



SAFETY DATA SHEET

According Regulation (EU) Nr. 1272/2008
Classification according to regulation (EG) Nr. 1272/2008 [CLP]

1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

Product code: rs-001-LoadDye

Product name: **2x RNA Loading Dye (riboCut Marker)**

REACH-registration number: Formamide 01-2119496064-35-XXXX

Company/Undertaking identification:

siTOOLS Biotech GmbH

Lochhamer Strasse 29a

82151 Planegg

Deutschland

Emergency response: +49 (0) 89 125014800

For research use only. Not intended for human or animal diagnostic or therapeutic procedures.

2. Hazards identification

In accordance with local and national regulations:

No hazardous substance or no hazardous mixture according to EU directive 1999/45/EG or 67/548/EWG. No hazardous substance and no hazardous mixture according regulation (EG) Nr. 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

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

Precautionary Statements

Prevention

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
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

3. Composition/information on ingredients

Component	CAS No	EINECS-No.	Weight-%	REACH registration number	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Formamide 75-12-7 (60-100)	75-12-7	200-842-0	60-100	01-2119496064-35-XXXX	Repr. 1B - H360 Carc. 2 - H351 STOT RE 2 - H373

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

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.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Foam. Dry powder. Dry chemical. Carbon dioxide (CO₂). Water spray.

Unsuitable extinguishing media

No information available.

Specific hazards during fire fighting

None known.

Special protective equipment for firefighters

Wear self-containing breathing apparatus and protective suit.

Additional information

No data available

6. Accidental release measures

Personal precautions

Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Methods for cleaning up

Take up mechanically and collect in suitable container for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

7. Handling and storage

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.

Storage

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.

Recommended storage temperature: -20°C

Specific end use(s)

For research use only. Not for use in diagnostic procedures.

8. Exposure controls/personal protection

Control Parameter

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

Chemical Name	Austria	Belgium (TWA)	Czechia
Formamide 75-12-7	9 ppm 16 mg/m ³	10 ppm 18 mg/m ³	None

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

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

Chemical Name	Lithuania OEL (TWA)	Netherlands OEL (MAC)	Norway
Formamide 75-12-7	10 ppm 20 mg/m ³	None	10 ppm TWA 18 mg/m ³ TWA 15 ppm STEL 27 mg/m ³ STEL

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

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

9. Physical and chemical properties

a) Physical state	liquid
b) Odour	this information is not available
c) Odour threshold	this information is not available
d) pH	this information is not available
e) melting point / freezing point	0-2.5 °C
f) boiling point / melting point	100-210 °C
g) Flash point	>120 °C
h) Vapour pressure	this information is not available
i) Explosion limits	this information is not available
j) Density	this information is not available
k) Water solubility	Soluble in water
l) Percent volatile	this information is not available
m) Volatile organic	this information is not available
n) Auto ignition temperature	this information is not available
o) Viscosity	this information is not available

10. Stability and reactivity

Reactivity

none known

Stability

stable under normal conditions

Materials to avoid

no dangerous reactions known under normal use

Hazardous decomposition products

none under normal use

Polymerisation

hazardous polymerisation does not occur

11. Toxicological information

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 (STOT) – single exposure

Data are conclusive but insufficient for classification

Specific target organ toxicity (STOT) – repeated exposure

Target organ(s) : Cardiovascular System Hematopoietic System

Carcinogenicity

Contains a known or suspected carcinogen

Germ cell mutagenicity

Data are conclusive but insufficient for classification

Reproductive Toxicity

May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility

Aspiration Hazard

Data are conclusive but insufficient for classification

12. Ecological information

Ecotoxicity

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

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

Persistence and degradability

Readily biodegradable.

Bioaccumulative potential

No information available.

Results of PBT and vPvB assessment

No information available.

Other adverse effects

No information available.

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.

14. Transport information

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

UN number Not Applicable

UN proper shipping name Not Applicable

Transport hazard class(es) Not Applicable

Packing group Not Applicable

Environmental hazards

Not Applicable

Special precautions for user

Not Applicable

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not Applicable

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	60-100	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	60-100	Use restricted. See item 30.

Substances listed under Annex I of Regulation (EC) No 689/2008

None.

Restricted substances under Annex V of Regulation (EC) No 689/2008

None.

Substances under Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

None.

German Water hazard classes (Wassergefährdungsklassen)

Chemical Name	Weight-%	Water hazard class (WGK)
Formamide	60-100	hazard class 1 - slightly hazardous to water

Other International Inventories

Chemical Name	EINECS (European Union)	ELINCS (European List of Notified Chemical Substances)	ENCS (Japan)	PICCS (Philippines)
Formamide	Listed	N/A	Listed	Listed

Chemical Name	AICS (Australia)	South Korea (KECL)	Canada (DSL)	NDSL
Formamide	Listed	Listed	Listed	N/A

Chemical safety assessment

No Chemical safety assessment has been carried out.

16. Other information

Reason for revision

Update according to Commission Regulation (EU) No 830/2015

Revision number

3

Revision date

12-Jan-2022

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	Category 2	Calculation method
Reproductive Toxicity	Category 1B	Calculation method
fic target organ toxicity – Repeated exposure	Category 2	Calculation method

The information in this SDS was acquired by diligent investigation and the recommendations are based on prudent application of professional judgement. It should not be relied upon as a product specification. The information shall not be taken as being all inclusive and is to be used as a guide. All materials and mixtures may represent unknown hazards and should be used with caution. siTOOLS Biotech does not control the methods, amounts or conditions of use and shall not be held liable for any damages or losses resulting from the handling or from contact with the product. siTOOLS Biotech does not make any warranty of any kind, expressed or implied, concerning the safe use of this material in your procedures or in combination with other chemical substances, including any implied warranty of merchantability or fitness for any particular purpose.

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End of safety data sheet