## LABDET 07 MSDS

### CAS No: MSDS



### **MATERIAL SAFETY DATA SHEET (MSDS)**

| SECT     | ON 1: Identification of the subs  | tance/mixture and of the company/undertaking      |  |  |  |
|----------|---|---|--|--|--|
| 1.1.     | Product identifier  |   |  |  |  |
| Produc   | ct form   | : Mixture   |  |  |  |
| Duradiu  |   | :   |  |  |  |
| Produc   | ct code   | : 04293   |  |  |  |
| 1.2.     | Polovant identified uses of th  | e substance or mixture and uses advised against   |  |  |  |
| 1.2.1.   | Relevant identified uses  | e substance of mixture and uses advised against   |  |  |  |
|          | the substance/mixture   | : Laboratory chemicals, Manufacture of substances |  |  |  |
|          |   |   |  |  |  |
| 1.2.2.   | Uses advised against  |   |  |  |  |
| No ado   | ditional information available  |   |  |  |  |
| 1.3.     | Details of the supplier of the  | safety data sheet                                 |  |  |  |
|          | ens Fine Chem Industries  |   |  |  |  |
| 1st Flo  | or , Above Bank of India, Guru Vil                                      | nar , Rahon Road,                                 |  |  |  |
|          | na Pb. (141007)   |   |  |  |  |
|          | +91 9316777775, +91 7707855700<br>sales@labogens.com - www.Labogens.com |   |  |  |  |
|          |   |   |  |  |  |
| 1.4.     | Emergency telephone numbe   | r   |  |  |  |
| Emerg    | ency number   | : +91 7707855700 (9:00am - 6:00 pm)               |  |  |  |
|          |   |   |  |  |  |
| SECT     | ON 2: Hazards identification  |   |  |  |  |
| 2.1.     | Classification of the substand  | ce or mixture                                     |  |  |  |
|          | fication according to Directive (                                       |   |  |  |  |
|          | Cat.2; R45  |   |  |  |  |
| Muta.0   | Cat.2; R46  |   |  |  |  |
| Repr.C   | Cat.2; R60<br>Cat.2; R61  |   |  |  |  |
| C; R35   |   |   |  |  |  |
| ruii (e) | kt of R-phrases: see section 16   |   |  |  |  |
|          |   |   |  |  |  |
|          |   |   |  |  |  |
|          |   |   |  |  |  |

#### Adverse physicochemical, human health and environmental effects No additional information available

Safety Data Sheet

2.2. Label elements

| Labelling according to Directive 67/548/EEC or 1999/45/EC |
|---|
|---|

:

Hazard symbols



|           | T - Toxic C - Corrosive  |
|-----------|--|
| R-phrases | : R35 - Causes severe burns<br>R45 - May cause cancer<br>R46 - May cause heritable genetic damage<br>R60 - May impair fertility<br>R61 - May cause harm to the unborn child  |
| S-phrases | <ul> <li>S4 - Keep away from living quarters<br/>S24 - Avoid contact with skin</li> <li>S26 - In case of contact with eyes, rinse immediately with plenty of water and seek<br/>medical advice</li> <li>S28 - After contact with skin, wash immediately with plenty of (to be specified by<br/>the manufacturer)</li> <li>S35 - This material and its container must be disposed of in a safe way</li> <li>S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection</li> <li>S38 - In case of insufficient ventilation, wear suitable respiratory equipment</li> <li>S45 - In case of accident or if you feel unwell, seek medical advice immediately<br/>(show the label where possible)</li> <li>S53 - Avoid exposure - obtain special instructions before use</li> <li>S59 - Refer to manufacturer/supplier for information on recovery/recycling</li> </ul> |
|           |  |

#### 2.3. Other hazards

No additional information available

| SECTION 3: Composition/information on ingredients |  |
|---|--|
| SECTION 5. COMPOSITION/INFORMATION OF INGREDIENTS |  |
|   |  |
|   |  |

#### 3.1. Substance

Not applicable

3.2. Mixture

| Name           | Product identifier  | %       | Classification according<br>to Directive 67/548/EEC | Classification according<br>to Regulation (EC) No.<br>1272/2008 [CLP] |
|----------------|---|---------|---|---|
| Water          | (CAS No) 7732-18-<br>5<br>(EC no) 231-791-2                                   | 50 - 75 | Not classified                                      | Not classified  |
| Sulphuric acid | (CAS No) 7664-93-<br>9<br>(EC no) 231-639-5<br>(EC index no) 016-<br>020-00-8 | 15 - 25 | C; R35  | Skin Corr. 1A, H314<br>Eye Dam. 1, H318                               |

