

# CITRIC ACID MONOHYDRATE USP

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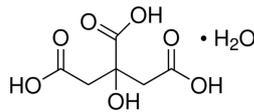
□□ (EU) 2020/878 □□ □□ □□ REACH □□ (EC) 1907/2006 □□ □□  
□□ □□□□: 11/11/2025 □□: 1.0

## □□ 1: □□□□□ □□□ □□ □□

### 1.1. □□□□

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□□ □□  
EC □□  
CAS □□  
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: □□  
: CITRIC ACID MONOHYDRATE USP  
: 201-069-1  
: 5949-29-1  
: UC001  
: Carboxylic acids  
: C<sub>6</sub>H<sub>8</sub>O<sub>7</sub> · H<sub>2</sub>O



□□ □□ : 2-Hydroxypropane-1,2,3-tricarboxylic acid Monohydrate

### 1.2. □□□□ □□ □□□□ □□ □□ □□ □□

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□□□□/□□□□ □□

: Laboratory chemicals  
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### 1.3. □□□□□□□□ □□□ □□

LOBA CHEMIE PVT.LTD.  
107 Wode House Road, Jehangir Villa, Colaba  
400005 Mumbai  
INDIA  
T +91 22 6663 6663, F +91 22 6663 6699  
[info@lobachemie.com](mailto:info@lobachemie.com), [www.lobachemie.com](http://www.lobachemie.com)

### 1.4. □□□□□□

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

## □□ 2: □□□·□□□

### 2.1. □□□·□□□ □□

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

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□□□□□, □□ □□ □□□□□□□□

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]

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### 2.3. □□ □□

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## □□ 3: □□□□□ □□ □□ □□

### 3.1. □□□□

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| □□                      | □□□□                                  | %   |
|-------------------------|---------------------------------------|-----|
| CITRIC ACID MONOHYDRATE | CAS □□: 5949-29-1<br>EC □□: 201-069-1 | 100 |

## □□ 4: □□□□□□

### 4.1. □□□□ □□

□□ □□ □□ : If you feel unwell, seek medical advice.  
□□□□ □□ : □□□ □□□ □□ □□□ □□□ □□ □□□ □□□ □□□.  
□□□ □□□□ □□ : Wash skin with plenty of water.  
□□ □□□□ □□ : □□□□□ □□ □□ □□ □□□□.  
□□□ □□ : □□□□ □□□ □□□□(□□)□ □□□ □□□□.  
Self protection of the first-aider : □□ □□□□ □□□ □□□□ □□□□□, □□□□□□ □□□ □□□, □□, □□□ □□ □□□□ □□□□ □□□ □□□□ □□□ □□□ □□□ □□□ □□□ □□□□ □□□□□.

### 4.2. □□ □□□□ □□ □□□ □□ □□□

□□ □ □□/□□ : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.  
□□ □□ □ □□/□□ : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.  
□ □□ □ □□/□□ : None under normal conditions. Dust from this product may cause eye irritation.  
□□ □ □□/□□ : None under normal conditions.

### 4.3. □□□□ □□ □ □□ □□ □□ □□ □□

Treat symptomatically.

## □□ 5: □□•□□□ □□□□

### 5.1. □□□ □□□

□□□ □□□ : Water spray. Dry powder. Foam.  
□□□□ □□□ : 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. □□□ □□□□ □□ □□□ □□□□ □ □□□

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□□□ □□ □□ :  
□□ □□ : Wear recommended personal protective equipment.  
□□ □□ : Ventilate spillage area.

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

□□ □□

: Evacuate unnecessary personnel.

## 6.2. □□□ □□□□ □□ □□□ □□□□

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## 6.3. □□ □□ □□ □□

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: Using a clean shovel, put the material in a dry container and cover without compressing it.

□□ □□

: Mechanically recover the product.

□□ □□□□□

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

## 6.4. □□ □□ □□

For further information refer to section 13.

## □□ 7: □□ □ □□□□

### 7.1. □□□□□□

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

□□ □□

: □□□□ □□□ □□□ □□□, □□□□ □□□□ □□□□. Always wash hands after handling the product.

### 7.2. □□□□ □□□ □□□ □□□ □□ □□

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

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

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□□ □□(LK)

: NG - Non-hazardous

### 7.3. □□ □□ □□

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## □□ 8: □□□□ □ □□□□□

### 8.1. □□ □□ □□

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### 8.2. □□□□

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□□□□ □□□□ □□:

Ensure good ventilation of the work station.

