °C	: No data available				
Relative density	: ≈ 1 (Water = 1)				
Solubility	: Water: Miscible				
Log Pow	: No data available				
Viscosity, kinematic	: No data available				
Viscosity, dynamic	: No data available				
Explosive properties	: Not explosive.				
Oxidising properties	: No data available				
Explosive limits	: No data available				

9.2. Other information

No additional information available

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SECT	ON 10: Stability and reactivity			
10.1.	Reactivity			
Stable ι	inder normal conditions.			
10.2.	Chemical stability			
Stable ι	inder normal conditions.			
10.3.	Possibility of hazardous reactions			
None kr	None known.			
10.4.	Conditions to avoid			
Extreme	Extremely high or low temperatures.			
10.5.	Incompatible materials			
Strong of	oxidizing agents.			
10.6.	Hazardous decomposition products			
None kr	iown.			
SECT	ON 11: Toxicological information			

11.1. Information on toxicological effects	
Acute toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Skin corrosion/irritation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and	: Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity Ecology - water

symptoms

: Not classified.

12.2. Persistence and degradability No additional information available 12.3. Bioaccumulative potential No additional information available 12.4. Mobility in soil HyperLadder™ 100bp Ecology - soil Miscible with water.

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12.5.	Results of PBT and vPvB assessment
Hyper	'Ladder™ 100bp
This su	ubstance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This su	ubstance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
40.0	

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number	
UN-No. (ADR)	: Not regulated
UN-No. (IMDG)	: Not regulated
UN-No. (IATA)	: Not regulated
UN-No. (ADN)	: Not regulated
UN-No. (RID)	: Not regulated
14.2. UN proper shipping name	č
Proper Shipping Name	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not regulated
14.3. Transport hazard class(es)	č
ADR	
Transport hazard class(es) (ADR)	: Not regulated
	-
IMDG	
Transport hazard class(es) (IMDG)	: Not regulated
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not regulated
ADN	
Transport hazard class(es) (ADN)	: Not regulated
RID	
Transport hazard class(es) (RID)	: Not regulated
14.4. Packing group	
Packing group	: Not regulated
Packing group (IMDG)	: Not regulated
Packing group (IATA)	: Not regulated
Packing group (ADN)	: Not regulated
Packing group (RID)	: Not regulated
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available
14.6. Special precautions for user	
- Overland transport	
Not regulated	

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- Transport by sea

Not regulated

- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

1.1		Cat. no.	Modified				
Abbreviatio	ns and acronyms:						
	ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route)						
	ATE (Acute Toxicity Estimate) CAS (Chemical Abstracts Service) number CLP (Classification, Labeling and Packaging) DNEL (Derived No effect Limit) EC (European Community)						
	EC50 (Effective Concent	ation 50%)					
	EN (European Norm)						
	IARC (International Agen	cy for Research on C	ancer)				
	IATA (International Air Tr	ansport Association)					
	IBC (Intermediate Bulk Container) IMDG (International Maritime Dangerous Goods Code) IMO (International Maritime Organisation) LC50 (Lethal Concentration 50%) LD50 (Lethal Dose 50%)						
MAC (Maximal Allowed Concentration)							
	O/W (Oil-in-Water (chem	stry))					
	OECD (Organisation for I		on and Development)				
	PBT (Persistent, Bioaccu	,					
	PMcc (Pensky-Martens C	. ,					
	PNEC (Predicted No Effe	ct Concentration)					
	REACH (Registration, Ev						
	RID (Règlement concernant le transport international ferroviaire de marchandises)						
	STEL (Short Term Expos	,					
	TWA (Time Weighted Av	erage)					
		•		on the Transport of Dangerous Goods)			
	vPvB (very Persistent and	d very Bioaccumulativ	ve)				

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Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

NCEC SDS EU BlackandWhite

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1.	Product identifier			
Product	form	: Mixture		
Product name		: Sample Loading Buffer		
Cat. no.		: BIO-33045, BIO-33046, BIO-33056, BIO-33029, BIO-33030, BIO-33053, BIO-33025, BIO- 33026, BIO-33057, BIO-33031, BIO-33032, BIO-33054, BIO-33039, BIO-33040, BIO-37045		
1.2.	Relevant identified uses of the	substance or mixture and uses advised against		
1.2.1.	Relevant identified uses			
Industria	al/Professional use spec	: Industrial use Professional use		
Use of t	he substance/mixture	: Laboratory use		
1.2.2.	Uses advised against			
No addi	tional information available			
1.3.	Details of the supplier of the s	afety data sheet		
Bioline	Reagents Ltd.			
Humber	Road			
London				
NW2 6E	EW			
United I	Kingdom			
T: +44 (0)20 8830 5300			
F: +44 (F: +44 (0)20 8452 2822			
E-mail:	info.uk@bioline.com			
1.4.	Emergency telephone number			
Emerae	ncy number	: +44 (0)1865 407 333 – English speaking (24 hours, 7 days)		

