

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 SDS Reference Number: 03892

## 1.1.

: 🗆 🗆

: FURFURAL FOR SYNTHESIS

 $EC \square \square \square \square$ : 605-010-00-4  $EC \square \square$ : 202-627-7  $CAS \; \square \; \square$ : 98-01-1 : 03892

: Heterocyclic organic compound

: C5H4O2

: Furan-2-carboxaldehyde, Fural, Furfuraldehyde, 2-Furaldehyde, Pyromucic aldehyde

### 1.2.

0000/000000

: Industrial

> For professional use only Laboratory chemicals

## 1.3.

LOBA CHEMIE PVT.LTD.

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)

## 2.1.

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

 $\square\square\square$   $\square\square$ ,  $\square\square$  3 H226  $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$ H301 H312  $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$  4 H331  $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$ \[ \text{\tinc{\text{\tin}\text{\tetx{\text{\text{\texi}\text{\texi}\text{\text{\texi}\text{\text{\tin}\text{\text{\text{\text{\texi}\text{\texi}\text{\texit{\text{\ti}\tinttit{\texititt{\text{\texi}\tint{\text{\texit{\text{\tet H315 H319 H351  $\square$   $\square$   $\square$  ,  $\square$   $\square$  2 H335

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## 2.2.

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







GHS02

GHS06

GHS08

 $\square \square \square$  (CLP)

□□·□□ □□ (CLP)

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: H226 - 🗆 🗆 🗆 🗆 🗆 🗆 .

H301+H331 - 0000 0000 0000.

H312 - 000 0000 0000. H315 - 000 000 0000. H319 - 00 000 000 0000. H335 - 000 000 000 000.

: P210 - 0.000 00.000.00.00 000000 00000.00.

#### 2.3.

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

## **aa3: aaaaa aa a aaa**

## 3.1.

| 00 |  | %   |
|----|--|-----|
|    | CAS :: 98-01-1<br>EC :: 202-627-7<br>EC :: :: 605-010-00-4 | 100 |

## **004: 00000**

## 4.1.

: DD DD Call a physician immediately.

Call a doctor.

: DD DDDD/DDD DDD DDD DDD DDD DDD . (DDD DDD DD DD DD DD DD DD

00. 00 00 0 000 000 00000. 00 000 000: 0000 00/000 0000. 00 000 0

00/000 0000.

□□. Call a physician immediately.

First-aid measures for first aider : \( \text{\tint{\text{\tint{\text{\tinit}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texict{\text{\texi}}\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\texit{\texitilex{\text{\texi{\texi{\texi{\texi{\texi{\texi}\texit{\tex{\texi}\tint{\texi{\texi{\texit{\texi{\texi{\texi{\texi{\texi{\ti

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## 4.2.

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## 4.3.

Treat symptomatically.

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#### 5.1.

: Water spray. Foam. Dry powder. Carbon dioxide.

: Do not use a heavy water stream.

## 5.2.

: 000 00 000.

: 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 enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment.  $\Box\Box\Box\Box\Box\Box\Box\Box$ . Complete protective

clothing.

## **6.1.** 000 000 00 000 0000 0 000

00 0000 00 0000 000000.

: Wear recommended personal protective equipment.

: Ventilate spillage area. Evacuate unnecessary personnel.  $\Box\Box$ ,  $\Box\Box\Box\Box\Box\Box\Box\Box\Box$ .  $\Box\Box$ .  $\Box\Box$ / $\Box$ / $\Box\Box$ 

□/□□/□□□□□□□□□. Avoid contact with skin, eyes and clothing.

: Do not attempt to take action without suitable protective equipment.  $\Box\Box\Box\Box\Box\Box\Box\Box\Box\Box\Box\Box\Box\Box\Box\Box\Box$ 

: Ventilate area. 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.  $\Box\Box\Box\Box\Box\Box\Box\Box$ . On land, sweep or shovel into suitable

containers.

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

For further information refer to section 13.

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#### 00**7:** 00 0 0000

## **7.1.** □□□□□□□

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: 0000 00 00000 000 000 000 000

#### **7.2.**

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

### 7.3.

## oo **8:** oooo o ooooo

#### 8.1.

## **8.2.** $\Box$

000 000 00:

Ensure good ventilation of the work station.

00 000:

Wear recommended personal protective equipment.

