

Revision date 06-May-2023

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and Regulation (EC) No. 1272/2008

Version 9

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

| 1.1. Product identifier | |
|---|---|
| Product No | M0240 |
| Product name | Fpg |
| Pure substance/mixture | Mixture |
| 1.2. Relevant identified uses of the | substance or mixture and uses advised against |
| Recommended use | This product is for research and development only |
| Uses advised against | No information available |
| 1.3. Details of the supplier of the sa | fety data sheet |
| Supplier Address New England BioLabs 240 County Road Ipswich, MA 01938 USA For further information, please contact | <u>t</u> |
| Company Phone Number | 978-927-5054, 800-632-5227 (toll free) |
| Telefax | 978-921-1350 |
| E-mail address | info@neb.com |
| 1.4. Emergency telephone number | - |
| 24 Hour Emergency Phone Number | Chemtrec +44 20 3885 0382 |
| Europe | +1 978-380-2125 |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008 This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP] 2.2. Label elements This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP] Hazard statements This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP] EUH210 - Safety data sheet available on request Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment. 2.3. Other hazards No information available.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

The product contains no substances which at their given concentration, are considered to be hazardous to health

| Chemical | Weight-% | REACH registration | EC No (EU Index | Classification according to | Specific | M-Facto | M-Factor |
|---------------------------------|----------|--------------------|-----------------|-----------------------------|---------------|---------|-----------|
| name | | number | No) | Regulation (EC) No. | concentratio | r | (long-ter |
| | | | | 1272/2008 [CLP] | n limit (SCL) | | m) |
| Sodium Chloride 7647-14-5 | 0.1 - 1 | No data available | 231-598-3 | No data available | - | - | - |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate No information available

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 | Inhalation LC50 - 4 | Inhalation LC50 - 4 |
|------------------------------|-----------------|-------------------|---------------------|---------------------|---------------------|
| | | | hour - dust/mist - | hour - vapor - mg/L | hour - gas - ppm |
| | | | mg/L | | |
| Sodium Chloride 7647-14-5 | 3000 | 10000 | No data available | No data available | No data available |

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove to fresh air.

| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
|---|--|
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician. |
| Ingestion | Rinse mouth. |
| <u>4.2. Most important symptoms and</u> Symptoms | effects, both acute and delayed No information available. |
| Effects of Exposure | No information available. |

4.3. Indication of any immediate medical attention and special treatment neededNote to physiciansTreat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. | | |
|--|---|--|--|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. | | |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. | | |
| 5.2. Special hazards arising from the substance or mixture | | | |
| Specific hazards arising from the chemical | No information available. | | |
| 5.3. Advice for firefighters | | | |

Special protective equipment and
precautions for fire-fightersFirefighters should wear self-contained breathing apparatus and full firefighting turnout gear.
Use personal protection equipment.

SECTION 6: Accidental release measures

| Personal precautions | Ensure adequate ventilation. | | | |
|---|---|--|--|--|
| For emergency responders | Use personal protection recommended in Section 8. | | | |
| 6.2. Environmental precautions | | | | |
| Environmental precautions | See Section 12 for additional Ecological Information. | | | |
| 6.3. Methods and material for containment and cleaning up | | | | |
| Methods for containment | Prevent further leakage or spillage if safe to do so. | | | |
| Methods for cleaning up | Take up mechanically, placing in appropriate containers for disposal. | | | |
| | | | | |

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handlingEnsure adequate ventilation.General hygiene considerationsHandle in accordance with good industrial hygiene and safety practice.7.2. Conditions for safe storage, including any incompatibilitiesEnsure adequate ventilation.Storage ConditionsKeep container tightly closed in a dry and well-ventilated place.Storage class (TRGS 510)Storage class 10.7.3. Specific end use(s)Ensure adequate ventilation.

