SAFETY DATA SHEET

Revision Date: 5th January 2017

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identification

Product Name: anti human Frataxin; purified mouse monoclonal IgG

Product Number: T-1431

CAS-number: N/A; mixture

1.2 Company Identification

BMA Biomedicals
Division of Chemoforma AG
Rheinstrasse 28-32
CH – 4302 Augst
Switzerland

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1.3 Recommended use and Restrictions on use

Laboratory reagent, Research Use Only

2. HAZARD(S) IDENTIFICATION

2.1 Classification of the mixture

GHS-US Classification in accordance with 29 CFR 1910 (OSHA HCS): Not dangerous

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture. Not dangerous.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture:

Principal Components	Concentration	CAS No	GHS-US CLASSIFICATION
Sodium Phosphate dibasic anhydrous	2.3% upon reconstitution to 0.5ml	7558-79-4	Eye irritant 2B H320
Sodium Phosphate monobasic monohydrate	0.52% upon reconstitution to 0.5ml	10049-21-5	
Magnesium nitrate	0.01% upon reconstitution to 0.5ml.	10377-60-3	Ox. Sol. 3; H272
Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1)	0.05% upon reconstitution to 0.5ml.	55965-84-9	Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Resp. Sens. 1; Aquatic Acute1; Aquatic Chronic 1; H301 + H311 + H331, H314, H334, H410

4. FIRST-AID MEASURES

4.1 Description of First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion: Rinse mouth with water. Consult a physician.
In case of skin contact: Immediately remove all contaminated clothing, wash with soap and plenty of water.
In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes; remove contact lenses.

4.2 Important Symptoms/Effects, acute and delayed
See section 2.2.

4.3 Required treatment
Note to physician: treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing agents
Suitable extinguishing agents: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing agents: Do not use a heavy water stream.

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

5.3 Advice for firefighters
Protective equipment: Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions:
Try to prevent the material from entering drains or water courses, prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleanup:
Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Blot spills with inert solids, such as sand, clay, diatomaceous earth, acid binders, universal binders, or sawdust as soon as possible. Collect spillage and absorbent material and place in closed container for proper disposal. Wash spill site thoroughly and discard contaminated cleanup items in container for proper disposal.

6.4 Disposal:
Dispose in accordance with local regulation.

6.5 References to other sections:
See Section 8 Exposure Controls and personal protection.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling and hygiene
Avoid contact with skin and eyes, and the formation of dust and aerosols. Provide appropriate exhaust ventilation in work area to prevent vapor buildup. Do not breathe dust, mist, vapors, spray. Wash hands and other exposed skin with mild soap and water before eating, drinking, or smoking and when leaving work. Wash contaminated clothing before reusing. See precautions section 2.2.

7.2 Conditions for safe storage, and incompatibilities
Comply with applicable regulations. Keep container closed when not in use, in a dry and well-ventilated place

7.3 Specific end use(s)
Apart from uses listed in Section 1.3, no other specific uses are stipulated.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control Parameters

Components with workplace control parameters:

Kathon CG: Contains no substances with occupational exposure limit values.

8.2 Exposure Controls

Appropriate engineering controls: Showers, eyewash satations, ventilation systems.

Personal protective equipment: Avoid all unnecessary exposure by using the following equipment:

Eye protection: Tightly fitting safety goggles.

Skin and body protection: No special protective equipment required other than standard laboratory clothing such as a laboratory coat.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Other information: Do not eat, drink, or smoke during use.

Control of environmental exposure : Prevent further leakage and spillage if safe to do so. Do not let product enter drains. Discharge into the environment should be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state: Powder
Color: white to off-white
Odor: No data available
Odor threshold: No data available
pH: No data available
Relative evaporation rate: No data available
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Self-ignition temperature: No data available
Decomposition temperature: No data available
Flammability limits in air: No data available
Vapor Pressure: No data available
Relative vapor density at 20C: No data available
Relative density: No data available
Density: No data available
Solubility: Soluble in water
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidizing properties: No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity: No data available

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. Strong acids. Strong bases.

10.6 Hazardous decomposition products: None known based on information supplied.
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Chemical name	LD50 oral	LD50 dermal	LC50 inhalation
Thiazolinone mixture	2'630mg/kg (female rat) 3'350mg/kg (male rat)	n/a	n/a
Sodium phosphate dibasic anhydrous	17g/kg (rat)	n/a	n/a

Skin: Corrosive (Thiazolinone). May cause skin irritation (sodium phosphate dibasic anhydrous).

Serious eye damage/irritation: Eyes – rabbit; result: corrosive to eyes (thiazolinone).

Respiratory or skin sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

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 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 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: RTECS: Not available.

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Information on ecological effects

12.1 Toxicity:

The environmental impact of this product has not been fully investiated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Thiazolinones		n/a		

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: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Thiazolinone is toxic to aquatic life. Put into perspective, the quantity contained in this product is comparably minuscule.

13. DISPOSAL CONSIDERATIONS

13.1 Waste disposal methods: This material, as supplied, is not a hazardous waste according to US federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

13.2 Contaminated packaging: Do not re-use empty containers.

13.3 US EPA Waste Number: n/a

14. TRANSPORT INFORMATION

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

ADR: Not dangerous goods.

15. REGULATORY INFORMATION

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorizatio Act of 1986 (SARA). This product does not contain any chemicals which are subject to th ereporting requirements fo th eAct and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

US State Right-to-know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Isothiazolinone mixture		x			

International Regulations

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H300 + H310 – Fatal if swallowed or in contact with skin
H400 – Very toxic to aquatic life
H410 – Very toxic to aquatic life with long lasting effects

Disclaimer:
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It is the users' responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary. Chemoforma AG or its Division BMA Biomedicals shall not be held liable for any damage resulting from the handling of the above product.