### Safety Data Sheet

| Name   | Product identifier  | %     | Classification according<br>to Directive 67/548/EEC   | Classification according<br>to Regulation (EC) No.<br>1272/2008 [CLP]  |
|--|---|-------|---|--|
| Potassium dichromate<br>substance listed as REACH<br>Candidate<br>substance listed in REACH<br>Annex XIV | (CAS No) 7778-50-<br>9<br>(EC no) 231-906-6<br>(EC index no) 024-<br>002-00-6 | 1 - 5 | Carc.Cat.1; R45<br>Muta.Cat.1; R46<br>Repr.Cat.1; R60<br>Repr.Cat.1; R61<br>O; R8<br>T+; R26<br>T; R25<br>T; R48/23<br>Xn; R21<br>R42<br>C; R34<br>R43<br>N; R50/53 | Acute Tox. 2 (Inhalation),<br>H330<br>Acute Tox. 3 (Oral), H301<br>Acute Tox. 4 (Dermal),<br>H312<br>Aquatic Acute 1, H400 |

Full text of R- and H-phrases: see section 16

| SECTION 4. First sid massives                                  |  |
|--|--|
| SECTION 4: First aid measures                                  |  |
| 4.1. Description of first aid measu                            | Ires   |
| First-aid measures general                                     | : IF exposed or concerned: Get medical advice/attention.   |
| First-aid measures after inhalation                            | <ul> <li>Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br/>Immediately call a POISON CENTER or doctor/physician.</li> </ul>                                     |
| First-aid measures after skin contact                          | <ul> <li>Remove/Take off immediately all contaminated clothing. Rinse skin with<br/>water/shower. Immediately call a POISON CENTER or doctor/physician.</li> </ul>                                     |
| First-aid measures after eye contact                           | <ul> <li>Rinse cautiously with water for several minutes. Remove contact lenses, if present<br/>and easy to do. Continue rinsing. Immediately call a POISON CENTER or<br/>doctor/physician.</li> </ul> |
| First-aid measures after ingestion                             | : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.   |
| 4.2. Most important symptoms an                                | d effects, both acute and delayed  |
| Symptoms/injuries  | : Causes severe skin burns and eye damage. May cause genetic defects. May cause cancer. May damage the unborn child. May damage fertility.   |
| 4.3. Indication of any immediate r                             | nedical attention and special treatment needed   |
| No additional information available                            |  |
| SECTION 5: Firefighting measures                               |  |
| 5.4 Estimatiching modia  |  |
| 5.1. Extinguishing media                                       | , dry chemical neurons, clashed registent from carbon disvide (CO2)  |
| Suitable extinguishing media<br>Unsuitable extinguishing media | <ul><li>dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).</li><li>Do not use a heavy water stream.</li></ul>  |
| 5.2. Special hazards arising from                              | the substance or mixture   |
| No additional information available                            |  |
| 5.3. Advice for firefighters                                   |  |
| No additional information available                            |  |
| SECTION 6: Accidental release measure                          | ures   |
| 6.1. Personal precautions, protect                             | tive equipment and emergency procedures  |
| 6.1.1. For non-emergency personne                              | 91   |
| Emorgonov procedures   | : Do not broatho vanours   |

#### Emergency procedures

: Do not breathe vapours.

