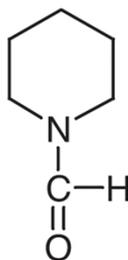


### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
Trade name : N-FORMYLPIPERIDINE  
EC-No. : 219-986-0  
CAS-No. : 2591-86-8  
Product code : 3879D  
Formula : C<sub>6</sub>H<sub>11</sub>NO  
Chemical structure :



Synonyms : Piperidine-1-carbaldehyde, 1-Formyl piperidine

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use  
Use of the substance/mixture : Laboratory chemicals  
Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

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. Emergency telephone number

Emergency number : + 91 22 6663 6663 (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]

Acute toxicity (oral), Category 4	H302
Acute toxicity (dermal), Category 3	H311
Serious eye damage/eye irritation, Category 2	H319
Full text of H-statements: see section 16	

##### Adverse physicochemical, human health and environmental effects

Toxic in contact with skin. Harmful if swallowed. Causes serious eye irritation.

# N-FORMYLPIPERIDINE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS06

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H302 - Harmful if swallowed.

H311 - Toxic in contact with skin.

H319 - Causes serious eye irritation.

Precautionary statements (CLP) :

P280 - Wear protective clothing, eye protection, face protection, protective gloves.

P301+P312 - IF SWALLOWED: Call doctor if you feel unwell.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 - Call doctor if you feel unwell.

P330 - Rinse mouth.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type

: Mono-constituent

Name	Product identifier	%
N-FORMYLPIPERIDINE	CAS-No.: 2591-86-8 EC-No.: 219-986-0	100

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

: Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

: Wash skin with plenty of water. Take off immediately all contaminated clothing.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. 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. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after eye contact

: Eye irritation.

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

Treat symptomatically.

# N-FORMYLPIPERIDINE

## Safety Data Sheet

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

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

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment.  
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1. National occupational exposure and biological limit values

No additional information available

# N-FORMYLPIPERIDINE

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

##### Hand protection:

Protective gloves

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

Wear appropriate mask

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear. Liquid.
Molecular mass	: 113.16 g/mol
Colour	: Colourless to Light yellow.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: -31 °C
Boiling point	: 222 °C
Flash point	: 91 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available

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Flammability (solid, gas)	: Not applicable
Vapour pressure	: 0.1 mm Hg at 25°C
Relative vapour density at 20 °C	: 3.9 (Air = 1.0)
Relative density	: No data available
Density	: 1.019 g/cm <sup>3</sup> at 25°C
Solubility	: No data available
Partition coefficient n-octanol/water (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

Refractive index :  $\approx 1.48$  (n 20/D)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Toxic in contact with skin.
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
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

# N-FORMYLPIPERIDINE

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

#### 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

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
-------------------------	---

### SECTION 14: Transport information

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

#### 14.1. UN number

UN-No. (ADR)	: UN 2810
UN-No. (IMDG)	: UN 2810
UN-No. (IATA)	: UN 2810
UN-No. (ADN)	: UN 2810
UN-No. (RID)	: UN 2810

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: TOXIC LIQUID, ORGANIC, N.O.S.
Proper Shipping Name (IMDG)	: TOXIC LIQUID, ORGANIC, N.O.S.
Proper Shipping Name (IATA)	: Toxic liquid, organic, n.o.s.
Proper Shipping Name (ADN)	: TOXIC LIQUID, ORGANIC, N.O.S.
Proper Shipping Name (RID)	: TOXIC LIQUID, ORGANIC, N.O.S.
Transport document description (ADR)	: UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (N-Formylpiperidine), 6.1, III, (E)
Transport document description (IMDG)	: UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (N-Formylpiperidine), 6.1, III
Transport document description (IATA)	: UN 2810 Toxic liquid, organic, n.o.s. (N-Formylpiperidine), 6.1, III
Transport document description (ADN)	: UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (N-Formylpiperidine), 6.1, III
Transport document description (RID)	: UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (N-Formylpiperidine), 6.1, III

