

Material Safety Data Sheet



Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

1. Identification

1. 1. Product: ZediXclusive Microbial Transglutaminase (MTG) ELISA

1. 2. Art.-No.: E021

1. 3. Manufacturer: Zedira GmbH
Rösslerstrasse 83
D-64293 Darmstadt
Germany
Tel.: +49 6151 66628-0
Fax: +49 6151 66628-19
email: contact@zedira.com

1.4. Distributor: Zedira GmbH
Roesslerstrasse 83
64293 Darmstadt
Tel.: +49 6151 66628-0
Fax.: +49 6151 66628-19
email: contact@zedira.com

2. Composition of the product / list of components

2. 1. Wash buffer 10x-concentrate

2. 2. Sample buffer

2. 3. Coated solid phase

2. 4. MTG Standard

2. 5. MTG-Ab-conjugate

2. 6. Substrate

2. 7. Stop solution

2. 8. Streptavidin-HRP conjugate

2. 1. Wash buffer 10x-concentrate

2. 1. 01. Identification

2. 1. 01. 01. Id.-No.: W002, respectively 0501GC11.AED

2. 1. 01. 02. Chemical characterisation: Liquid preparation

2. 1. 01. 03. Amount: 100 mL

2. 1. 01. 04. Description: Solution of nonhazardous substances with hazardous additions listed below

2. 1. 02. Composition / information on hazardous ingredients

2. 1. 02. 01. Bronidox (= 5-Bromo-5-nitro-1,3-dioxan)

2. 1. 02. 01. 1. Concentration: <0,15%

2. 1. 02. 01. 2. CAS-No.: 57-55-6

2. 1. 02. 01. 3. EINECS/ELINCS-No.: 2003380

2. 1. 02. 01. 4. Hazard symbol: C (corrosive)

2. 1. 02. 01. 5. R-phrases

2. 1. 02. 01. 5. 1. R34: Causes burns

2. 1. 02. 01. 6. S-phrases

2. 1. 02. 01. 6. 1. S26: In case of eye contact immediately rinse opened eye thoroughly with water; seek medical advice.

2. 1. 02. 01. 6. 2. S28: In case of skin contact wash immediately with plenty of water; seek medical advice.

2. 1. 02. 02. 1,2-Propylene glycol

2. 1. 02. 02. 1. Concentration: <1,2%

2. 1. 02. 02. 2. CAS-No.: 30007-47-7

2. 1. 02. 02. 3. EINECS/ELINCS-No.: 2500017

2. 1. 03. Hazard description: Bronidox in its concentrated form causes burns.

2. 1. 04. First aid measures

2. 1. 04. 01. General advice: In case of complaints, consult a physician. Show this safety data sheet to the doctor in attendance.

2. 1. 04. 02. After inhalation: Supply fresh air, keep at rest, consult doctor in case of complaints.

2. 1. 04. 03. After skin contact: Wash off with plenty of water. Remove contaminated clothing immediately.

2. 1. 04. 04. After eye contact: Rinse out with plenty of water with the eyelid held open. Remember to remove contact lenses. Seek medical advice.

2. 1. 04. 05. After swallowing: Rinse mouth; then, drink plenty of water. Seek medical advice.

2. 1. 05. Fire fighting measures

2. 1. 05. 01. Suitable extinguishing agents: Adapt to surroundings

2. 1. 05. 02. Protective equipment: When extinguishing fire use self-contained breathing device.

2. 1. 05. 03. Specific hazards: None known (aqueous solution)

2. 1. 06. Accidental release measures

2. 1. 06. 01. Person-related safety precautions: Do not inhale vapours/aerosols. Avoid substance contact. See 2.1.8.

2. 1. 06. 02. Measures for environmental protection: None (see 2.1.12.1.)

2. 1. 06. 03. Measures for cleaning/collecting: Adsorb with liquid-binding material (e.g. sand, sawdust, Chemisorb)

2. 1. 07. Handling and storage

2. 1. 07. 01. Handling: Avoid inhalation of vapours/aerosols. Wear protective gloves and goggles during refilling/diluting.

2. 1. 07. 02. Storage: Cannot be stored indefinitely. Store at 2-23°C in the original, tightly closed container.

2. 1. 08. Exposure controls and personal protection gear

2. 1. 08. 01. Exposure controls

2. 1. 08. 01. 1. Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored.