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

No labelling obligation.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Glycerol	(CAS No) 56-81-5 (EC No.) 200-289-5	20 - 30	Not classified

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Full text of H-statements: see section 16

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).	
First-aid measures after inhalation	: Remove to fresh air, keep the patient warm and at rest. If symptoms persist, obtain medical attention.	
First-aid measures after skin contact	 Remove affected clothing and wash all exposed skin area with mild soap and water, follo by warm water rinse. If symptoms develop, obtain medical attention. 	
First-aid measures after eye contact	: Rinse immediately with plenty of water. Ensure that folded skin of eyelids is thoroughly washe with water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritatio persists: Get medical advice/attention.	
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Give 100 - 200 ml of water to drink. If symptoms develop, obtain medical attention.	
4.2. Most important symptoms and effect	ts, both acute and delayed	
Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.	
Symptoms/injuries after eye contact	: May cause slight irritation to eyes.	
4.3. Indication of any immediate medica	attention and special treatment needed	
Treat symptomatically.		
SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.	
Unsuitable extinguishing media	: None known.	
5.2. Special hazards arising from the sul	ostance or mixture	
Fire hazard	: Not flammable.	
Hazardous decomposition products in case of fire	: Carbon monoxide. Carbon dioxide.	
5.3. Advice for firefighters		
Firefighting instructions	: Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.	
Protection during firefighting	: As in any fire, wear self-contained breathing apparatus and full protective gear.	
SECTION 6: Accidental release meas	sures	
6.1. Personal precautions, protective eq	uipment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing.	
6.1.2. For emergency responders		
Protective equipment	: Wear suitable protective clothing and gloves.	
Emergency procedures	: Avoid contact with eyes, skin and clothing.	
6.2. Environmental precautions		
Notify authorities if large amounts of the product	enters sewers or public waters.	
6.3. Methods and material for containme	nt and cleaning up	
Methods for cleaning up	: Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.	
6.4. Reference to other sections		
SECTION 8: Exposure controls/personal protection	on. SECTION 13: Disposal considerations.	
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	: Provide adequate ventilation. Avoid contact with skin, eyes and clothing.	
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.	
7.2. Conditions for safe storage, including	ng any incompatibilities	
Storage conditions	: Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.	
	· Strong ovidizing agonto	
Incompatible materials	: Strong oxidizing agents.	

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7.3. Specific end use(s)

Laboratory use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerol (56-81-5)		
United Kingdom	Local name	Glycerol
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ mist

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. Standard EN 374 - Protective gloves against chemicals. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough

Eye protection:

Wear safety glasses with side shields. Standard EN 166 - Personal eye-protection

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

Not required for normal conditions of use

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemic		
9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Colour	: Colourless.	
Odour	: Odourless.	
Odour threshold	: No data available	
рН	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: Not applicable.	
Flash point	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: Not applicable	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: ≈ 1 (Water = 1)	
Solubility	: Water: Miscible	
Log Pow	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive properties	: Not explosive.	