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□□ □□□□:

Wear recommended personal protective equipment.

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□□ □□:

Chemical goggles or safety glasses

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## Skin protection

□□ □□:

Wear a mask

□□ □□:

Protective gloves

□□ □□

□□ □□ □□:

Wear appropriate mask

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## □□ 9: □□□□ □□

### 9.1. □□□□ □□□□ □□ □□ □□

|   |                                   |
|---|-----------------------------------|
| □□ □□   | : □□                              |
| □□  | : Colourless or white.            |
| □□  | : Crystalline powder or crystals. |
| □□ □□   | : 210.14 g/mol                    |
| □□  | : Odourless.                      |
| □□ □□   | : □□□□                            |
| □□ □□   | : 135 – 152 °C                    |
| □□ □□   | : □□□□                            |
| □□ □□□□ □□□ □□                                  | : 175 °C                          |
| □□ □□   | : □□□□                            |
| □□ □□□  | : □□□□                            |
| □□ □□□  | : □□□□                            |
| □□ □□   | : 173.9 °C                        |
| □□□□ □□   | : 1010 °C                         |
| □□ □□   | : > 170 °C                        |
| pH  | : 2.2 (50 g/L at 20°C)            |
| pH □□   | : □□□□                            |
| □□(□□□)   | : □□□□                            |
| □□ □□   | : □: 59.2 % (50 g/L at 20°C)      |
|   | □□□: Soluble                      |
|   | □□□: Soluble                      |
|   | □□□: Soluble                      |
| Partition coefficient n-octanol/water (Log Kow) | : □□□□                            |
| □□ □□   | : < 0.01 hPa at 25°C              |
| 50°C □□□ □□□                                    | : □□□□                            |
| □□ □□   | : 1.54 g/cm <sup>3</sup> at 20°C  |
| □□ □□   | : □□□□                            |
| 20°C □□□ □□ □□ □□                               | : 7.26 (Air = 1.0)                |
| Particle size                                   | : □□□□                            |

### 9.2. □ □□ □□□□

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□□ □□ : 800 – 1000 kg/m<sup>3</sup>

## □□ 10: □□□ □□□□

### 10.1. □□□

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

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## 10.2. □□□ □□□

Stable under normal conditions.

## 10.3. □□ □□□ □□□

No dangerous reactions known under normal conditions of use.

## 10.4. □□□ □ □□

None under recommended storage and handling conditions (see section 7).

## 10.5. □□□ □ □□

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## 10.6. □□□ □□□□ □□□□

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

## □□ 11: □□□ □□ □□

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

|                    |   |                                     |
|--------------------|---|-------------------------------------|
| □□ □□ (□□)         | : | □□□□ □□                             |
| □□ □□ (□□)         | : | □□□□ □□                             |
| □□ □□ (□□)         | : | □□□□ □□                             |
| □□ □□□ □□ □□□      | : | □□□□ □□<br>pH: 2.2 (50 g/L at 20°C) |
| □□ □ □□ □□ □□□     | : | □□□□ □□<br>pH: 2.2 (50 g/L at 20°C) |
| □□□ □□ □□ □□□      | : | □□□□ □□                             |
| □□□□ □□□□          | : | □□□□ □□                             |
| □□□                | : | □□□□ □□                             |
| □□□□               | : | □□□□ □□                             |
| □□ □□□□ □□ (1□ □□) | : | □□□□ □□                             |
| □□ □□□□ □□ (□□ □□) | : | □□□□ □□                             |
| □□ □□□             | : | □□□□ □□                             |

| CITRIC ACID MONOHYDRATE USP (5949-29-1) |      |
|---|------|
| □□(□□□)                                 | □□□□ |

## 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. □□□ □ □□□

| CITRIC ACID MONOHYDRATE USP (5949-29-1) |          |
|---|----------|
| □□□ □ □□□                               | □□ □□ □□ |

## 12.3. □□ □□□

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## 12.4. □□ □□□□

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## 12.5. PBT □ vPvB □□ □□

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## 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.
- /□□ □□ □□□□ : Comply with applicable regulations for solid waste disposal. 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

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

□□ □□(ADN) : Not regulated  
□□ □□(RID) : Not regulated

## 14.5. □□ □□ □□

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## 14.6. □□□□ □□ □□ □□□□

□□ □□  
Not regulated

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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 □□ □□ □□ □□ (□□ EU 2019/1021)

#### Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

#### □□□□ □□(428/2009)

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

#### □□ □□□□ □□ (2019/1148)

Not listed on the Explosives Precursors list (EU)

#### □□ □□□□ □□ (273/2004)

Not listed on the Drug Precursors list (EU)

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Ordinance on Flammable Liquids (VbF) : □□□□ □□.