Safety Data Sheet

| 6.1.2.           | For emergency responders           |   |
|------------------|------------------------------------|---|
| No addi          | tional information available       |   |
| 6.2.             | Environmental precautions          |   |
| Avoid re         | elease to the environment.         |   |
| 6.3.             | Methods and material for contain   | nment and cleaning up   |
| Method           | s for cleaning up                  | : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.  |
| 6.4.             | Reference to other sections        |   |
| No addi          | tional information available       |   |
| SECTIO           | ON 7: Handling and storage         |   |
| - 4              |                                    |   |
| 7.1.             | Precautions for safe handling      |   |
| Precaut          | ions for safe handling             | : Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. |
| Hygiene measures |                                    | : Wash thoroughly after handling.   |
| 7.2.             | Conditions for safe storage, inclu | uding any incompatibilities   |
| Technic          | al measures                        | : Comply with applicable regulations.   |
| Storage          | conditions                         | : Store in original container. Keep container tightly closed.   |
| -                |                                    |   |
| 7.3.             | Specific end use(s)                |   |
| No addi          | tional information available       |   |
| SECTIO           | ON 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 face shield   |  |  |
| Skin and body protection            | : Wear suitable protective clothing |  |  |
| Respiratory protection              | : Wear appropriate mask             |  |  |
| SECTION 9: Physical and chemical pr | operties                            |  |  |
| 9.1. Information on basic physica   | I and chemical properties           |  |  |
| Physical state                      | : Liquid                            |  |  |
| Colour                              | : Orange brown.                     |  |  |
| Odour                               | : No data available                 |  |  |
| Odour threshold                     | : No data available                 |  |  |
| pН                                  | : No data available                 |  |  |

### Safety Data Sheet

| Relative evaporation rate (butylacetate=1) | : | No data available               |
|--|---|---------------------------------|
| Melting point                              | : | No data available               |
| Freezing point                             | : | No data available               |
| Boiling point                              | : | No data available               |
| Flash point                                | : | No data available               |
| Auto-ignition temperature                  | : | No data available               |
| Decomposition temperature                  | : | No data available               |
| Flammability (solid, gas)                  | : | No data available               |
| Vapour pressure                            | : | No data available               |
| Relative vapour density at 20 °C           | : | No data available               |
| Relative density                           | : | No data available               |
| Density<br>Solubility                      | : | 1.24 g/cm³<br>No data available |
| Log Pow                                    | : | No data available               |
| Viscosity, kinematic                       | : | No data available               |
| Viscosity, dynamic                         | : | No data available               |
| Explosive properties                       | : | No data available               |
| Oxidising properties                       | : | No data available               |
| Explosive limits                           | : | No data available               |
|  |   |                                 |

#### 9.2. Other information

SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

| 10.2. Chemical stability |
|--------------------------|
|--------------------------|

No additional information available

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Direct sunlight. Overheating. Open flame. Heat.

#### 10.5. Incompatible materials

No additional information available

#### **10.6.** Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours.

#### **SECTION 11: Toxicological information**

| 11.1. Information on toxicological effects |   |  |  |
|--|---|--|--|
| Acute toxicity                             | : Not classified  |  |  |
| Irritation                                 | : Not classified  |  |  |
| Corrosivity                                | : Causes severe burns.                                      |  |  |
| Sensitisation                              | : Not classified  |  |  |
| Repeated dose toxicity                     | : Not classified  |  |  |
| Carcinogenicity                            | : May cause cancer.   |  |  |
| Mutagenicity                               | : May cause heritable genetic damage.                       |  |  |
| Toxicity for reproduction                  | : May impair fertility. May cause harm to the unborn child. |  |  |

| SECTION 12: Ecological information |                                |  |  |
|------------------------------------|--------------------------------|--|--|
|                                    |                                |  |  |
| 12.1.                              | Toxicity                       |  |  |
| No ac                              | ditional 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 |
|-------|---------|--------|----------|------------|
|-------|---------|--------|----------|------------|

| Component                        |   |
|----------------------------------|---|
| Potassium dichromate (7778-50-9) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

| 12.6.Other adverse effectsNo additional information available |                                    |
|---|------------------------------------|
| SECTION 13: Disposal considerations                           |                                    |
| 13.1. Waste treatment methods                                 |                                    |
| Product/Packaging disposal recommendations                    | : Dispose of contents/container to |
| SECTION 14: Transport information                             |                                    |

