BUFFER SOLUTION pH 4.0 (COLOR CODED - RED)

□□□□□□□□

□□ (EU) 2020/878□ □□ □□□ REACH □□ (EC) 1907/2006□ □□
□□ □□□□: 1/4/2019 □□ □□□□: 6/2/2025 □□ □□: 1/4/2019 □□: 1.0

□□ 1: □□□□□ □□□ □□ □□

1.1. □□□□

□□ □□	:	□□□
□□□	:	BUFFER SOLUTION pH 4.0 (COLOR CODED - RED)
□□ □□	:	2373N
□□ □□	:	pH Buffer

1.2. □□□□ □□ □□□□ □□ □□ □□ □□

□□ □□ □□

□□/□□□ □□ □□	:	For professional use only
□□□□/□□□□ □□	:	Laboratory chemicals pH Buffer Reagent

1.3. □□□□□□□□ □□□ □□

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107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai
INDIA
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info@lobachemie.com, www.lobachemie.com

1.4. □□□□□□

□□ □□ □□	:	+ 91 22 6663 6663 (9:00am - 6:00 pm)

□□ 2: □□□·□□□

2.1. □□□·□□□ □□

Regulation (EC) No.1272/2008 [CLP]□ □□ □□

□□□□ □□

□□□□□, □□ □□ □ □□□□□□□

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. □□□□□□□ □□□ □□□□ □□

□□ (EC) No. 1272/2008□ □□ □□ □□[CLP]

□□ □□ □□

2.3. □□ □□

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

□ □□□□ REACH□ 59(1)□□ □□ □□□ □□ □□□ □□ □□□ □□□ □□□ □□□□ □□ □□□ □□□□ □□ □□□, □□□ □□ □□ (EU) 2017/2100 □□ □□□ □ □ (EU) 2018/605□ □□□ □□□ □□ □□□ 0.1% □□□ □□□ □□ □□□ □□ □□□ □□□□ □□ □□□ □□□□ □□ □□□□

BUFFER SOLUTION pH 4.0 (COLOR CODED - RED)

□□□□□□□□

□□ (EU) 2020/878□ □□ □□□ REACH □□ (EC) 1907/2006□ □□

□□ 3: □□□□□ □□ □ □□□

3.2. □□□

□□	□□□□	%	Regulation (EC) No.1272/2008 [CLP]□ □□ □□
WATER	CAS □□: 7732-18-5 EC □□: 231-791-2	95 – 99	□□□□ □□
POTASSIUM HYDROGEN PHTHALATE	CAS □□: 877-24-7 EC □□: 212-889-4	1 – 5	□□□□ □□
ALLURA RED	CAS □□: 25956-17-6 EC □□: 247-368-0	0.01 – 0.05	□□□□ □□

□□ 4: □□□□□□

4.1. □□□□ □□

□□ □□ □□ : If you feel unwell, seek medical advice.

□□□□ □ : □□□ □□□ □□ □□□ □□□ □□□□ □□ □□□ □□□ □□□□.

□□□ □□□□ □ : Wash skin with plenty of water.

□□ □□□□ □ : □□□□ □□□□□□ □□□□□. □□ □□□□. □ □□ □□ □□□□ □□□□. □□ □□□ □□□□: □□□ □ □□/□□□ □□□□.

□□□ □ : Rinse mouth out with water. □□□□ □□□ □□□□(□□)□ □□□ □□□□.

First-aid measures for first aider : □□□□ □□□□ □□□ □□ □□ □□□ □□□□ □□□.

4.2. □□ □ □□□ □□ □□□ □□ □ □□

□□ □ □□/□□ : None under normal conditions.

□□ □□ □ □□/□□ : □□□ □□□ □□□.

□ □□ □ □□/□□ : □□ □□ □□□ □□□.

□□ □ □□/□□ : None under normal conditions.

4.3. □□□□ □□ □ □□ □□ □□ □□ □□

Treat symptomatically.

