

An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate,

Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Universal indicator solution pH 4-11

Product Code: U 1215

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,

Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no.: + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]Mixtures/Substances: SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)

Flammable liquids,

Category 3

H226

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display Hazard pictograms (CLP):

GHS02

Signal word (CLP): Warning

Hazard statements (CLP): H226 - Flammable liquid and vapour.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| 3.2. Mixtures | _ | | |
|--|---------------------|-------|--|
| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| WATER AR | (CAS-No.) 7732-18-5 | 49.91 | Not classified |
| METHANOL AR/ACS | (CAS-No.) 67-56-1 | 45 | Flam. Liq. 2, H225 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Oral), H301 STOT SE 1, H370 |
| PHENOLPHTHALEIN AR/ACS substance listed as | (CAS-No.) 77-09-8 | 0.05 | Muta. 2, H341 Carc. 1A, H350 Repr. 2, H361 |

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| REACH Candidate | | | |
|-------------------|--------------------|-------|----------------|
| (Phenolphthalein) | | | |
| BROMOTHYMOL BLUE | (CAS-No.) 76-59-5 | 0.025 | Not classified |
| INDICATOR AR | , | | ! |
| METHYL RED | (CAS-No.) 493-52-7 | 0.006 | Not classified |
| INDICATOR AR | , | | |
| THYMOL BLUE | (CAS-No.) 76-61-9 | 0.003 | Not classified |
| INDICATOR AR | , | | |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. If you feel unwell.

seek medical advice.

First-aid measures after skin contact: Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Flammable liquid and vapour.

Explosion hazard: Heating may cause a fire or explosion.

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment: Use personal protective equipment as required.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Clean up immediately by sweeping or vacuum.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid contact with eyes.

Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy.

This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection: Protective gloves

Eye protection: Chemical goggles or safety glasses Skin and body protection: Wear suitable protective clothing Respiratory protection: Approved supplied air respirator

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:

Colour: Odour:

Odour threshold:

pH:

Relative evaporation rate (butylacetate=1):

Melting point: Freezing point: Boiling point: Flash point:

Auto-ignition temperature: Decomposition temperature :

Flammability (solid, gas):

Vapour pressure:

Relative vapour density at 20 °C:

Relative density:

Density:

Solubility: Water:

Log Pow:

Viscosity, kinematic:

Viscosity, dynamic: Explosive properties:

Oxidising properties:

Explosive limits:

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Heat. Open flame. Overheating.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Liquid

Green solution.

alcoholic odour.

No data available

4 - 11

No data available

No data available

No data available

No data available

19 °C

No data available

No data available

No data available No data available

No data available

No data available

0.93 g/cm3

Soluble

No data available

No data available

No data available

No data available No data available

No data available

No additional information available

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No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified

Skin corrosion/irritation: Not classified

pH: 4 - 11

Serious eye damage/irritation : Not classified

pH: 4 - 11

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified Carcinogenicity: Not classified Reproductive toxicity: Not classified STOT-single exposure: Not classified STOT-repeated exposure: Not classified Aspiration hazard: Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods No additional information available

SECTION 14: Transport information

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

14.1. UN number UN-No. (ADR) : 1230 UN-No. (IMDG) : 1230 UN-No. (IATA) : 1230 UN-No. (ADN) : 1230 UN-No. (RID) : 1230

14.2. UN proper shipping name

Proper Shipping Name (ADR): METHANOL Proper Shipping Name (IMDG): METHANOL Proper Shipping Name (IATA): Methanol Proper Shipping Name (ADN): METHANOL Proper Shipping Name (RID): METHANOL

Transport document description (ADR): UN 1230 METHANOL, 3 (6.1), II, (D/E) Transport document description (IMDG): UN 1230 METHANOL, 3 (6.1), II (12°C c.c.)

Transport document description (IATA): UN 1230 Methanol, 3 (6.1), II Transport document description (ADN): UN 1230 METHANOL, 3 (6.1), II Transport document description (RID): UN 1230 METHANOL, 3 (6.1), II



