

# **MSDS**

**Material Safety Data Sheet** 

Version No.: 1.0(Rev.date 2012-09-10)

# **Formamide**

# 1. Product and Company Information

Product Name: Formamide

Recommended Use: For Research Use Only

Supply Information

Company: Bioneer

O Address: 8-11 Munpyeongseo-ro, Daedeok-gu, Daejeon 34302, Republic of korea

○ Emergency telephone number: 82-42-930-8777

# 2. Hazards Identification

GHS-Classification

Classification of the hazardous chemical

Serious eye damage/eye irritation: Category 2

Productive toxicity: Category 1B

Label elements, including precautionary statements

Pictogram



Signal word Dangerous

Hazard statements

H318 Causes serious eye damage. H331 Toxic if inhaled.

H360 May damage fertility or the urborn child.

Precautionary statements

P201 Obtain special instruction before use.

P261 Do not breathe dust/fume/gas/mist/spray.

P271 Use only outdoors or in a well-ventilated area.

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

BQ-042-101-06

Revision: 0(2012-11-29)



# 3. Compositon/Information on ingredients

Chemical name	Synonyms	CAS No.	Weight(%)
Formamide		75-12-7	90~100%

# 4. Compositon/Information on ingredients

- . Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes.
- . Skin Contact: Rinse thoroughly with plenty of water for at least 15 minutes.
- . Inhalation: Move to fresh air. If breathing is difficult, give oxygen.
- . Ingestion: Rinse around the mouth with water.
- . The most important acute and delayed symptoms/effects: Not information available
- . Notes to Physician: Not information available

# 5. Fire-fighting measures

- . Suitable Extinguishing Media: Water-spray, Dry chemical, CO2.
- . Flammable Properties : Carbon oxides, Nitrogen oxides
- . Protective Equipment and Precautions for Firefighters : As in any fire, wear self-  $\!\!\!$

contained breathing apparatus pressure-demand and full protective gear.

#### 6. Accidental release measures

- . Personal Precautions: Wear respirator, safety goggles, boots, thick gloves.
- . Environmental precautions: Absorb the sand or vermiculite. Store in a sealed container for disposal. Prevent entering from waterway, drain, basement, close space.
- . Methods for cleaning up: Absorb the spillage with inert material (dry sand or soil) and Store the designated waste container. Wash contaminated area with detergent and water.

# 7. Handling and Storage

- . Handling: Store in a cool and well-ventilated area.
- . Storage: Store at refrigerate.

# 8. Exposure control/personal protection

. Chemical exposure limits, biological exposure limits etc:

Domestic regulations TWA: 10 ppm 15 mg/m³

ACGIH regulations TWA 10 ppm

Biological exposure limits No information available

- . Engineering Measures : Use local exhuast ventilation system.
- . Personal Protective Equipment

Respiratory Protection: Wear respiratory mask approved by KOSHA(Korea Occupation Safety

Health Agency).

BQ-042-101-06

Revision: 0(2012-11-29)





Eye/Face Protection: Wear Chemical Safety protective goggle or glasses approved by

KOSHA(Korea Occupation Safety Health Agency).

Skin Protection: Wear Chemical Safety gloves approved by KOSHA(Korea Occupation Safety Health

Agency).

Body Protection: Wear protective clothes approved by KOSHA(Korea Occupation Safety Health

Agency).

# 9. Physical and chemical properties

. Apperance: Liquid, transparentness

. Odor: No data available

. Odor threshold: No information available

. pH: No information available

. Melting point/Freezing point: No information available

. Initial boiling point/range: No information available

. Flash point: No information available

. Evaporation rate: No information available

. Flammability (Solid, Liquid): No information available

. Flammability Limits upper/lower: No information available

. Vapor pressure: No information available

. Solubility: No information available

. Vapor density: No information available

. Viscosity: No information available

. n octanol/water : No information available

. Autoigntion temperature: No information available

. Decomposition temperature : No information available

. Specific gravity: No information available

. Molecular weight: No information available

#### 10. Stability and Reactivility

. Stability: Stable under recommended storage conditions.

. Possibility of harmful response: No information available

. Conditions to avoid (electric discharge, impact, vibration etc): Heat, spark, flame

. Material to avoid: Combustible materials

. Hazardous Decomposition Products: Carbon oxides, Nitrogen oxides

# 11. Toxicological information

BQ-042-101-06

Revision: 0(2012-11-29)





. Principle routes of exposure

Respiratory: No information available

Dermal: No information available Eye/Skin: No information available

. Health effects

Acute toxicity:

Oral LD50 5577 mg/kg Rat

Dermal LD50 6000 mg/kg Rabbit

Inhalation LC50 3900 ppm 6 hr Rat (6hr)

Skin corrosive or irritant: Report transient mild skin irritation in experiments with guinea pigs.

Serious eye damage or irritant : Report transient mild skin irritation in experiments in the eyes of

rabbit guinea pigs.

Respiratory irritability : No data available

Skin irritability: No data available

Carcinogenicity: No data available

Germ cell mutagenicity: in vivo mouse erythrocyte micronucleus test - negative

Reproductive toxicity: No data available

Specific target organ toxicity (single exposure): No data available Specific target organ toxicity (repeated exposure): No data available

Aspiration Hazard: No data available

. Numerical measures of toxicity(Acute toxicity estimates etc) : No data available

# 12. Ecological Information

. Ecotoxicity effects

Fish  $LC50 > 100 \text{ mg}/\ell 96 \text{ hr}$ 

Shellfish No data available
Birds No data available

. Residual and degradability: No data available

. Bioaccumulation: No data available

. Mobility: No data available

. Other harmful effects: No data available

# 13. Disposable considerations

- . Waste disposal method: Dispose of material in accordance with formally disposal company.
- . Contaminated packaging: Dispose contents and vessel in accordance with regulation by the waste disposal law.

#### 14. Transport Information

BQ-042-101-06

Revision: 0(2012-11-29)





. UN Number: No data available

. UN Proper Shipping Name: No data available

. Transport hazard class: No data available

. Packing group: No data available

. Marine pollutant : No data available

. The special vehicle Safety measures: No data available

# 15. Regulatory information

- . Regulation by Industrial safety and health act: Exposure limits set material
- . Regulation by toxic chemicals control act : No data available
- . Regulation by Safety control of dangerous substance act: The third class petroleum
- . Regulation by the waste control act: Not information available
- . Regulation by other domestic and foreign regulatory: Not information available

#### 16. Other information

Bioneer Corporation makes no warranty or representation to its completeness, accuracy or currency. This material is intended for use by persons with pertinent technical skills and at their discretion and risk. It is the responsibility of the user to determine the product's suitability for its intended use, the product's safe use, and the product's proper disposal. Disposal of hazardous material may be subject to federal, state or local lawsor regulations.

BQ-042-101-06 Revision: 0(2012-11-29)