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

Safety Data Sheet

| 14.1. UN number                       |   |
|---------------------------------------|---|
| UN-No. (ADR)                          | : 3264  |
| UN-No. (IMDG)                         | : 3264  |
| UN-No.(IATA)                          | : 3264  |
| UN-No.(ADN)                           | : 3264  |
| UN-No. (RID)                          | : 3264  |
|                                       |   |
| 14.2. UN proper shipping name         |   |
| Proper Shipping Name (ADR)            | : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.                     |
| Proper Shipping Name (IMDG)           | : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.                     |
| Proper Shipping Name (IATA)           | : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.                     |
| Proper Shipping Name (ADN)            | : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.                     |
| Proper Shipping Name (RID)            | : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.                     |
| Transport document description (ADR)  | : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, II, (E) |
| Transport document description (IMDG) | : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, II      |
| Transport document description (IATA) | : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, II      |
| Transport document description (ADN)  | : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, II      |
| Transport document description (RID)  | : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, II      |
| 14.3. Transport hazard class(es)      |   |
| ADR                                   |   |
| Transport hazard class(es) (ADR)      | : 8   |
| Danger labels (ADR)                   | : 8   |
|                                       |   |
|                                       |   |
| IMDG                                  |   |
| Transport hazard class(es) (IMDG)     | : 8   |
| Danger labels (IMDG)                  | : 8   |
|                                       |   |
|                                       |   |

#### ΙΑΤΑ

Transport hazard class(es) (IATA) Hazard labels (IATA)



: 8

: 8 : 8

#### ADN

| Transport hazard class(es) (ADN) |  |
|----------------------------------|--|
| Danger labels (ADN)              |  |

### LABDET 07 Safety Data Sheet



#### RID

Transport hazard class(es) (RID) Danger labels (RID)



: 8

| 14.4.            | Packing group             |      |
|------------------|---------------------------|------|
| Packir           | ng group (ADR)            | : 11 |
| Packir           | ng group (IMDG)           | : 11 |
| Packir           | ng group (IATA)           | : 11 |
| Packir           | ng group (ADN)            | : 11 |
| Packir           | ng group (RID)            | : 11 |
|                  |                           |      |
| 14.5.            | Environmental hazards     |      |
| Dange            | erous for the environment | : No |
| Marine pollutant |                           | : No |

|                   | . 110                                    |
|-------------------|--|
| Other information | : No supplementary information available |

| 14.6. Special precautions for user                        |               |
|---|---------------|
| - Overland transport                                      |               |
| Classification code (ADR)                                 | : C1          |
| Special provision (ADR)                                   | : 274         |
| Limited quantities (ADR)                                  | : 1L          |
| Excepted quantities (ADR)                                 | : E2          |
| Packing instructions (ADR)                                | : P001, IBC02 |
| Mixed packing provisions (ADR)                            | : MP15        |
| Portable tank and bulk container<br>instructions (ADR)    | : T11         |
| Portable tank and bulk container special provisions (ADR) | : TP2, TP27   |
| Tank code (ADR)   | : L4BN        |
| Vehicle for tank carriage                                 | : AT          |
| Transport category (ADR)                                  | : 2           |
| Hazard identification number (Kemler No.)                 | : 80          |
| Orange plates   | 80<br>3264    |
|   | 5204          |
| Tunnel restriction code (ADR)                             | : E           |
| EAC code  | : 2X          |
| APP code  | : B           |
| - Transport by sea  |               |
| Special provision (IMDG)                                  | : 274         |
| Limited quantities (IMDG)                                 | : 1L          |
|   |               |

### Safety Data Sheet

| •   |  |
|---|--|
| Excepted quantities (IMDG)<br>Packing instructions (IMDG)<br>IBC packing instructions (IMDG)<br>Tank instructions (IMDG)<br>Tank special provisions (IMDG)<br>EmS-No. (Fire)<br>EmS-No. (Spillage)<br>Stowage category (IMDG)<br>Stowage and handling (IMDG)  | : E2<br>: P001<br>: IBC02<br>: T11<br>: TP2, TP27<br>: F-A<br>: S-B<br>: B<br>: SW2                        |
| <ul> <li>Air transport</li> <li>PCA Excepted quantities (IATA)</li> <li>PCA Limited quantities (IATA)</li> <li>PCA limited quantity max net quantity (IATA)</li> <li>PCA packing instructions (IATA)</li> <li>PCA max net quantity (IATA)</li> <li>CAO packing instructions (IATA)</li> <li>CAO max net quantity (IATA)</li> <li>Special provision (IATA)</li> <li>ERG code (IATA)</li> </ul>   | : E2<br>: Y840<br>: 0.5L<br>: 851<br>: 1L<br>: 855<br>: 30L<br>: A3<br>: 8L                                |
| - Inland waterway transport<br>Classification code (ADN)<br>Special provisions (ADN)<br>Limited quantities (ADN)<br>Excepted quantities (ADN)<br>Carriage permitted (ADN)<br>Equipment required (ADN)<br>Number of blue cones/lights (ADN)  | : C1<br>: 274<br>: 1 L<br>: E2<br>: T<br>: PP, EP<br>: 0   |
| <ul> <li>Rail transport</li> <li>Classification code (RID)</li> <li>Special provision (RID)</li> <li>Limited quantities (RID)</li> <li>Excepted quantities (RID)</li> <li>Packing instructions (RID)</li> <li>Mixed packing provisions (RID)</li> <li>Portable tank and bulk container instructions (RID)</li> <li>Portable tank and bulk container special provisions (RID)</li> <li>Portable tank and bulk container special provisions (RID)</li> <li>Tank codes for RID tanks (RID)</li> <li>Transport category (RID)</li> <li>Colis express (express parcels) (RID)</li> </ul> | : C1<br>: 274<br>: 1L<br>: E2<br>: P001, IBC02<br>: MP15<br>: T11<br>: TP2, TP27<br>: L4BN<br>: 2<br>: CE6 |
| Hazard identification number (RID)  | : 80   |