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Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
Stable under normal conditions.	
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactions	
None known.	
10.4. Conditions to avoid	
Extremely high or low temperatures.	
10.5. Incompatible materials	
Strong oxidizing agents.	
10.6. Hazardous decomposition products	
Carbon monoxide. Carbon dioxide.	
SECTION 11: Toxicological informati	on
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
	Not classifiedBased on available data, the classification criteria are not met
Acute toxicity	: Based on available data, the classification criteria are not met
Acute toxicity Additional information	: Based on available data, the classification criteria are not met 27200 mg/kg
Acute toxicity Additional information Glycerol (56-81-5) LD50 oral rat LD50 dermal	 Based on available data, the classification criteria are not met 27200 mg/kg 56750 mg/kg (Guinea pig)
Acute toxicity Additional information Glycerol (56-81-5) LD50 oral rat LD50 dermal LC50 inhalation rat (mg/l)	 Based on available data, the classification criteria are not met 27200 mg/kg 56750 mg/kg (Guinea pig) > 2.75 mg/l/4h
Acute toxicity Additional information Glycerol (56-81-5) LD50 oral rat LD50 dermal LC50 inhalation rat (mg/l) Skin corrosion/irritation	 Based on available data, the classification criteria are not met 27200 mg/kg 56750 mg/kg (Guinea pig) > 2.75 mg/l/4h Not classified
Acute toxicity Additional information Glycerol (56-81-5) LD50 oral rat LD50 dermal LC50 inhalation rat (mg/l) Skin corrosion/irritation Additional information	 Based on available data, the classification criteria are not met 27200 mg/kg 56750 mg/kg (Guinea pig) > 2.75 mg/l/4h Not classified Based on available data, the classification criteria are not met
Acute toxicity Additional information Glycerol (56-81-5) LD50 oral rat LD50 dermal LC50 inhalation rat (mg/l) Skin corrosion/irritation Additional information Serious eye damage/irritation	 Based on available data, the classification criteria are not met 27200 mg/kg 56750 mg/kg (Guinea pig) > 2.75 mg/l/4h Not classified Based on available data, the classification criteria are not met Not classified Not classified
Acute toxicity Additional information Glycerol (56-81-5) LD50 oral rat LD50 dermal LC50 inhalation rat (mg/l) Skin corrosion/irritation Additional information Serious eye damage/irritation Additional information	 Based on available data, the classification criteria are not met 27200 mg/kg 56750 mg/kg (Guinea pig) > 2.75 mg/l/4h Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met
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Potential adverse human health effects and symptoms

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - water	: Not classified.	
Glycerol (56-81-5)		
LC50 fish	54000 mg/l 96 Hours (Salmo gairdneri)	

: Not expected to present a significant hazard under anticipated conditions of normal use.

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12.2.	Persistence and degradability		
No addi	No additional information available		
12.3.	Bioaccumulative potential		
No addi	additional information available		
12.4.	Mobility in soil		
Samp	Sample Loading Buffer		
Ecolog	gy - soil	Miscible with water.	
12.5.	12.5. Results of PBT and vPvB assessment		
Samp	Sample Loading Buffer		
This s	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII		
This s	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		
12.6.	12.6. Other adverse effects		

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number	
UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable
14.2. UN proper shipping name	
Proper Shipping Name	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
ADN	
Transport hazard class(es) (ADN)	: Not applicable
RID	
Transport hazard class(es) (RID)	: Not applicable
14.4. Packing group	
Packing group	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

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14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available
Other information	: No supplementary information available

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

1.1		Cat. no.	Modified		
Abbreviatio	ons and acronyms:				
	ADR (Accord europée	en relatif au transport in	ternational des marchandises	s Dangereuses par Route)	
	ATE (Acute Toxicity E	stimate)			
	CAS (Chemical Abstr	acts Service) number			
	CLP (Classification, L	abeling and Packaging))		
	DNEL (Derived No ef	ect Limit)			
	EC (European Comm	unity)			
	EC50 (Effective Conc	entration 50%)			
	EN (European Norm)				
	IARC (International A	gency for Research on	Cancer)		
	IATA (International Ai	r Transport Association)		
	IBC (Intermediate Bul	k Container)			
	IMDG (International M	laritime Dangerous Goo	ods Code)		
	IMO (International Ma	ritime Organisation)			
	LC50 (Lethal Concen	ration 50%)			
	LD50 (Lethal Dose 50	%)			
	MAC (Maximal Allowe	d Concentration)			
	O/W (Oil-in-Water (ch	emistry))			
	OECD (Organisation	for Economic Co-operat	tion and Development)		
	PBT (Persistent, Bioa	ccumulative and Toxic)			
2/12/2017		EN (English)			6/7

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	PMcc (Pensky-Martens Closed Cup test)		
	PNEC (Predicted No Effect Concentration)		
	REACH (Registration, Evaluation and Authorisation of CHemicals)		
	RID (Règlement concernant le transport international ferroviaire de marchandises)		
	STEL (Short Term Exposure Limit)		
	TWA (Time Weighted Average)		
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)		
	vPvB (very Persistent and very Bioaccumulative)		
Data sources	 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. 		
Other information	Other information : None.		

NCEC SDS EU BlackandWhite

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product