Product Number **E021**

Revision Number **RN2.0**

Revision Date 02.12.2021

- 2. 1. 08. 02. Personal protective gear
- 2. 1. 08. 02. 1. General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of workday.
- 2. 1. 08. 02. 2. Respiratory protection: Avoid inhalation of vapours/aerosols.
- 2. 1. 08. 02. 3. Protection of hands: Protective gloves during refilling/diluting
- 2. 1. 08. 02. 4. Eye protection: Protective goggles during refilling/diluting
- 2. 1. 09. Physical and chemical properties
- 2. 1. 09. 01. Form: Liquid
- 2. 1. 09. 02. Colour: Blue
- 2. 1. 09. 03. Odour: Specific and intensive
- 2. 1. 09. 04. pH-value (20°C): Near neutral
- 2. 1. 09. 05. Melting point: Not available
- 2. 1. 09. 06. Boiling point: Not available
- 2. 1. 09. 07. Ignition temperature: Not available
- 2. 1. 09. 08. Flash point: Not available
- 2. 1. 09. 09. Explosion limits (lower/upper): Not available
- 2. 1. 09. 10. Relative vapour density: Not available
- 2. 1. 09. 11. Density (20°C): 1,06 g/mL
- 2. 1. 09. 12. Solubility in / miscibility with water (20°C): full y miscible
- 2. 1. 10. Stability and reactivity
- 2. 1. 10. 01. Conditions to be avoided: Heating (>35°C)
- 2. 1. 10. 02. Substances to be avoided: Acids, bases, metals
- 2. 1. 10. 03. Hazardous decomposition products: None if used according to specifications
- 2. 1. 11. Toxicological information
- 2. 1. 11. 01. Acute toxicity
- 2. 1. 11. 01. 1. Primary effect on the skin, mucous membranes and eyes: Irritant (self-assessment)
- 2. 1. 11. 01. 2. After swallowing: LD50 > 160 g/kg
- 2. 1. 11. 02. Subacute to chronic toxicity: No information available
- 2. 1. 12. Ecological information
- 2. 1. 12. 01. Biodegradability: Readily degradable
- 2. 1. 13. Disposal considerations
- 2. 1. 13. 01. Product recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. If not officially specified differently, this product, if unaltered by use, may be disposed of like household waste.
- 2. 1. 13. 02. Uncleaned packaging recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. Handle wetted packaging in the same way as the substance itself (see above).
- 2. 1. 14. Transport information
- 2. 1. 14. 01. Land transport ADR/RID (cross-border): Not dangerous goods
- 2. 1. 14. 02. Maritime transport IMDG: Not dangerous goods
- 2. 1. 14. 03. Air transport ICAO-TI and IATA-DGR: Not dangerous goods
- 2. 1. 15. Regulations
- 2. 1. 15. 01. Labelling according to EU guidelines
- 2. 1. 15. 01. 1. Hazard symbol(s): None
- 2. 1. 15. 01. 2. R-phrases: None
- 2. 1. 15. 01. 3. S-phrases: None
- 2. 1. 15. 01. 4. Hazardous components which must be listed on the label: None
- 2. 1. 16. Other information: See 3.
- 2. 2. Sample buffer
- 2. 2. 01. Identification
- 2. 2. 01. 01. Id.-No.: SBA, respectively 0701GC00.AED
- 2. 2. 01. 02. Chemical characterisation: Liquid preparation
- 2. 2. 01. 03. Amount: 100 mL
- 2. 2. 01. 04. Description: Solution of nonhazardous substances with hazardous additions listed below
- 2. 2. 02. Composition / information on hazardous ingredients
- 2. 2. 02. 01. Sodium azide (NaN₃)
- 2. 2. 02. 01. 1. Concentration: <0,03% (w/v)
- 2. 2. 02. 01. 2. CAS-No.: 26628-22-8
- 2. 2. 02. 01. 3. EC-No.: 247-852-1
- 2. 2. 02. 01. 4. EC-Index-No.: 011-004-00-7
- 2. 2. 02. 01. 5. Hazard symbol(s): T+ (very toxic), N (dangerous for the environment)
- 2. 2. 02. 01. 6. R-phrases
- 2. 2. 02. 01. 6. 1. R28: Very toxic when swallowed
- 2. 2. 02. 01. 6. 2. R32: Contact with acids liberates very toxic gas.
- 2. 2. 02. 01. 6. 3. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 2. 2. 02. 01. 7. S-phrases
- 2. 2. 02. 01. 7. 1. S61: Avoid release to the environment. Refer to special instructions/safety data sheets.
- 2. 2. 02. 02. Bovine serum albumin (BSA)
- 2. 2. 02. 02. 1. Concentration: <1% (w/v)
- 2. 2. 02. 02. 2. CAS-No.: 9048-46-8
- 2. 2. 02. 02. 3. Hazard symbol(s): None
- 2. 2. 02. 02. 4. Supplier: Celliance Inc., Kankakee, IL 60901 (USA)

Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

2. 2. 03. Hazard description
2. 2. 03. 01. Sodium azide: Harmful if swallowed. Exposure can cause nausea, headache, and vomiting. Target organs: nerves, heart, brain. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2. 2. 03. 02. Bovine serum albumin: Pursuant to United States OSHA Regulations 29 CFR Part 1910.1200, this product is not considered hazardous. However, as with all animal derivatives, universal handling precautions are recommended.
2. 2. 04. First aid measures
2. 2. 04. 01. General advice: In case of complaints, consult a physician. Show this safety data sheet to the doctor in attendance.
2. 2. 04. 02. After inhalation: Supply fresh air, keep at rest, consult doctor in case of complaints.
2. 2. 04. 03. After skin contact: Wash off with soap and plenty of water. Remove contaminated clothing immediately.
2. 2. 04. 04. After eye contact: Rinse out with plenty of water with the eyelid held open. Remember to remove contact lenses. Seek medical advice.
2. 2. 04. 05. After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
2. 2. 05. Fire fighting measures
2. 2. 05. 01. Suitable extinguishing agents: Adapt to surroundings
2. 2. 05. 02. Protective equipment: When extinguishing fire use self-contained breathing device.
2. 2. 05. 03. Specific hazards: Contact with acids liberates very toxic gas.
2. 2. 06. Accidental release measures
2. 2. 06. 01. Person-related safety precautions: Do not inhale vapours/aerosols. Avoid substance contact. See 2.2.8.
2. 2. 06. 02. Measures for environmental protection: Do not let product enter drains. Discharge into the environment must be avoided.
2. 2. 06. 03. Measures for cleaning/collecting: Soak with inert absorbent material (e.g. sand, sawdust, Chemisorb) and dispose as hazardous waste. Keep in suitable (non-metal), closed container for disposal.
2. 2. 07. Handling and storage
2. 2. 07. 01. Handling: Avoid inhalation of vapours/aerosols. Wear protective gloves and goggles during refilling.
2. 2. 07. 02. Storage: Cannot be stored indefinitely. Store at 2-8°C in the original, tightly closed container.
2. 2. 08. Exposure controls and personal protection gear
2. 2. 08. 01. Exposure controls
2. 2. 08. 01. 1. Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored.
2. 2. 08. 02. Personal protective gear
2. 2. 08. 02. 1. General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of workday.
2. 2. 08. 02. 2. Respiratory protection: Avoid inhalation of vapours/aerosols.
2. 2. 08. 02. 3. Protection of hands: Protective gloves during refilling
2. 2. 08. 02. 4. Eye protection: Protective goggles during refilling
2. 2. 09. Physical and chemical properties
2. 2. 09. 01. Form: Liquid
2. 2. 09. 02. Colour: Orange
2. 2. 09. 03. Odour: Odourless
2. 2. 09. 04. pH-value (20°C): Near neutral
2. 2. 09. 05. Melting point: Not available
2. 2. 09. 06. Boiling point: Not available
2. 2. 09. 07. Ignition temperature: Not available
2. 2. 09. 08. Flash point: Not available
2. 2. 09. 09. Explosion limits (lower/upper): Not available
2. 2. 09. 10. Relative vapour density: Not available
2. 2. 09. 11. Density (20°C): 1,01 g/mL
2. 2. 09. 12. Solubility in / miscibility with water (20°C): fully miscible
2. 2. 10. Stability and reactivity
2. 2. 10. 01. Conditions to be avoided: Heating (>35°C)
2. 2. 10. 02. Substances to be avoided: Acids, heavy metals
2. 2. 10. 03. Hazardous decomposition products: None if used according to specifications; unknown under fire conditions
2. 2. 11. Toxicological information
2. 2. 11. 01. Acute toxicity: No data available
2. 2. 11. 02. Irritation and corrosion: No data available
2. 2. 11. 03. Sensitisation: No data available
2. 2. 11. 04. Subacute to chronic toxicity: No data available
2. 2. 11. 05. Potential signs and symptoms of exposure: Nausea, headache, vomiting. Inhalation may cause respiratory tract irritation. Skin or eye contact may cause irritation. Ingestion may be harmful.
2. 2. 12. Ecological information
2. 2. 12. 01. Biodegradability / persistence: No data available
2. 2. 12. 02. Further information on ecology: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2. 2. 13. Disposal considerations
2. 2. 13. 01. Product recommendation: Disposal must be in accordance with appropriate local, federal or national legislation.
2. 2. 13. 02. Uncleaned packaging recommendation: Handle wetted packaging in the same way as the substance itself (see above).
2. 2. 14. Transport information
2. 2. 14. 01. Land transport ADR/RID (cross-border): Not dangerous goods
2. 2. 14. 02. Maritime transport IMDG: Not dangerous goods
2. 2. 14. 03. Air transport ICAO-TI and IATA-DGR: Not dangerous goods
2. 2. 15. Regulations
2. 2. 15. 01. Labelling according to EU guidelines
2. 2. 15. 01. 1. Hazard symbol(s): None
2. 2. 15. 01. 2. R-phrases: None

Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

2. 2. 15. 01. 3. S-phrases(s): None
2. 2. 15. 01. 4. Hazardous components which must be listed on the label: None
2. 2. 16. Other information: See 3.
2. 3. Coated solid phase
2. 3. 01. Identification
2. 3. 01. 01. Id.-no.: 0306NC01
2. 3. 01. 02. Chemical characterisation: Not applicable
2. 3. 01. 03. Amount: 1 microwell plate consisting of 96 reaction cavities
2. 3. 01. 04. Description: 8x12 polystyrol reaction wells in a frame, coated with Microbial Transglutaminase Ab
2. 3. 02. Composition / information on hazardous ingredients: The product does not contain any relevant quantities of hazardous substances.
2. 3. 03. Hazard description: Not hazardous
2. 3. 04. First aid measures: Not applicable
2. 3. 05. Fire fighting measures
2. 3. 05. 01. Suitable extinguishing agents: Adapt to surroundings
2. 3. 05. 02. Protective equipment: When extinguishing fire use self-contained breathing device.
2. 3. 06. Accidental release measures: Not applicable
2. 3. 07. Handling and storage
2. 3. 07. 01. Handling: No safety-related measures required
2. 3. 07. 02. Storage: Cannot be stored indefinitely. Store dry and at 2-8°C.
2. 3. 08. Exposure controls and personal protection gear
2. 3. 08. 01. Exposure controls: Not applicable
2. 3. 08. 02. Personal protective gear: No safety-related measures/equipment required
2. 3. 09. Physical and chemical properties: Not applicable
2. 3. 10. Stability and reactivity: Irrelevant with regard to safety
2. 3. 11. Toxicological information: The product is non-toxic.
2. 3. 12. Ecological information: The product does not constitute an ecological risk.
2. 3. 13. Disposal considerations
2. 3. 13. 01. Product recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. If not officially specified differently, this product may be disposed of like household waste.
2. 3. 13. 02. Uncleaned packaging recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. Handle packaging in the same way as the product itself (see above).
2. 3. 14. Transport information
2. 3. 14. 01. Land transport ADR/RID (cross-border): Not dangerous goods
2. 3. 14. 02. Maritime transport IMDG: Not dangerous goods
2. 3. 14. 03. Air transport ICAO-TI and IATA-DGR: Not dangerous goods
2. 3. 15. Regulations
2. 3. 15. 01. Labelling according to EU guidelines
2. 3. 15. 01. 1. Hazard symbol(s): None
2. 3. 15. 01. 2. R-phrases(s): None
2. 3. 15. 01. 3. S-phrases(s): None
2. 3. 15. 01. 4. Hazardous components which must be listed on the label: None
2. 3. 16. Other information: See 3.
2. 4. MTG-Standard
2. 4. 01. Identification
2. 4. 01. 01. Id.-no.: T113
2. 4. 01. 02. Chemical characterisation: Liquid preparations
2. 4. 01. 03. Amount: 5 µL
2. 4. 01. 04. Description: Solution of nonhazardous substances with hazardous additions listed below
2. 4. 02. Composition / information on hazardous ingredients
2. 4. 02. 01. Sodium azide (NaN₃)
2. 4. 02. 01. 1. Concentration: <0,03% (w/v)
2. 4. 02. 01. 2. CAS-No.: 26628-22-8
2. 4. 02. 01. 3. EC-No.: 247-852-1
2. 4. 02. 01. 4. EC-Index-No.: 011-004-00-7
2. 4. 02. 01. 5. Hazard symbols: T+ (very toxic), N (dangerous for the environment)
2. 4. 02. 01. 6. R-phrases
2. 4. 02. 01. 6. 1. R28: Very toxic when swallowed
2. 4. 02. 01. 6. 2. R32: Contact with acids liberates very toxic gas.
2. 4. 02. 01. 6. 3. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2. 4. 02. 01. 7. S-phrases
2. 4. 02. 01. 7. 1. S61: Avoid release to the environment. Refer to special instructions/safety data sheets.
2. 4. 03. Hazard description
2. 4. 03. 01. Sodium azide: Harmful if swallowed. Exposure can cause nausea, headache, and vomiting. Target organs: nerves, heart, brain. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2. 4. 03. 03. Additional information: The products do not contain any relevant quantities of hazardous substances but should be treated as potentially infectious (see 2.4.2.3.).
2. 4. 04. First aid measures
2. 4. 04. 01. General advice: In case of complaints, consult a physician. Show this safety data sheet to the doctor in attendance.
2. 4. 04. 02. After inhalation: Not applicable