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 substances with Annex XVII restrictions

### Safety Data Sheet

Contains substance on the candidate list in concentration  $\geq$  0.1% or with a lower specific limit: Potassium dichromate (EC 231-906-6, CAS 7778-50-9)

#### Contains REACH Annex XIV substances:

| Substance name                                     | Authorisation number | Sunset date | REACH authorization<br>exemptions |
|--|----------------------|-------------|-----------------------------------|
| Potassium dichromate (EC 231-906-6, CAS 7778-50-9) |                      | 21/09/2017  |                                   |

#### 15.1.2. National regulations

#### Germany

| AwSV/VwVwS Annex reference  | : Water hazard class (WGK) 3, strongly hazardous to water (Classification according to AwSV, Annex 1)  |  |
|---|--|--|
| 12th Ordinance Implementing the Federal<br>Immission Control Act - 12.BImSchV | : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)   |  |
| Denmark   |  |  |
| Recommendations Danish Regulation   | Young people below the age of 18 years are not allowed to use the product<br>Pregnant/breastfeeding women working with the product must not be in direct<br>contact with the product |  |
|   | The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal  |  |

## **15.2.** Chemical safety assessment No additional information available

SECTION 16: Other information

#### Full text of R-, H- and EUH-phrases:

| Acute Tox. 2 (Inhalation) | Acute toxicity (inhal.), Category 2                             |  |
|---------------------------|---|--|
| Acute Tox. 3 (Oral)       | Acute toxicity (oral), Category 3                               |  |
| Acute Tox. 4 (Dermal)     | Acute toxicity (dermal), Category 4                             |  |
| Aquatic Acute 1           | Hazardous to the aquatic environment — Acute Hazard, Category 1 |  |
| Eye Dam. 1                | Serious eye damage/eye irritation, Category 1                   |  |
| Skin Corr. 1A             | Skin corrosion/irritation, Category 1A                          |  |
| H301                      | Toxic if swallowed  |  |
| H312                      | Harmful in contact with skin                                    |  |
| H314                      | Causes severe skin burns and eye damage                         |  |
| H318                      | Causes serious eye damage                                       |  |
| H330                      | Fatal if inhaled  |  |
| H400                      | Very toxic to aquatic life                                      |  |
| R21                       | Harmful in contact with skin                                    |  |

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| R25    | Toxic if availaved  |  |
|--------|---|--|
| -      | Toxic if swallowed  |  |
| R26    | Very toxic by inhalation  |  |
| R34    | Causes burns  |  |
| R35    | Causes severe burns   |  |
| R42    | May cause sensitization by inhalation   |  |
| R43    | May cause sensitisation by skin contact   |  |
| R45    | May cause cancer  |  |
| R46    | May cause heritable genetic damage  |  |
| R48/23 | Toxic: danger of serious damage to health by prolonged exposure through inhalation              |  |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |  |
| R60    | May impair fertility  |  |
| R61    | May cause harm to the unborn child  |  |
| R8     | Contact with combustible material may cause fire  |  |
| С      | Corrosive   |  |
| Ν      | Dangerous for the environment   |  |
| 0      | Oxidising   |  |
| Т      | Toxic   |  |
| T+     | Very toxic  |  |
| Xn     | Harmful   |  |

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