

## **Safety Data Sheet**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

#### **Product identifier**

Product code 4311320

Product name Hi-Di Formamide Unique Formula Identifier Not Applicable

(UFI)

Chemical Name Not Applicable

REACH registration number No registration number is given yet for this substance / substances in this mixture

since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet

expired.

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

**Relevant identified uses** For research use only

**Use Description Code** SU22 - Professional uses: Public domain (administration, education,

entertainment, services, craftsmen), PROC15 - Use as laboratory reagent, PC21 -

Laboratory chemicals, SU24 - Scientific research and development

**Uses advised against** Not for consumer use.

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

## Manufacturer / Supplier

LIFE TECHNOLOGIES EUROPE BV KWARTSWEG 2 2665 NN BLEISWIJK NETHERLANDS 31-(0)180 392 400

Email: MSDS@lifetech.com

Life Technologies Limited 3 Fountain Drive Inchinnan Business Park Paisley PA4 9RF, UK +44 (0)141 814 6100

#### **Emergency telephone number**

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24 hour Emergency Response for Hazardous Materials Within the USA + Canada: 1-800-424-9300 and

[or Dangerous Goods] Incident. Spill, Leak, Fire, 1-703-527-3887

**Exposure, or Accident. Call CHEMTREC**Outside the USA + Canada: 1-703-741-5970

## **Country Specific Emergency Number (if available):**

CHEMTREC Ireland (Dublin) +(353)-19014670 (Greeting Language: English and Irish) +(44)-870-8200418 (Greeting Language: English)

### SECTION 2: Hazards identification

### Classification of the substance or mixture

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

#### **Physical hazards**

Not Hazardous

#### **Health hazards**

| Carcinogenicity                                    | Category 2  |
|--|-------------|
| Reproductive Toxicity                              | Category 1B |
| Specific target organ toxicity - Repeated exposure | Category 2  |

#### **Environmental hazards**

Not Hazardous

#### **Additional information**

No information available

#### Label elements

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

## **Hazard pictograms**



## Signal Word

Danger

## **Hazard Statements**

H351 - Suspected of causing cancer

H360 - May damage fertility or the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

### **Precautionary Statements**

#### Prevention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

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P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### Response

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P314 - Get medical advice/attention if you feel unwell

## **Storage**

Not Applicable

### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

#### Other hazards

Not Applicable

## SECTION 3: Composition/information on ingredients

### **Mixtures**

| Chemical Name | CAS No  | EC No.    | Weight-% | REACH registration | Classification according to<br>Regulation (EC) No. |
|---------------|---------|-----------|----------|--------------------|--|
|               |         |           |          | number             | 1272/2008 [CLP]                                    |
| Formamide     | 75-12-7 | 200-842-0 | 98-100   | 01-2119496064-35-  | Repr. 1B - H360                                    |
|               |         |           |          | XXXX               | Carc. 2 - H351                                     |
|               |         |           |          |                    | STOT RE 2 - H373                                   |

| Chemical Name | Specific concentration limit (SCL) | M-Factor | Acute Toxicity Estimate |
|---------------|------------------------------------|----------|-------------------------|
| Formamide     | -                                  | -        | -                       |

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#### SECTION 4: First aid measures

#### Description of first aid measures

**Skin contact** Wash off immediately with plenty of water for at least 15 minutes. Remove and

wash contaminated clothing and gloves, including the inside, before re-use.

Immediate medical attention is required.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Immediate medical attention is required.

**Ingestion** Never give anything by mouth to an unconscious person. Do not induce vomiting

without medical advice. If swallowed, rinse mouth with water (only if the person is conscious). Risk of serious damage to the lungs (by aspiration). Get medical

attention if symptoms occur.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist,

call a doctor.

Notes to Physician Treat symptomatically.

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

H360 - May damage fertility or the unborn child if swallowed H351 - Suspected of causing cancer if swallowed H373 - May cause damage to organs through prolonged or repeated exposure

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

IF exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell.

#### SECTION 5: Firefighting measures

#### **Extinguishing media**

Suitable extinguishing media Foam. Dry powder. Dry chemical. Carbon dioxide (CO<sub>2</sub>).

Water spray.

Unsuitable extinguishing media No information available.

## Special hazards arising from the substance or mixture

No data

#### Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

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#### SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid exposure to vapour
Avoid breathing vapours or mists
Ensure adequate ventilation
Avoid contact with skin, eyes or clothing
Use personal protection equipment
See section 8 for more information

#### **Environmental precautions**

No special environmental precautions required.

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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

#### Reference to other sections

See section 8 for more information.

### SECTION 7: Handling and storage

#### Precautions for safe handling

Always wear recommended Personal Protective Equipment. Wash hands before breaks and immediately after handling the product. Do not get in eyes, on skin, or on clothing. Avoid breathing vapours or mists. If during normal use the material presents a respiratory hazard, use adequate ventilation and/or wear appropriate respirator. See section 8 for more information.