□□ 5: □□·□□□ □□□□

5.1. □□□ □□□

□□□ □□□ : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry powder. Foam. Carbon dioxide.

□□□□ □□□ : Do not use a heavy water stream.

5.2. □□□□□□□ □□□ □□ □□□

□□ □□ : No fire hazard.

□□ □□ : No direct explosion hazard.

□□ □ □□□ □□□ □□ : Toxic fumes may be released.

5.3. □□□□ □□□□ □ □□□□

□□ □□ : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

□□ □□ □ □□ : Do not attempt to take action without suitable protective equipment. □□□ □□□□□. Complete protective clothing.

□□ 6: □□□□□ □□□□

6.1. □□□ □□□□ □□ □□□ □□□□ □ □□□

□□ □□ : □□□□ □□□□ □□ □□□□ □□□ □□□□. □□□ □□□ □□ □□□□□ □□□ □□ □□□ □□. □□□ □□ □□□□ □□ □□□□ □□□□□□.

□□□ □□ □□

□□ □□ : Wear recommended personal protective equipment.

□□ □□ : Ventilate spillage area. Avoid contact with skin, eyes and clothing.

□□ □□ □□

□□ □□ : Do not attempt to take action without suitable protective equipment. □□□ □□ □□□□ □□□□□. □ □ □□□ □□□ □□ 8: "□□□□ □ □□□□□"□ □□□□□.

□□ □□ : Evacuate unnecessary personnel. □□□□ □□□□ □□ □□□□ □□□ □□□□.

6.2. □□□ □□□□ □□ □□□ □□□□

□□□□ □□□□ □□□.

6.3. □□ □□ □□ □□

□□□ : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

□□ □□ : Take up liquid spill into absorbent material. Clean contaminated surfaces with an excess of water.

□ □□ □□□□ : Dispose of materials or solid residues at an authorized site.

6.4. □□ □□ □□

For further information refer to section 13.

□□ 7: □□ □ □□□□

7.1. □□□□□□

□□ □ □□□□□ □□ □□ : □□□□ □□ □□□□□ □□□ □□□ □□□□ □□.

□□□□□□ : Ensure good ventilation of the work station. □□ □□□□ □□□□□. □□ □ □□□ □□□ □□□□.

□□ □□ : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. □ □□□ □□□ □□□ □□□, □□□□ □□□□ □□□. Always wash hands after handling the product.

7.2. □□□□ □□□ □□□ □□□ □□ □□

□□□ □□ : Keep in a cool, well-ventilated place away from heat.

□□ □□ : □□□ □ □□ □□ □□□□□. □□□ □□□ □□□□□.

□□□ : Store always product in container of same material as original container.

7.3. □□ □□ □□

□□ □□

□□ 8: □□□□ □ □□□□□

8.1. □□ □□ □□

□□ □□

8.2. □□□□

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□□□ □□□ □□:

Ensure good ventilation of the work station.

□□ □□□

□□ □□□:

Wear recommended personal protective equipment.

□□ □□ □□ □□:



□ □ □□ □□□

□ □□:

Chemical goggles or safety glasses

Skin protection

□□ □□:

Wear a mask

□ □□:

Protective gloves

□□□ □□

□□□ □□:

Wear appropriate mask

□□ □□ □□

□□ □□ □□:

□□□□ □□□□ □□□.

□□ 9: □□□□□ □□

9.1. □□□□ □□□□□ □□□ □□ □□

□□□ □□	:	□□
□□	:	Red.
□□	:	Clear liquid.
□□	:	Odourless.
□□ □□	:	□□□□
□□□	:	□□□□
□□□	:	≈ 0 °C
□□ □□□□ □□□ □□	:	≈ 100 °C
□□□	:	□□□
□□ □□□	:	□□□□
□□ □□□	:	□□□□
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□□□□ □□	:	□□□□
□□ □□	:	□□□□
pH	:	4 at 25 °C
□□(□□□)	:	□□□□
□□□	:	□: Miscibile
Partition coefficient n-octanol/water (Log Kow)	:	□□□□
□□□	:	□□□□
50°C□□□ □□□	:	□□□□
□□	:	≈ 1 g/cm³
□□	:	□□□□
20°C□□□ □□ □□ □□	:	□□□□
□□ □□	:	□□□□

9.2. □ □□ □□□□

□□ □□

□□ 10: □□□ □ □□□

10.1. □□□

The product is non-reactive under normal conditions of use, storage and transport.