00 00 00 00:







Chemical goggles or safety glasses

#### **Skin protection**

0000:

Wear a mask

□□□:

Protective gloves

\_\_\_\_**:** 

Wear appropriate mask

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#### \_\_ **9:** \_\_\_\_\_

## 9.1.

: 00

 □
 : Colourless to brown.

 □
 : Clear oily liquid.

 : 96.09 g/mol
 : almond-like.

 □
 : -37 °C

 □
 : -30 □

Partition coefficient n-octanol/water (Log Kow) : □□□□
Partition coefficient n-octanol/water (Log Pow) : 0.41

:  $2 \text{ mm Hg at } 20 \,^{\circ}\text{C}$ 

□□ : 1.16 g/cm³ at 20 °C
□□ : □□□□
: □□□□
: 3 33 (Air= 1)

## 9.2.

## \_\_ **10:** \_\_\_ \_ \_ \_ \_

# 10.1. □□□

000000000.

## 10.2.

Stable under normal conditions.

## 10.3.

No dangerous reactions known under normal conditions of use.

## 10.4.

Down Extremely high or low temperatures.

## 10.5.

Strong acids. Strong bases.

#### 10.6.

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

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#### 00 11: 000 00 00

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

: 000 000 000.

## **FURFURAL FOR SYNTHESIS (98-01-1)**

 $\square \square (\square \square)$  1.368 mm<sup>2</sup>/s

## 11.2.

## \_\_ **12:** \_\_\_ \_\_ \_\_ \_\_

#### **12.1.** □ □

the environment.

## 12.2.

## **FURFURAL FOR SYNTHESIS (98-01-1)**

## 12.3.

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## 12.4.

## **12.5. PBT** □ **vPvB** □ □ □ □

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## 12.6.

## 12.7.

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## **00 13: 000 0000**

## 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.

Ecological information : Hazardous waste due to toxicity.

## **00 14: 000 000 00**

ADR / IMDG / IATA / ADN / RID 🗆 🗆

## 14.1. UN 🗆 🗆 ID 🗆

UN- \( \bigcup \) (IMDG) : UN 1199 UN- \( \bigcup \) (IATA) : UN 1199 UN- \( \bigcup \) (ADN) : UN 1199 UN- \( \bigcup \) (RID) : UN 1199

#### **14.2. UN** □□ □□□

| UN 1199 | Canal | Ca

## 14.3.

## ADR

(ADR) : 6.1 (3) : 6.1, 3

: 6. :