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□□

Employment restrictions

: □□ □□ □□□ (MuSchG) □□ □□ □□.  
 □□ □□□ □□□ (JArbSchG) □□ □□ □□.

WGK

: WGK 1, □□ □□ □□ □□ (Classification according to AwSV; ID □□ 8248).

□□ □□ □□(12. BImSchV)

: Is listed in the Major Accidents Ordinance (12. BImSchV)

| □□ □□ □□(12. BImSchV) |    |    |              |               |
|-----------------------|----|----|--------------|---------------|
| □□                    | □□ | □□ | □□ □□        | □□ □□         |
| 1.1.1                 |    |    | 5,000 kg     | 20,000 kg     |
| 1.1.2                 |    |    | 50,000 kg    | 200,000 kg    |
| 1.1.3                 |    |    | 50,000 kg    | 200,000 kg    |
| 1.2.1.1               |    |    | 10,000 kg    | 50,000 kg     |
| 1.2.1.2               |    |    | 50,000 kg    | 200,000 kg    |
| 1.2.2                 |    |    | 10,000 kg    | 50,000 kg     |
| 1.2.3.1               |    |    | 150,000 kg   | 500,000 kg    |
| 1.2.3.2               |    |    | 5,000,000 kg | 50,000,000 kg |
| 1.2.4                 |    |    | 50,000 kg    | 200,000 kg    |
| 1.2.5.1               |    |    | 10,000 kg    | 50,000 kg     |
| 1.2.5.2               |    |    | 50,000 kg    | 200,000 kg    |
| 1.2.5.3               |    |    | 5,000,000 kg | 50,000,000 kg |
| 1.2.6.1               |    |    | 10,000 kg    | 50,000 kg     |
| 1.2.6.2               |    |    | 50,000 kg    | 200,000 kg    |
| 1.2.7                 |    |    | 50,000 kg    | 200,000 kg    |
| 1.2.8                 |    |    | 50,000 kg    | 200,000 kg    |
| 1.3.1                 |    |    | 100,000 kg   | 200,000 kg    |
| 1.3.2                 |    |    | 200,000 kg   | 500,000 kg    |
| 1.4.1                 |    |    | 100,000 kg   | 500,000 kg    |
| 1.4.2                 |    |    | 100,000 kg   | 500,000 kg    |
| 1.4.3                 |    |    | 50,000 kg    | 200,000 kg    |
| 2.1                   |    |    | 50,000 kg    | 200,000 kg    |
| 2.11                  |    |    | 5,000 kg     | 50,000 kg     |
| 2.3.1                 |    |    | 2,500,000 kg | 25,000,000 kg |
| 2.3.2                 |    |    | 2,500,000 kg | 25,000,000 kg |
| 2.3.3                 |    |    | 2,500,000 kg | 25,000,000 kg |
| 2.3.4                 |    |    | 2,500,000 kg | 25,000,000 kg |
| 2.3.5                 |    |    | 2,500,000 kg | 25,000,000 kg |
| 2.30                  |    |    | 200,000 kg   | 500,000 kg    |
| 2.31                  |    |    |              | 1,000 kg      |
| 2.35                  |    |    |              | 1 kg          |
| 2.43.3                |    |    | 10,000 kg    | 100,000 kg    |
| 2.7                   |    |    | 1,000 kg     | 2,000 kg      |
| 2.8                   |    |    |              | 100 kg        |

# CITRIC ACID MONOHYDRATE USP

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

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- 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)

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- Royal Decree 665/1997 : Is not subject to the Royal Decree 665/1997

## 15.2. □□ □□ □□□ □□

No chemical safety assessment has been carried out

## □□ 16: □ □□ □□□□

| □□ □□ □□□□: |   |
|-------------|---|
| 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         | □□ □□ □□□ □□  |

# CITRIC ACID MONOHYDRATE USP

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

| □□ □ □□□□: |  |
|------------|--|
| DMEL       | Derived Minimal Effect level   |
| DNEL       | □□ □□ □□   |
| EC □□      | □□ □□ □□   |
| EC50       | Median effective concentration   |
| ED         | □□□ □□□□   |
| EN         | □□ □□  |
| EWC        | European waste catalogue   |
| 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        | □□ □□ □□□  |

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