10.2. □□□ □□□

Stable under normal conditions.

10.3. □□ □□□ □□□

No dangerous reactions known under normal conditions of use.

10.4. □□□ □ □□

□□□□.

10.5. □□□ □ □□

□□ □□

10.6. □□□ □□□□ □□□□

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

□□ 11: □□□ □□ □□

11.1. □□ (EC) No 1272/2008□ □□□, □□□ □□□ □□ □□

□□ □□ (□□) : □□□□ □□
□□ □□ (□□) : □□□□ □□
□□ □□ (□□) : □□□□ □□
□□ □□□ □□ □□□ : □□□□ □□
pH: 4 at 25 °C

WATER (7732-18-5)	
pH	6 – 8 at 25 °C

POTASSIUM HYDROGEN PHTHALATE (877-24-7)	
pH	3.8 – 4

□□ □ □□ □□ □□□ : □□□□ □□
pH: 4 at 25 °C

WATER (7732-18-5)	
pH	6 – 8 at 25 °C

POTASSIUM HYDROGEN PHTHALATE (877-24-7)	
pH	3.8 – 4

□□□ □□ □□ □□□ : □□□□ □□
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□□ □□□□ □□ (1□ □□) : □□□□ □□
□□ □□□□ □□ (□□ □□) : □□□□ □□
□□ □□□ : □□□□ □□

WATER (7732-18-5)	
□□(□□□)	0.894 mm²/s

POTASSIUM HYDROGEN PHTHALATE (877-24-7)	
□□(□□□)	□□□□

11.2. □□ □□ □□

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□□ 12: □□□ □□□ □□

12.1. □□

□□□ - □□ : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

□□ □□□□ □□□ : □□□□ □□

□□ □□□□ □□□ : □□□□ □□

12.2. □□□ □ □□□

BUFFER SOLUTION pH 4.0 (COLOR CODED - RED)	
□□□ □ □□□	□□ □□ □□

ALLURA RED (25956-17-6)	
□□□ □ □□□	□□ □□ □□

WATER (7732-18-5)	
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POTASSIUM HYDROGEN PHTHALATE (877-24-7)	
□□□ □ □□□	□□ □□ □□

12.3. □□ □□□

□□ □□

12.4. □□ □□□

□□ □□

12.5. PBT □ vPvB □□ □□

□□ □□

12.6. □□□ □□ □□

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12.7. □□ □□ □□

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□□ 13: □□□ □□□□

13.1. □□□ □□□

□□ □□(□□□) : Disposal must be done according to official regulations.

□□□ □□□ : Dispose of contents/container in accordance with licensed collector's sorting instructions.

□□ □□ □□ □□ : Disposal must be done according to official regulations.

□□/□□ □□ □□□□ : Disposal must be done according to official regulations.

□□ □□ : Do not re-use empty containers.

□□ 14: □□□ □□□ □□

ADR / IMDG / IATA / ADN / RID□ □□

14.1. UN □□ □□ ID □□

□□ □□□□ □□□□

14.2. UN □□ □□□

□□ □□□ (ADR)	:	Not regulated
□□ □□□ (IMDG)	:	Not regulated
□□ □□□ (IATA)	:	Not regulated
□□ □□□ (ADN)	:	Not regulated
□□ □□□ (RID)	:	Not regulated