Risk management methods [RMM] The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical name | Ireland | Italy MDLPS | Italy AIDII | Latvia | Lithuania |
|-----------------|---------|-------------|-------------|--------------------------|--------------------------|
| Sodium Chloride | - | - | - | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ |
| 7647-14-5 | | | | | - |

Biological occupational exposure This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

| Chemical name | Oral | Dermal | Inhalation |
|----------------------------------|------|-----------------------------|-----------------------------------|
| Glycerol | - | - | 56 mg/m³ [5] [6] |
| 56-81-5 | | | |
| Tris-HCI | - | 216.6 mg/kg bw/day [4] [6] | 152.8 mg/m³ [4] [6] |
| 1185-53-1 | | | |
| Sodium Chloride | - | 295.52 mg/kg bw/day [4] [6] | 2068.62 mg/m ³ [4] [6] |
| 7647-14-5 | | 295.52 mg/kg bw/day [4] [7] | 2068.62 mg/m ³ [4] [7] |
| Ethylenediamine tetraacetic acid | - | - | 1.5 mg/m³ [5] [6] |
| 60-00-4 | | | 3 mg/m ³ [5] [7] |

Notes

| [4] | Systemic health effects. |
|------|--------------------------|
| [5] | Local health effects. |
| [6] | Long term. |
| [7] | Short term. |
| L. 1 | |

Derived No Effect Level (DNEL) - General Public

| Chemical name | Oral | Dermal | Inhalation |
|----------------------------------|-----------------------------|-----------------------------|----------------------------------|
| Glycerol | 229 mg/kg bw/day [4] [6] | - | 33 mg/m³ [5] [6] |
| 56-81-5 Tris-HCI | 10.8 mg/kg bw/day [4] [6] | | 37.7 mg/m ³ [4] [6] |
| 1185-53-1 | | _ | 57.7 mg/m² [+] [0] |
| Sodium Chloride | 126.65 mg/kg bw/day [4] [6] | 126.65 mg/kg bw/day [4] [6] | 443.28 mg/m ³ [4] [6] |
| 7647-14-5 | 126.65 mg/kg bw/day [4] [7] | 126.65 mg/kg bw/day [4] [7] | 443.28 mg/m ³ [4] [7] |
| Ethylenediamine tetraacetic acid | 25 mg/kg bw/day [4] [6] | - | 0.6 mg/m ³ [5] [6] |
| 60-00-4 | | | 1.2 mg/m ³ [5] [7] |

Notes

| [4] | Systemic health effects. |
|-----|--------------------------|
| [5] | Local health effects. |
| [6] | Long term. |
| [7] | Short term. |

Predicted No Effect Concentration (PNEC)

| Chemical name | Freshwater | Freshwater (intermittent release) | Marine water | Marine water (intermittent release) | Air |
|--|------------|--------------------------------------|--------------|--|-----|
| Glycerol 56-81-5 | 0.885 mg/L | 8.85 mg/L | 0.0885 mg/L | - | - |
| Sodium Chloride 7647-14-5 | 5 mg/L | - | - | - | - |
| Ethylenediamine tetraacetic acid 60-00-4 | 2.2 mg/L | 1.2 mg/L | 0.22 mg/L | - | - |

| Chemical name | Freshwater sediment | Marine sediment | Sewage treatment | Soil | Food chain |
|--|--------------------------|---------------------------|------------------|---------------------|------------|
| Glycerol 56-81-5 | 3.3 mg/kg sediment dw | 0.33 mg/kg sediment dw | 1000 mg/L | 0.141 mg/kg soil dw | - |
| Sodium Chloride 7647-14-5 | - | - | 500 mg/L | 4.86 mg/kg soil dw | - |
| Ethylenediamine tetraacetic acid 60-00-4 | - | - | 43 mg/L | 0.72 mg/kg soil dw | - |

8.2. Exposure controls

| Engineering controls | No information available. |
|--|---|
| Individual protection measures, such as personal protective equipment Eye/face protection | No special protective equipment required. |
| Skin and body protection | No special protective equipment required. |

| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
|---------------------------------|--|
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |
| Environmental exposure controls | No information available. |