# N-FORMYLPIPERIDINE

## Safety Data Sheet

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### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 6.1  
Danger labels (ADR) : 6.1



#### IMDG

Transport hazard class(es) (IMDG) : 6.1  
Danger labels (IMDG) : 6.1



#### IATA

Transport hazard class(es) (IATA) : 6.1  
Danger labels (IATA) : 6.1



#### ADN

Transport hazard class(es) (ADN) : 6.1  
Danger labels (ADN) : 6.1



#### RID

Transport hazard class(es) (RID) : 6.1  
Danger labels (RID) : 6.1



### 14.4. Packing group

Packing group (ADR) : III  
Packing group (IMDG) : III  
Packing group (IATA) : III  
Packing group (ADN) : III  
Packing group (RID) : III

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No

# N-FORMYLPIPERIDINE

## Safety Data Sheet

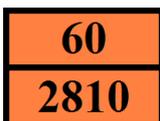
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Other information : No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : T1  
Special provisions (ADR) : 274, 614  
Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P001, IBC03, LP01, R001  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T7  
Portable tank and bulk container special provisions (ADR) : TP1, TP28  
Tank code (ADR) : L4BH  
Tank special provisions (ADR) : TU15, TE19  
Vehicle for tank carriage : AT  
Transport category (ADR) : 2  
Special provisions for carriage - Packages (ADR) : V12  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28  
Special provisions for carriage - Operation (ADR) : S9  
Hazard identification number (Kemler No.) : 60  
Orange plates :



Tunnel restriction code (ADR) : E  
EAC code : 2X

#### Transport by sea

Special provisions (IMDG) : 223, 274  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP1, TP28  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-A  
Stowage category (IMDG) : A  
Stowage and handling (IMDG) : SW2  
Properties and observations (IMDG) : Toxic if swallowed, by skin contact or by inhalation.

#### Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y642  
PCA limited quantity max net quantity (IATA) : 2L  
PCA packing instructions (IATA) : 655  
PCA max net quantity (IATA) : 60L  
CAO packing instructions (IATA) : 663  
CAO max net quantity (IATA) : 220L  
Special provisions (IATA) : A3, A4, A137  
ERG code (IATA) : 6L

#### Inland waterway transport

Classification code (ADN) : T1  
Special provisions (ADN) : 274, 614, 802  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Equipment required (ADN) : PP, EP, TOX, A  
Ventilation (ADN) : VE02

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Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : T1  
Special provisions (RID) : 274, 614  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P001, IBC03, LP01, R001  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T7  
Portable tank and bulk container special provisions (RID) : TP1, TP28  
Tank codes for RID tanks (RID) : L4BH  
Special provisions for RID tanks (RID) : TU15  
Transport category (RID) : 2  
Special provisions for carriage – Packages (RID) : W12  
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31  
Colis express (express parcels) (RID) : CE8  
Hazard identification number (RID) : 60

### 14.7. Transport in bulk according to Annex II of Marpol 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

##### EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(b)	N-FORMYLPIPERIDINE

N-FORMYLPIPERIDINE is not on the REACH Candidate List

N-FORMYLPIPERIDINE is not on the REACH Annex XIV List

N-FORMYLPIPERIDINE is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

N-FORMYLPIPERIDINE is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

##### Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)  
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 7516)

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

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting : The substance is not listed

giftige stoffen – Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting : The substance is not listed

giftige stoffen – Ontwikkeling

##### Denmark

Class for fire hazard : Class III-1

Store unit : 50 liter

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Classification remarks	: Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product
<b>Switzerland</b>	
Storage class (LK)	: LK 6.1 - Toxic materials
Chemicals Ordinance (SR 813.11)	: Group 2

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms

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	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
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
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)

# N-FORMYLPIPERIDINE

## Safety Data Sheet

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### Abbreviations and acronyms

TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

### Full text of H- and EUH-statements

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H319	Causes serious eye irritation.

Safety Data Sheet (SDS), EU

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.