

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 04/03/2006

Reviewed on 04/03/2006

1 Identification of substance

Trade name: Loading Dye

Article number: E343

Application of the substance / the preparation Laboratory chemicals

Manufacturer/Supplier:

Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Emergency information:

CHEMTREC 1-800-424-9300

for call originating outside the United States dial 001-703-527-3887

2 Composition/Data on components

Chemical characterization

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

| | |
|-------------------|---------|
| 75-12-7 formamide | 75-100% |
|-------------------|---------|

Additional information: For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

Hazard description:



T Toxic

Information pertaining to particular dangers for man and environment:

May cause harm to the unborn child.

Classification system:

The classification was made according to the latest editions of international substances lists, and is expanded upon by company and technical literature data.

NFPA ratings (scale 0 - 4)

Health = 2

Fire = 1

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 2

Fire = 1

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200):

Toxic

(Contd. on page 2)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 04/03/2006

Reviewed on 04/03/2006

Trade name: Loading Dye

(Contd. of page 1)

Reproductive Hazard

Primary route(s) of entry: Oral

Target Organ(s):

May affect Nervous system (Neurotoxin)

May affect Reproductive System (Mutagen, Teratogen)

Affects Blood (Hematopoietic system)

Risk of damage to eyes

Additional information:

Product contains a toxic substance in greater than 1% and may exhibit toxicological properties similar to the pure substance.

4 First aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

5 Fire fighting measures

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

6 Accidental release measures

Person-related safety precautions: Not required.

Measures for environmental protection:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

7 Handling and storage

Handling:

Information for safe handling: *Keep receptacles tightly sealed.*

Information about protection against explosions and fires: *No special measures required.*

Storage:

Requirements to be met by storerooms and receptacles: *No special requirements.*

Information about storage in one common storage facility: *Not required.*

Further information about storage conditions: *None.*

USA

(Contd. on page 3)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 04/03/2006

Reviewed on 04/03/2006

Trade name: Loading Dye

(Contd. of page 2)

8 Exposure controls and personal protection

Components with limit values that require monitoring at the workplace:

75-12-7 formamide

| | |
|-----|---------------------------------------|
| REL | 15 mg/m ³ , 10 ppm Skin |
| TLV | 18 mg/m ³ , 10 ppm Skin |

Additional information: The lists that were valid during the creation were used as basis.

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Pregnant women should strictly avoid inhalation or skin contact.

Breathing equipment: Not required.

Protection of hands:

Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

General Information

| | |
|---------------|----------------|
| Form: | Fluid |
| Color: | Colorless |
| Odor: | Characteristic |

Change in condition

Melting point/Melting range: 2.5°C (37°F)

Boiling point/Boiling range: 210°C (410°F)

Flash point: > 100°C (> 212°F)

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Vapor pressure at 20°C (68°F): 0.03 hPa (0 mm Hg)

Density at 20°C (68°F): 1.1339 g/cm³

Solubility in / Miscibility with

Water: Fully miscible.

Solvent content:

Organic solvents: 98.0 %

Water: 1.5 %

VOC content: 98.0 %

Solids content: 0.5 %

USA

(Contd. on page 4)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 04/03/2006

Reviewed on 04/03/2006

Trade name: Loading Dye

(Contd. of page 3)

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions

Reacts with strong acids and alkali.

Reacts with strong oxidizing agents.

Dangerous products of decomposition:

Nitrogen oxides

Ammonia

Carbon monoxide and carbon dioxide

11 Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification:

75-12-7 formamide

| | | |
|--------------------|-------|---------------------------|
| Oral | LD50 | 5570 mg/kg (Rat) |
| Irritation of eyes | acute | 100 mg (Rabbit) Severe |

Primary irritant effect:

on the skin: No irritant effect.

on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

12 Ecological information

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

Product:

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

Contact Promega Safety Department for additional transportation information

DOT regulations:

Hazard class: -

Land transport ADR/RID (cross-border):

ADR/RID class: -

(Contd. on page 5)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 04/03/2006

Reviewed on 04/03/2006

Trade name: **Loading Dye**

(Contd. of page 4)

Maritime transport IMDG:**IMDG Class:** -**Marine pollutant:** No**Air transport ICAO-TI and IATA-DGR:****ICAO/IATA Class:** -

15 Regulations

Sara**Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65**Chemicals known to cause cancer:**

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Carcinogenity categories**EPA (Environmental Protection Agency)**

None of the ingredients are listed.

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

NTP (National Toxicology Program)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

MAK (German Maximum Workplace Concentration)

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

Hazard symbols:

T Toxic

(Contd. on page 6)

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 04/03/2006

Reviewed on 04/03/2006

Trade name: Loading Dye

(Contd. of page 5)

Hazard-determining components of labelling:
formamide

Risk phrases:
May cause harm to the unborn child.

Safety phrases:
*In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
This material and its container must be disposed of in a safe way.
Wear suitable protective clothing, gloves and eye/face protection.
If swallowed, seek medical advice immediately and show this container or label.*

National regulations:

Water hazard class: *Water hazard class 1 (Self-assessment): slightly hazardous for water.*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS:
*Promega Corporation
Environmental Health and Safety Department
2800 Woods Hollow Road
Madison, WI
Ph: (608)274-4330*

*** Data compared to the previous version altered.**

USA