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14.3. Transport hazard class(es) Transport hazard class(es) (ADR): 3 (6.1) Danger labels (ADR): 3, 6.1 **IMDG** Transport hazard class(es) (IMDG): 3 (6.1) Danger labels (IMDG): 3, 6.1 IATA Transport hazard class(es) (IATA): 3 (6.1) Hazard labels (IATA): 3, 6.1 Transport hazard class(es) (ADN): 3 (6.1) Danger labels (ADN): 3, 6.1 Transport hazard class(es) (RID): 3 (6.1) Danger labels (RID): 3, 6.1 14.4. Packing group Packing group (ADR): II Packing group (IMDG): II Packing group (IATA): II Packing group (ADN): II Packing group (RID): II 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 Classification code (ADR): FT1 Special provisions (ADR): 279 Limited quantities (ADR): 11 Excepted quantities (ADR): E2 Packing instructions (ADR): P001, IBC02 Mixed packing provisions (ADR): MP19 Portable tank and bulk container instructions (ADR) Portable tank and bulk container special provisions (ADR) : TP2 Tank code (ADR): L4BH Tank special provisions (ADR): TU15 Vehicle for tank carriage: FL Transport category (ADR): 2 Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28 Special provisions for carriage - Operation (ADR)

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: S2, S19

Hazard identification number (Kemler No.): 336

Orange plates:

Tunnel restriction code (ADR): D/E

EAC code: •2WE APP code: A(fl) - Transport by sea

Special provisions (IMDG): 279
Limited quantities (IMDG): 1 L
Excepted quantities (IMDG): E2
Packing instructions (IMDG): P001
IBC packing instructions (IMDG): IBC02

Tank instructions (IMDG): T7

Tank special provisions (IMDG): TP2

EmS-No. (Fire): F-E EmS-No. (Spillage): S-D Stowage category (IMDG): B Stowage and handling (IMDG): SW2 Flash point (IMDG): 12°C c.c.

Properties and observations (IMDG): Colourless, volatile liquid. Flashpoint: 12°C c.c. Explosive limits: 6% to 36.5% Miscible with water. Toxic if swallowed; may cause blindness. Avoid skin contact.

- Air transport

PCA Excepted quantities (IATA): E2 PCA Limited quantities (IATA): Y341 PCA limited quantity max net quantity (IATA)

: 1L

PCA packing instructions (IATA): 352 PCA max net quantity (IATA): 1L CAO packing instructions (IATA): 364 CAO max net quantity (IATA): 60L Special provisions (IATA): A113

ERG code (IATA): 3L
- Inland waterway transport
Classification code (ADN): FT1
Special provisions (ADN): 279, 802
Limited quantities (ADN): 1 L
Excepted quantities (ADN): E2
Carriage permitted (ADN): T

Equipment required (ADN): PP, EP, EX, TOX, A

Ventilation (ADN): VE01, VE02 Number of blue cones/lights (ADN): 2

- Rail transport

Classification code (RID): FT1 Special provisions (RID): 279 Limited quantities (RID): 1L Excepted quantities (RID): E2

Packing instructions (RID): P001, IBC02 Mixed packing provisions (RID): MP19 Portable tank and bulk container

instructions (RID)

: T7

Portable tank and bulk container special

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provisions (RID)

: TP2

Tank codes for RID tanks (RID): L4BH Special provisions for RID tanks (RID): TU15

Transport category (RID): 2

Special provisions for carriage - Loading,

unloading and handling (RID)

: CW13, CW28

Colis express (express parcels) (RID): CE7 Hazard identification number (RID): 336

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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 ≥ 0,1 % / SCL

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV: Water hazard class (WGK) 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : PHENOLPHTHALEIN AR/ACS is listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen - Borstvoeding

: None of the components are listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen -

Vruchtbaarheid

: PHENOLPHTHALEIN AR/ACS is listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen - Ontwikkeling

: None of the components are listed

Denmark

Class for fire hazard : Class I-1

Store unit: 1 liter

Classification remarks: F <Flam. Liq. 3>; Emergency management guidelines for the storage of flammable

liquids must be followed

Recommendations Danish Regulation : Pregnant/breastfeeding women working with the product must not be in direct

contact with the product

15.2. Chemical safety assessment

No additional information available

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all

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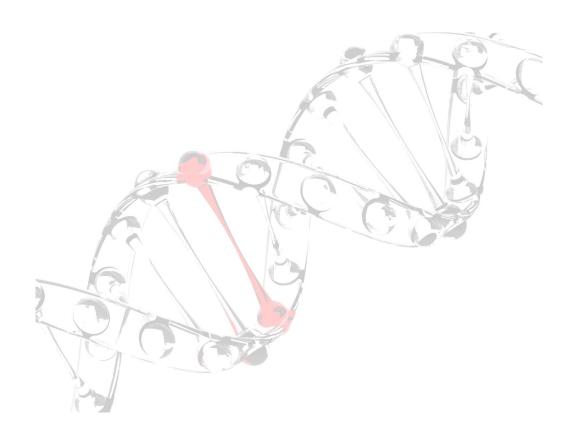
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precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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