according to Regulation (EC) No. 1907/2006



# **ROX Protein Labeling Kit**

Fluorescent labeling of primary amino groups

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name: ROX Protein Labeling Kit

Catalog Number: FP-201-ROX

Supplier: Jena Bioscience GmbH

Loebstedter Strasse 71 07749 Jena, Germany

 Telephone:
 +49 - 3641 - 62 85 000

 Fax:
 +49 - 3641 - 62 85 100

 e-Mail:
 info@jenabioscience.com

 WWW:
 http://www.jenabioscience.com

## 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008 (EU-GHS/CLP)

Flam. Liq. 3, H226

Acute Tox., Inhalation 4, H332 Acute Tox., Dermal 4, H312

Eye Irrit. 2, H319 Repr. 1B, H360D

According to EC-directives 67/548/EEC or 1999/45/EC

Xn, R20/21 Xi, R36 R61

Pictogram

Label elements

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



Signal word

Hazard statement(s)

H226 Flammable liquid and vapour.

H312 + H332 Harmful in contact with skin or if inhaled

H319 Causes serious eye irritation. H360D May damage the unborn child.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

P280 Wear protective gloves/ protective clothing.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P341 IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.



according to Regulation (EC) No. 1907/2006



# **ROX Protein Labeling Kit**

Fluorescent labeling of primary amino groups

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

Supplemental Hazard State- none

ments

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazard component of the Kit: DMF

Synonyms: N,N-Dimethylformamide

Registration number: 01-2119475605-32-XXXX

Classification: Flam. Liq. 3, H226 - Acute Tox. 4, H312/H332 - Eye Irrit. 2, H319 - Repr. 1B, H360D

Xn, R20/21 - Xi, R36 - R61

Concentration: ?100 %

## 4. FIRST AID MEASURES

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration.

## In case of skin contact

Wash off with soap and plenty of water.

## In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

drying, cracking of the skin, Skin irritation

## 5. FIRE-FIGHTING MEASURES

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Avoid dust formation.

according to Regulation (EC) No. 1907/2006



# **ROX Protein Labeling Kit**

Fluorescent labeling of primary amino groups

## **Environmental precautions**

Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

#### Handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: store at -20 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Personal protective equipment

## Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **Hand protection**

For prolonged or repeated contact use protective gloves.

## Eye protection

Safety glasses

## **Hygiene measures**

General industrial hygiene practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Appearance**

Form:

## Safety data

рН:

Melting point: -61 °C Boiling point: 153 °C

Flash point: 58 °C - closed cup

Ignition temperature: 440 °C Lower explosion limit: 2.2 % (v/v)

according to Regulation (EC) No. 1907/2006



# **ROX Protein Labeling Kit**

Fluorescent labeling of primary amino groups

Upper explosion limit: 16 % (v/v)

Water solubility: completely miscible

## 10. STABILITY AND REACTIVITY

## Storage stability

Stable under recommended storage conditions.

#### Materials to avoid

Strong oxidizing agents

#### Hazardous decomposition products

no data available

## 11. TOXICOLOGICAL INFORMATION

## Acute toxicity

 $\begin{array}{ll} \text{Oral LD}_{50} & \text{2800 mg/kg (rat) (TOXNET)} \\ \text{Dermal LD}_{50} & \text{1500 mg/kg (rabbit) (TOXNET)} \end{array}$ 

Inhalativ LC50/4 h 90-15 mg/l (rat)

#### Irritation and corrosion

Skin - human - Mild skin irritation - 24 h Eyes - rabbit - Moderate eye irritation - 24 h

## Sensitisation

no data available

#### Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (N,N-Dimethylformamide)

## Germ cell mutagenicity

mouse, lymphocyte, mutation in mammalian somatic cells

## Reproductive toxicity

May cause congenital malformation in the fetus.

## 12. ECOLOGICAL INFORMATION

#### **Toxicity**

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 9.000 - 13.000 mg/l - 96 h

LC50 - Lepomis macrochirus (Bluegill) - 6.700 - 7.500 mg/l - 96 h

LC50 - Pimephales promelas (fathead minnow) - 10.400 - 10.800 mg/l - 96 h

LC50 - Oncorhynchus mykiss (rainbow trout) - 9.800 mg/l - 96 h

according to Regulation (EC) No. 1907/2006



# **ROX Protein Labeling Kit**

Fluorescent labeling of primary amino groups

LC50 - Lepomis macrochirus (Bluegill) - 6.300 mg/l - 96 h

LC50 - Pimephales promelas (fathead minnow) - 10.600 mg/l - 96 h

Toxicity to daphnia and other EC50 - Daphnia magna (Water flea) - 9.600 - 13.100 mg/l - 48 h

aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 15.700 mg/l - 48 h

Toxicity to algae LC50 - Desmodesmus subspicatus (green algae) - > 500 mg/l - 96 h

#### Elimination information (persistence and degradability)

Biodegradability Result: > 90 % - Readily biodegradable

#### Further information on ecology

none

## 13. DISPOSAL CONSIDERATIONS

#### Product

Observe all federal, state, and local environmental regulations.

## Contaminated packaging

Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

## UN number/ Proper shipping name

ADR/RID: UN 2265 N,N-Dimethylformamid
IMDG: UN 2265 N,N-Dimethylformamide
IATA: UN 2265 N,N-Dimethylformamide

## Transport hazard class(es)

ADR/RID: 3
IMDG: 3
IATA: 3

## **Packaging group**

ADR/RID: III
IMDG: III
IATA: III

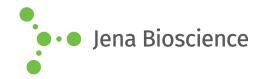
## **Environmental hazards**

ADR/RID: no IMDG: no IATA: no

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

according to Regulation (EC) No. 1907/2006



# **ROX Protein Labeling Kit**

Fluorescent labeling of primary amino groups

#### 16. OTHER INFORMATION

#### **Further information**

© 2017 Jena Bioscience GmbH

This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Users should make independent decisions regarding completeness of the information based on all sources available.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

Jena Bioscience GmbH shall not be held liable for any damage resulting from handling or from contact with the above product. See our website for our terms and conditions of sales.