14.3. □□□□□ □□□ □□

ADR

□□□□□ □□□ □□ (ADR)	:	Not regulated

IMDG

□□□□□ □□□ □□ (IMDG)	:	Not regulated

IATA

□□□□□ □□□ □□ (IATA)	:	Not regulated

ADN

□□□□□ □□□ □□ (ADN)	:	Not regulated

RID

□□□□□ □□□ □□ (RID)	:	Not regulated

14.4. □□□□

□□ □□ (ADR)	:	Not regulated
□□ □□(IMDG)	:	Not regulated
□□ □□ (IATA)	:	Not regulated
□□ □□(ADN)	:	Not regulated
□□ □□(RID)	:	Not regulated

14.5. □□ □□□

□ □□ □□□□	:	□□ □□ □□ □□

14.6. □□□□ □□ □□ □□□□

□□ □□

Not regulated

□□ □□

Not regulated

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Not regulated

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Not regulated

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Not regulated

14.7. □□□□□□(IMO)□ □□ □□ □□ □□

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□□ 15: □□ □□□□

15.1. □□, □□ □ □□□ □□□□ □□□□ □□ □□□□ □□ □□ □□/□□

EU □□

REACH □□□ XVII (□□ □□)

REACH □□□ XVII (□□ □□)□ □□□ □□□ □□□□ □□

REACH □□□ XIV (□□ □□)

REACH □□□ XIV (□□ □□)□ □□□ □□□ □□□□ □□

REACH □□ □□ □□ (SVHC)

REACH □□ □□ □□□ □□□ □□□ □□□□ □□

PIC □□ (□□□□□□)

PIC □□(□□ □□□□ □□□□ □□ □□ EU 649/2012)□ □□□ □□□ □□□□ □□

POP □□ (□□□ □□ □□□□)

POP □□□ □□□ □□□ □□□□ □□ (□□□□□□□□□□ □□ □□ EC 2019/1021)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

□□□□ □□(428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

□□ □□□□ □□ (2019/1148)

□□□ □□□□ □□(□□ □□□□□ □□ □ □□□ □□ □□ EU 2019/1148)□ □□□ □□ □□□□ □□

□□ □□□□ □□ (273/2004)

□□ □□□□ □□□ □□□ □□□ □□□□ □□(□□ □ □□□□ □□□ □□ □□□ □□□□ □□ □□□ □□ □ □□□ □□ □□ EC 273/2004)

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□□

WGK	:	WGK 2, □□□ □□□ □□ (AwSV, □□□ 1□ □□ □□).
□□ □□ □□(12. BImSchV)	:	□□ □□ □□(12. BImSchV)□ □□ □□ □□

□□□□

SZW-lijst van kankerverwekkende stoffen	:	□□ □□□ □□□□ □□□□□.
SZW-lijst van mutagene stoffen	:	□□ □□□ □□□□ □□□□□.
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	□□ □□□ □□□□ □□□□□.
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	:	□□ □□□ □□□□ □□□□□.
SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	□□ □□□ □□□□ □□□□□.

□□□

□□□ □□ □□ : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)

15.2. □□ □□ □□□ □□

No chemical safety assessment has been carried out

□□ 16: □ □□ □□□□

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ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	□□ □□ □
BOD	Biochemical oxygen demand (BOD)
CAS □□	□□□□ □□ □□ □□(CAS)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	□□□ □□ □□□
CSA	□□ □□ □□□ □□
DMEL	Derived Minimal Effect level
DNEL	□□ □□□ □□
EC □□	□□ □□□ □□
EC50	Median effective concentration
ED	□□□ □□□□
EN	□□ □□
EWC	European waste catalogue

BUFFER SOLUTION pH 4.0 (COLOR CODED - RED)

□□□□□□□□

□□ (EU) 2020/878□ □□ □□□ REACH □□ (EC) 1907/2006□ □□

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IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	□□□ □□ □□
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	□□ □□□ □□
PPE	□□ □□□
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	□□□□□□□□
STP	Sewage treatment plant
TF	□□□ □□
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
COV	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	□□ □□ □□□

□□□□□□□□(SDS), EU

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