SECTION 9: Physical and chemical properties

| 9.1. Information on basic physical a | nd chemical properties | |
|--|--------------------------|------------------|
| Physical state | Liquid | |
| Appearance | Colorless | |
| Color | No information available | |
| Odor | Mild. | |
| Odor threshold | No information available | |
| Property_ | Values | Remarks • Method |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling rang | eNo data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive | No data available | |
| limits | | |
| Lower flammability or explosive | No data available | |
| limits | | |
| Flash point | No data available | None known |
| Autoignition temperature | 392.78 °C | |
| Decomposition temperature | | None known |
| рН | No data available | None known |
| pH (as aqueous solution) | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Vapor pressure | No data available | None known |
| Relative density | No data available | None known |
| Bulk density | No data available | |
| Liquid Density | No data available | |
| Vapor density | No data available | None known |
| Particle characteristics | | |
| Particle Size | No information available | |
| Particle Size Distribution | No information available | |
| | | |

9.2. Other information

9.2.1. Information with regard to physical hazard classes Not applicable

9.2.2. Other safety characteristics No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

| Reactivity | No information available. |
|--|---|
| 10.2. Chemical stability | |
| Stability | Stable under normal conditions. |
| Explosion data Sensitivity to mechanical impac Sensitivity to static discharge | t None. None. |
| 10.3. Possibility of hazardous react | ions |
| Possibility of hazardous reactions | None under normal processing. |
| 10.4. Conditions to avoid | |
| Conditions to avoid | None known based on information supplied. |
| 10.5. Incompatible materials | |
| Incompatible materials | None known based on information supplied. |
| 10.6. Hazardous decomposition pro | oducts |

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

| Product | Information | |
|---------|-------------|--|
| | | |

| Inhalation | Specific test data for the substance or mixture is not available. |
|--------------|---|
| Eye contact | Specific test data for the substance or mixture is not available. |
| Skin contact | Specific test data for the substance or mixture is not available. |
| Ingestion | Specific test data for the substance or mixture is not available. |
| | |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

| ATEmix (oral) | 25,200.00 | mg/kg |
|-------------------------------|-----------|-------|
| ATEmix (dermal) | 20,000.00 | mg/kg |
| ATEmix (inhalation-gas) | 99,999.00 | ppm |
| ATEmix (inhalation-vapor) | 99,999.00 | mg/l |
| ATEmix (inhalation-dust/mist) | 99,999.00 | mg/l |

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------|----------------|------------------------|--------------------|
| Sodium Chloride | = 3 g/kg (Rat) | > 10000 mg/kg (Rabbit) | > 42 mg/L (Rat)1 h |

| Delayed and immediate effects as well as chronic effects from short and long-term exposure | | | | | |
|--|---------------------------|--|--|--|--|
| Skin corrosion/irritation | No information available. | | | | |
| Serious eye damage/eye irritation | No information available. | | | | |
| Respiratory or skin sensitization | No information available. | | | | |
| Germ cell mutagenicity | No information available. | | | | |
| Carcinogenicity | No information available. | | | | |
| Reproductive toxicity | No information available. | | | | |
| STOT - single exposure | No information available. | | | | |
| STOT - repeated exposure | No information available. | | | | |
| Aspiration hazard | No information available. | | | | |
| 11.2. Information on other hazards | <u>i</u> | | | | |
| 11.2.1. Endocrine disrupting prope | erties | | | | |
| Endocrine disrupting properties | No information available. | | | | |
| 11.2.2. Other information | | | | | |
| Other adverse effects | No information available. | | | | |
| SECTION 12: Ecological in | formation | | | | |

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|-----------------|----------------------|---|-------------------------------|--|
| Sodium Chloride | - | LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L | - | EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) |

| (96h, Pimephales | |
|-----------------------|--|
| promelas) | |
| LC50: =7050mg/L (96h, | |
| Pimephales promelas) | |
| LC50: 6420 - 6700mg/L | |
| (96h, Pimephales | |
| promelas) | |
| LC50: 4747 - 7824mg/L | |
| (96h, Oncorhynchus | |
| mykiss) | |

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

No information available.

| Chemical name | PBT and vPvB assessment | |
|-----------------|---------------------------------|--|
| Sodium Chloride | The substance is not PBT / vPvB | |

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
|--|---|
| Contaminated packaging | Do not reuse empty containers. |