## Conditions for safe storage, including any incompatibilities

Keep in properly labelled containers. Keep in a dry, cool and well-ventilated place. Store in accordance with local regulations. Keep away from combustible material.

## Specific end use(s)

For research use only.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

| Chemical Name | EU OEL (TWA) | EU OEL (STEL) | EU Skin Notation |
|---------------|--------------|---------------|------------------|
| Formamide     | None         | None          | None             |
| 75-12-7       |              |               |                  |

| Chemical Name Austria |                      | Belgium (TWA)        | Czech Republic |
|-----------------------|----------------------|----------------------|----------------|
| Formamide             | 9 ppm                | 10 ppm               | None           |
| 75-12-7               | 16 mg/m <sup>3</sup> | 18 mg/m <sup>3</sup> |                |

| Chemical Name Denmark (TWA) |                      | Finland OEL (TWA) | France OEL (VME)     |  |
|-----------------------------|----------------------|-------------------|----------------------|--|
| Formamide                   | 10 ppm               | 10 ppm            | 20 ppm               |  |
| 75-12-7                     | 18 mg/m <sup>3</sup> | 19 mg/m³          | 30 mg/m <sup>3</sup> |  |

| Chemical Name | Germany OEL (TWA) | Ireland (TWA)        | Italy OEL (TWA) |
|---------------|-------------------|----------------------|-----------------|
| Formamide     | None              | 10 ppm               | None            |
| 75-12-7       |                   | 18 mg/m <sup>3</sup> |                 |

| Chemical Name | Lithuania OEL (TWA)  | Netherlands OEL (MAC) | Norway                    |
|---------------|----------------------|-----------------------|---------------------------|
| Formamide     | 10 ppm               | None                  | 10 ppm TWA                |
| 75-12-7       | 20 mg/m <sup>3</sup> |                       | 18 mg/m³ TWA              |
|               |                      |                       | 20 ppm STEL               |
|               |                      |                       | 27 mg/m <sup>3</sup> STEL |

| Chemical Name |           | Poland        | Portugal                       | Spain OEL (TWA)      |
|---------------|-----------|---------------|--------------------------------|----------------------|
|               | Formamide | 23 mg/m³ TWA  | 10 ppm TWA                     | 10 ppm               |
|               | 75-12-7   | Skin Notation | skin - potential for cutaneous | 19 mg/m <sup>3</sup> |
|               |           |               | exposure                       |                      |

| Chemical Name Sweden - Occupational Exposure Limits - TLVs (LLVs) |           | Switzerland                              | United Kingdom |                                      |
|---|-----------|--|----------------|--------------------------------------|
|   | Formamide | 10 ppm TLV NGV; 20 mg/m <sup>3</sup> TLV | 10 ppm TWA     | 20 ppm TWA; 37 mg/m <sup>3</sup> TWA |
|   | 75-12-7   | NGV                                      | 18 mg/m³ TWA   |                                      |

**Engineering Measures** 

Ensure adequate ventilation, especially in confined areas.

### **Exposure controls**

### Personal protection equipment

**Respiratory protection** In case of insufficient ventilation wear respirators and components tested and

approved under appropriate government standards.

Hand protection Glove material: Nitrile rubber with thickness (mm) :5 Break through time (hours)

:>1

Recommended glove type has not been tested for use with this product.

Information is based on professional knowledge

**Eye protection** Tight sealing safety goggles.

**Skin and Body Protection** Wear laboratory coat for body protection.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** 

No special environmental precautions required.

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## SECTION 9: Physical and chemical properties

## Information on basic physical and chemical properties

Physical state
Colour
No data
Odour
No data
Molecular Weight
No data
Melting point / melting range
Pailing point / heiling range

\*C No data

Melting point / melting range°C No data°F No dataBoiling point / boiling range°C No data°F No data

Flammability (solid, gas)

Lower explosion limit

Upper explosion limit

Flash point

No data

No data

**pH** 9

Evaporation rate

Viscosity

Solubility

Partition coefficient:

No data

No data

No data

No data

n-octanol/water

Vapour PressureNo dataSpecific gravityNo dataRelative densityNo dataVapour densityNo dataExplosive propertiesNo dataOxidising propertiesNo dataParticle characteristicsNo data

#### Other information

Information with regards to physical hazard classes

No information available

Other safety characteristics

No information available

Revision number 18 Product code 4311320 SECTION 10: Stability and reactivity

Reactivity None known.

Chemical stability Stable under normal conditions.

Possibility of hazardous

reactions

Hazardous reaction has not been reported.

**Conditions to avoid**No information available.

**Incompatible materials**No information available.

Hazardous decomposition

products

No data available.