## **IMDG**

: 6.1 (3) : 6.1, 3

6

### **IATA**

: 6.1 (3) : 6.1, 3

## 

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#### **ADN**

□□□□□□□□(ADN) : 6.1 (3) □□□□(ADN) : 6.1, 3



#### RID

(RID) : 6.1 (3) : 6.1, 3



## 14.4.

□□□(ADR) : II
□□□(IMDG) : II
□□□(IATA) : II
□□□(ADN) : II
□□□(RID) : II

## 14.5.

□□□□□□ : □□□
□□□□□□ : □□□
EmS-No. (□□) : F-E
EmS-No. (□□) : S-D

### 14.6.

00 00

□□□(ADR) : TF1
□□□(ADR) : 100ml
□□(ADR) : E4
□□□(ADR) : P001, IBC02

CV13, CV28
COUNTY COUNT

□□□□□(Kemler□□) : 63 Orange plates (□□□□□) : □

63 1199

□□□□□(ADR) : D/E EAC□□ : •3Y

|  |  |  |  |  |  | П |  |  |
|--|--|--|--|--|--|---|--|--|
|  |  |  |  |  |  |   |  |  |

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|   | : 100 ml   |
|---|--|
|   | : E4   |
|   | : P001   |
| IBC 🗆 🗆 (IMDG)  | : IBC02  |
|   | : T7   |
|   | : TP2  |
|   | : A  |
|   | : Colourless or reddish-brown, mobile liquids with a pungent odour. Miscible with water. Explosive |
| ,   | limits for 2-FURALDEHYDE: 2.1% to 19.3%. Flashpoints: 2-FURALDEHYDE 60°C c.c., 3-                  |
|   | FURALDEHYDE 48°C c.c. Toxic if swallowed, by skin contact or by inhalation.                        |
| MFAG- $\square$   | : 132P   |
|   |  |
| 00 00   |  |
| $PCA \square \square \square (IATA)$  | : E4   |
| $PCA \square \square \square \square (IATA)$                                    | : Y641   |
| $PCA \square \square \square \square \square \square \square \square (IATA)$    | : 1L   |
| $PCA \square \square \square (IATA)$  | : 654  |
| $PCA \square \square \square \square \square (IATA)$                            | : 5L   |
| $CAO \square \square \square (IATA)$  | : 662  |
| $CAO \square \square \square \square \square (IATA)$                            | : 60L  |
| $ERG \square \square (IATA)$  | : 6F   |
| 00 00 00  |  |
| □ □ □ (ADN)   | : TF1  |
|   | : 802  |
|   | : 100 ml   |
|   | : E4   |
|   | : T  |
|   | : PP, EP, EX, TOX, A   |
|   | : VE01, VE02   |
|   | : 2  |
| ,   |  |
|   |  |
| $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ | : TF1  |
| $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ | : 100ml  |
| $\square \square \square (RID)$   | : E4   |
| $\square$ $\square$ $\square$ (RID)   | : P001, IBC02  |
|   | : MP15   |
| 000 00 0 00 000 00 (RID)  | : T7   |
| 000 00 0 00 000 00 00 (RID)   | : TP2  |
|   | : L4BH   |
| RID □□□□□(RID)  | : TU15   |
|   | : 2  |
| 00 00 00 -00, 00 0 00(RID)  | : CW13, CW28, CW31   |
|   | : CE5  |
| □□□ □□ (RID)  | : 63   |

# 

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## **0015: 00 0000**

## 

EU □□

## REACH $\square\square\square$ XVII ( $\square\square\square\square$ )

| EU restriction 🗆 (REACH Annex XVII) |                        |  |  |  |  |  |
|-------------------------------------|------------------------|--|--|--|--|--|
|                                     |                        |  |  |  |  |  |
| 3(a)                                | FURFURAL FOR SYNTHESIS |  |  |  |  |  |
| 3(b)                                | FURFURAL FOR SYNTHESIS |  |  |  |  |  |
| 40.                                 | FURFURAL FOR SYNTHESIS |  |  |  |  |  |

#### **REACH** $\square \square \square$ **XIV** ( $\square \square \square \square$ )

REACH | | | | XIV ( | | | | | | | | | | | |

#### REACH □□ □□ □□ (SVHC)

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#### **PIC** □□ (□□□□□□)

PIC □□□ □□ □ □(□□ EU 649/2012)

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POP □□□ □□ □ □(□□ EU 2019/1021)

#### Ozone Regulation (2024/590)

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

#### **□□□□□□(428/2009)**

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

### □□ □□□ □ □ (2019/1148)

OOO OOOO OO(OO OOOOO OO OO OO OO EU 2019/1148 )O OOO OO OO

## □□□□□□□□(273/2004)

| RG 74 |  |  |  |  |  |  |  |
|-------|--|--|--|--|--|--|--|
| RG 84 |  |  |  |  |  |  |  |

VOC ordinance (ChemVOCFarbV)

WGK : WGK 3, □□□□□ (Classification according to AwSV).

: This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be

observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and

documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to §

10).

: 00 00 (12. BImSchV) : 00 00 (12. BImSchV) 00 00

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

Class for fire hazard :  $\square\square$  III-1 Store unit : 50 liter

: 180 00 00 000 000 000

## 15.2.

No chemical safety assessment has been carried out

## □□ **16:** □ □□ □□□□

| 00 0 0000: |   |
|------------|---|
| ACGIH      | American Conference of Governement 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 🗆 🗆    | 0000 00 00 (CAS)  |
| CLP        | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                     |
| COD        |   |
| CSA        |   |
| DMEL       | Derived Minimal Effect level  |
| DNEL       |   |
| ЕС 🗆 🗆     |   |
| 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  |

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| 00 0 0000: |  |
|------------|--|
| 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       | 00 000 00  |
| PPE        | 00 000   |
| 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        |  |

| OHO O EUHO OO: |                                  |
|----------------|----------------------------------|
|                |                                  |
|                |                                  |
|                | □□ □□ (□□), □□ <b>4</b>          |
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| 2              | 00 000/00 000, 00 2              |
| H226           | 000 00 0 00.                     |
| H301           |                                  |
| H312           | 000 0000 000.                    |
| H315           |                                  |
| H319           | 00 00 000 000.                   |
| H331           | 0000 000.                        |
| H335           |                                  |
| H351           | 00 000 000 000.                  |

□□□□□□□(SDS), EU



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