SECTION 14: Transport information

| 14.1 UN number or ID number | Not regulated |
|---------------------------------|---------------|
| 14.2 Extended Proper Shipping | Not regulated |
| Name | |
| 14.3 Transport hazard class(es) | Not regulated |

| 14.4 Packing group14.5 Environmental hazard14.6 Special precautions for user | Not regulated Not applicable | |
|--|---------------------------------|--|
| Special Provisions | None | |
| IMDG | | |
| 14.1 UN number or ID number | Not regulated | |
| 14.2 Extended Proper Shipping | Not regulated | |
| | Not required | |
| 14.3 Transport hazard class(es) 14.4 Packing group | Not regulated Not regulated | |
| 14.4 Facking group 14.5 Environmental hazard | Not applicable | |
| 14.6 Special precautions for user | Not applicable | |
| Special Provisions | None | |
| 14.7 Maritime transport in bulk | No information available | |
| according to IMO instruments | | |
| | | |
| RID | N I I I I | |
| 14.1 UN/ID No | Not regulated | |
| 14.2 Extended Proper Shipping Name | Not regulated | |
| 14.3 Transport hazard class(es) | Not regulated | |
| 14.4 Packing group | Not regulated | |
| 14.5 Environmental hazard | Not applicable | |
| 14.6 Special precautions for user | | |
| Special Provisions | None | |
| | | |
| ADR | •••• | |
| 14.1 UN number or ID number | Not regulated | |
| 14.2 UN proper shipping name | Not regulated | |
| 14.3 Transport hazard class(es) 14.4 Packing group | Not regulated Not regulated | |
| 14.4 Facking group 14.5 Environmental hazard | Not applicable | |
| 14.6 Special precautions for user | | |
| Special Provisions | None | |
| | | |

SECTION 15: Regulatory information

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

| Chemical name | French RG number |
|-----------------------------|------------------|
| Sodium Chloride - 7647-14-5 | RG 78 |

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

| Chemical name | EU - Plant Protection Products (1107/2009/EC) | |
|-----------------------------|---|--|
| Sodium Chloride - 7647-14-5 | Plant protection agent | |

| Chemical name | Biocidal Products Regulation (EU) No 528/2012 (BPR) | |
|-----------------------------|---|--|
| Sodium Chloride - 7647-14-5 | Product-type 1: Human hygiene | |

International Inventories

| TSCA | Contact supplier for inventory compliance status |
|---------------|--|
| DSL/NDSL | Contact supplier for inventory compliance status |
| EINECS/ELINCS | Contact supplier for inventory compliance status |
| ENCS | Contact supplier for inventory compliance status |
| IECSC | Contact supplier for inventory compliance status |
| KECL | Contact supplier for inventory compliance status |
| PICCS | Contact supplier for inventory compliance status |
| AIIC | Contact supplier for inventory compliance status |
| NZIOC | Contact supplier for inventory compliance status |

Legend:

| TSCA - United States Toxic Substances Control Act Section 8(b) Inventory | |
|---|--|
| DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List | |
| | |

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

- **ENCS** Japan Existing and New Chemical Substances
- **IECSC** China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

| Chemical Safety Report | No information available |
|------------------------|--------------------------|
|------------------------|--------------------------|

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization:

| Legend Sectior TWA Ceiling + | 8: EXPOSURE CONTROLS/PERSONAL PF TWA (time-weighted average) Maximum limit value Sensitizers | ROTECTION STEL * | STEL (Short Term Exposure Limit) Skin designation |
|---|--|---|--|
| Agency for Toxic U.S. Environment European Food S European Chemid European Chemid EPA (Environment Acute Exposure C U.S. Environment U.S. Environment Food Research J Hazardous Subst International Unife National Institute Australia National NIOSH (National National Library C | | ssment (ECHA_RAC gicide, and Rodentic Chemicals | ide Act |

New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

| Prepared by | Environmental, Health and Safety |
|---------------|--|
| Revision note | SDS is valid 3 years from revision date. Contact info@neb.com for latest revision. |
| Revision date | 06-May-2023 |

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of publication. This information is intended only as a guide for safe handling, use, processing, storage, transportation, disposal and release and should not be taken as a warranty or quality specification. The information relates only to the specific material and may not be valid for such material used in combination with any other materials or in any process unless expressly specified in the text. New England Biolabs will not be liable for any damages resulting from handling or contact with the product.

End of Safety Data Sheet