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

1.1. Product identifier
Product name: Mouse Factor XII genetically deficient plasma, sodium citrate
Catalog number: MFXII-KO-SC

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory chemicals, for research use only
Uses advised against: Not for clinical or diagnostic use

1.3. Details of the supplier of the safety data sheet
Molecular Innovations, Inc.
46430 Peary Court, Novi, MI 48377, USA
Tel: 248-896-0142
Fax: 248-896-0148

1.4. Emergency telephone number
Emergency number: 248-896-0142

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Not a hazardous substance or mixture.

2.2. GHS label elements, including precautionary statements
Not a hazardous substance or mixture. No labeling applicable.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
No ingredients are hazardous according to OSHA criteria.
No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1. Description of 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.

4.2. Most important symptoms and effects, both acute and delayed
None known.
4.3. Indication of any immediate medical attention and special treatment needed
In all cases of doubt, or when symptoms persist, seek medical attention.

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture
Carbon oxides.

5.3. Advice for firefighters
Use normal individual fire protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
Avoid all unnecessary exposure. Avoid breathing vapors, mist or gas. For personal protection see section 8.

6.2. Environmental precautions
No additional information available.

6.3. Methods and material for containment and cleaning up
Take up liquid spill into inert absorbent material. Clean thoroughly.

6.4. Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
Components with workplace control parameters
Contains no substances with occupational exposure limit values.

8.2. Exposure controls
Appropriate engineering controls
General industrial hygiene practice.

Personal protective equipment
Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Do not let product enter drains.

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties
Physical state: Frozen liquid
Color: No data available
Odor: No data available
Odor threshold: No data available
pH: No data available
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Evaporation rate: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapor pressure: No data available
Relative vapor density: No data available
Relative density: No data available
Solubility: Water soluble
Viscosity: No data available
Explosive properties: No data available
Oxidizing properties: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity
10.1. Reactivity
Stable under recommended storage conditions.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
No data available.

10.5. Incompatible materials
Strong oxidizing agents.
10.6. Hazardous decomposition products
No data available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
No data available.

Skin corrosion/irritation
No data available.

Serious eye damage/eye irritation
No data available.

Respiratory or skin sensitization
No data available.

Germ cell mutagenicity
No data available.

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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.

Additional information
To the best of our knowledge the product does not present any particular risk under normal conditions of use. The chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1. Toxicity
Presents no specific risk for the environment in small amounts.
12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects
No data available.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information
Not dangerous goods in accordance with DOT (US) / ADR / RID / ADNR / IMDG / ICAO / IATA
14.1 UN number
Not regulated.

14.2 UN proper shipping name
Not regulated.

14.3 Transport hazard class(es)
Not regulated.

14.4 Packaging group
Not regulated.

14.5 Environmental hazards
No data available.

14.6 Special precautions for user
No data available.

14.7 Transport in bulk according to Annex II of Marpol73/78 and the IBC Code
No data available.
SECTION 15: Regulatory information

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

United States Restrictions
SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards: No SARA Hazards.
Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components: No components are subject to the Pennsylvania Right to Know Act.
New Jersey Right To Know Components: No components are subject to the New Jersey Right to Know Act.
California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

European Union Restrictions

15.2. Chemical safety assessment
Chemical safety assessment has not been carried out.

SECTION 16: Other information

Hazardous Material Information System (HMIS) Rating
Health Hazard: 0
Chronic Health Hazard: 0
Flammability: 0
Physical Hazard: 0

National Fire Protection Association (NFPA) Rating
Health Hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0

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