## SECTION 11: Toxicological information

#### Information on hazard classes as defined in Regulation (EC) No 1272/2008

| Chemical Name | Oral LD50  | Dermal LD50 | Inhalation LC50 |
|---------------|------------|-------------|-----------------|
| Formamide     | 3200 mg/kg | 13500 mg/kg | 3900 ppm/6H     |

#### **Principal Routes of Exposure**

**Skin corrosion/irritation** Data are conclusive but insufficient for classification

Serious eye damage/irritation Data are conclusive but insufficient for classification

Respiratory or skin

sensitisation

Data are conclusive but insufficient for classification

**Specific target organ toxicity** Data are conclusive but insufficient for classification (STOT) – single exposure

**Specific target organ toxicity** May cause damage to organs through prolonged or repeated exposure **(STOT) – repeated exposure** 

Carcinogenicity Contains a known or suspected carcinogen

**Germ cell mutagenicity** Data are conclusive but insufficient for classification

**Reproductive Toxicity** May damage fertility or the unborn child. May cause harm to breast-fed children

**Aspiration Hazard** Data are conclusive but insufficient for classification

#### Information on other hazards

## **Endocrine disrupting properties**

No information available

#### Other information

No information available

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## SECTION 12: Ecological information

#### **Toxicity**

The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to algae   | Toxicity to daphnia<br>and other aquatic<br>invertebrates | Toxicity to fish  | Microtox Data     | log Pow     |
|---------------|---|---|-------------------|-------------------|-------------|
| Formamide     | Desmodesmus<br>subspicatus<br>EC50>500 mg/L (72<br>h) Desmodesmus<br>subspicatus<br>EC50>500 mg/L (96<br>h) | Daphnia magna<br>EC50>500 mg/L (48<br>h)                  | No data available | No data available | logPow-0.82 |

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

Mobility in soil No information available.

#### Results of PBT and vPvB assessment

No information available.

#### **Endocrine disrupting properties**

This product does not contain any known or suspected endocrine disruptors

#### Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

### **SECTION 14: Transport information**

#### IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

UN number or ID number
UN proper shipping name
Transport hazard class(es)
Not Applicable
Packing group
Not Applicable
Not Applicable

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## Special precautions for user

Not Applicable

## Maritime transport in bulk according to IMO instruments

Not Applicable.

## SECTION 15: Regulatory information

## Safety, health and environmental regulations/legislation specific for the substance or mixture

## **Substances of Very High Concern**

| Chemical Name | Weight-% | EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances for Eventual Inclusion in Annex XIV |
|---------------|----------|---|
| Formamide     | 98-100   | Reason for inclusion Toxic for reproduction, Article 57c  |

## Substance subject to authorisation per REACH Annex XIV

None

## Restricted substances under EC 1907/2006, Annex XVII

| Chemical Name | Weight-% | EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances |
|---------------|----------|--|
| Formamide     | 98-100   | Use restricted. See item 30.   |
|               |          | Use restricted. See item 75.   |

# Regulation (EC) No 649/2012 (Rotterdam Convention - export/import of dangerous chemicals) None

## Regulation (EU) No 2019/1021 (Stockholm Convention – persistent organic pollutants) None

## EU - Substances Depleting the Ozone layer (1005/2009)

None

## German Water hazard classes (Wassergefährdungsklassen)

| Chemical Name | Weight-% | Water hazard class (WGK)                     |
|---------------|----------|--|
| Formamide     | 98-100   | hazard class 1 - slightly hazardous to water |

#### Other International Inventories

| Chemical Name | EINECS (European<br>Union) | ELINCS (European<br>List of Notified | ENCS (Japan) | PICCS (Philippines) |
|---------------|----------------------------|--------------------------------------|--------------|---------------------|
|               |                            | Chemical                             |              |                     |

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|           |        | Substances) |        |        |
|-----------|--------|-------------|--------|--------|
| Formamide | Listed | -           | Listed | Listed |

| Chemical Name | AICS (Australia) | South Korea<br>(KECL) | Canada (DSL) | NDSL |
|---------------|------------------|-----------------------|--------------|------|
| Formamide     | Listed           | Listed                | Listed       | -    |

## **Chemical safety assessment**

No Chemical safety assessment has been carried out.

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#### SECTION 16: Other information

Reason for revision Update according to Commission Regulation EU No. 2020/878

Revision number 18

Revision date 20-Jul-2023

#### References

ECHA: http://echa.europa.eu/TOXNET: http://toxnet.nlm.nih.gov/

eChemPortal: http://www.echemportal.org/

• LOLI database: https://www.chemadvisor.com/loli-database

# Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Carcinogenicity

Reproductive Toxicity

Specific target organ toxicity - Repeated Category 2

Category 2

Calculation method
Calculation method
Calculation method
Calculation method

## Abbreviations and acronyms

TWA - Time-Weighted Average

**OELs** - Occupational Exposure Limits

STEL - Short Term Exposure Limit

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**CEPA** - Canadian Environmental Protection Act

**EPA** - Environmental Protection Agency

OSHA - Occupational Safety and Health Administration of the US Department of Labour

IATA - International Air Transport Association

**DOT** - Department of Transportation

IMDG - International Maritime Dangerous Goods

**ACGIH** - American Conference of Governmental Industrial Hygienists

NIOSH - National Institute for Occupational Safety and Health

AIHA - American Industrial Hygiene Association

HMIS - Department of Defense Hazardous Materials Information System

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR

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