Material Safety Data Sheet



Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

- 2. 4. 04. 03. After skin contact: Wash off with soap and plenty of water. Remove contaminated clothing immediately.
- 2. 4. 04. 04. After eye contact: Rinse out with plenty of water with the eyelid held open. Remember to remove contact lenses. Seek medical advice.
- 2. 4. 04. 05. After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- 2. 4. 05. Fire fighting measures
 - 2. 4. 05. 01. Suitable extinguishing agents: Adapt to surroundings
 - 2. 4. 05. 02. Protective equipment: When extinguishing fire use self-contained breathing device.
- 2. 4. 06. Accidental release measures
 - 2. 4. 06. 01. Person-related safety precautions: Avoid substance contact, wear protective gloves
 - 2. 4. 06. 02. Measures for environmental protection: No measures required
 - 2. 4. 06. 03. Measures for cleaning/collecting: Soak with inert absorbent tissue and dispose as stated in 2.4.13. Treat wetted surfaces with anti-viral disinfectant spray.
- 2. 4. 07. Handling and storage
 - 2. 4. 07. 01. Handling: Handle as potentially infectious
 - 2. 4. 07. 02. Storage: Cannot be stored indefinitely. Store in the original, tightly closed container at 2-8°C. Keep away from foodstuffs, beverages and feed.
- 2. 4. 08. Exposure controls and personal protection gear
 - 2. 4. 08. 01. Exposure controls
 - 2. 4. 08. 01. 1. Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored.
 - 2. 4. 08. 02. Personal protective gear
 - 2. 4. 08. 02. 1. General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of workday.
 - 2. 4. 08. 02. 2. Respiratory protection: No measures required
 - 2. 4. 08. 02. 3. Protection of hands: Protective gloves during filling
 - 2. 4. 08. 02. 4. Eye protection: Protective goggles during filling
- 2. 4. 09. Physical and chemical properties
 - 2. 4. 09. 01. Form: Liquid
 - 2. 4. 09. 02. Colour: Colourless
 - 2. 4. 09. 03. Odour: Odourless
 - 2. 4. 09. 04. pH-value (20°C): Near neutral
 - 2. 4. 09. 05. Melting point: Not available
 - 2. 4. 09. 06. Boiling point: Not available
 - 2. 4. 09. 07. Ignition temperature: Not available
 - 2. 4. 09. 08. Flash point: Not available
 - 2. 4. 09. 09. Explosion limits (lower/upper): Not available
 - 2. 4. 09. 10. Relative vapour density: Not available
 - 2. 4. 09. 11. Density (20°C): 1,01 g/mL
 - 2. 4. 09. 12. Solubility in / miscibility with water (20°C): fully miscible
- 2. 4. 10. Stability and reactivity
 - 2. 4. 10. 01. Conditions to be avoided: None with regard to safety
 - 2. 4. 10. 02. Substances to be avoided: Acids
 - 2. 4. 10. 03. Hazardous decomposition products: None if used according to specifications
- 2. 4. 11. Toxicological information
 - 2. 4. 11. 01. Acute toxicity: No data available
 - 2. 4. 11. 02. Irritation and corrosion: No irritant or corrosive effect known
 - 2. 4. 11. 03. Sensitisation: No data available
 - 2. 4. 11. 04. Subacute to chronic toxicity: No data available
- 2. 4. 12. Ecological information: Not harmful for the environment in the quantities delivered (self-assessment)
- 2. 4. 13. Disposal considerations
 - 2. 4. 13. 01. Product recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. Unused excess of these products must be autoclaved and may then be disposed of like household waste.
 - 2. 4. 13. 02. Uncleaned packaging recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. Handle wetted packaging in the same way as the substance itself (see above).
- 2. 4. 14. Transport information
 - 2. 4. 14. 01. Land transport ADR/RID (cross-border): Not dangerous goods
 - 2. 4. 14. 02. Maritime transport IMDG: Not dangerous goods
 - 2. 4. 14. 03. Air transport ICAO-TI and IATA-DGR: Not dangerous goods
- 2. 4. 15. Regulations
 - 2. 4. 15. 01. Labelling according to EU guidelines
 - 2. 4. 15. 01. 1. Hazard symbol(s): None
 - 2. 4. 15. 01. 2. R-phrases(s): None
 - 2. 4. 15. 01. 3. S-phrases(s): None
 - 2. 4. 15. 01. 4. Hazardous components which must be listed on the label: None
- 2. 4. 16. Other information: See 3.
- 2. 5. MTG-Ab conjugate
 - 2. 5. 01. Identification
 - 2. 5. 01. 01. Id.-no.: A151
 - 2. 5. 01. 02. Chemical characterisation: Liquid preparation
 - 2. 5. 01. 03. Amount: 12 mL
 - 2. 5. 01. 04. Description: Solution of nonhazardous substances with hazardous additions listed below

Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

2. 5. 02. Composition / information on hazardous ingredients
2. 5. 02. 01. Methylisothiazolone (= 2-Methyl-4-isothiazoline-3-one)
2. 5. 02. 01. 1. Concentration: <0,015% (w/v)
2. 5. 02. 01. 2. CAS-No.: 0026172-54-3
2. 5. 02. 01. 3. Hazard symbol: C (corrosive)
2. 5. 02. 01. 4. R-phrases
2. 5. 02. 01. 4. 1. R22: Harmful if swallowed
2. 5. 02. 01. 4. 2. R34: Causes burns
2. 5. 02. 01. 4. 3. R43: May cause sensitisation by skin contact
2. 5. 02. 01. 5. Note: Substance is hazardous to water and ground water.
2. 5. 02. 01. 6. S-phrases
2. 5. 02. 01. 6. 1. S61: Avoid release to the environment.
2. 5. 02. 02. Bronidox (= 5-Bromo-5-nitro-1,3-dioxan)
2. 5. 02. 02. 1. Concentration: <0,015% (w/v)
2. 5. 02. 02. 2. CAS-No.: 57-55-6
2. 5. 02. 02. 3. EINECS/ELINCS-No.: 2003380
2. 5. 02. 02. 4. Hazard symbol: C (corrosive)
2. 5. 02. 02. 5. R-phrases
2. 5. 02. 02. 5. 1. R34: Causes burns
2. 5. 02. 02. 6. S-phrases
2. 5. 02. 02. 6. 1. S26: In case of eye contact immediately rinse opened eye thoroughly with water; seek medical advice.
2. 5. 02. 02. 6. 2. S28: In case of skin contact wash immediately with plenty of water; seek medical advice.
2. 5. 02. 03. Bovine-derived serum protein
2. 5. 02. 03. 1. Concentration: unknown (proprietary formulation of the supplier)
2. 5. 03. Hazard description
2. 5. 03. 01. Preservatives: The mercury-free preservatives Methylisothiazolone and Bronidox can produce adverse health effects in their concentrated forms. Though complete toxicity information on the preparation is not available, none of its components are known to be toxic or hazardous at use concentrations.
2. 5. 03. 02. Bovine serum protein: The suppliers of the serum protein certify that the bovine plasma from which it was purified was collected entirely from domestic animals in abattoirs regulated by the United States Dept. of Agriculture. The animals received ante- and post-mortem inspection at the time of slaughter and appeared free of infectious and contagious diseases and injurious parasites. The product does not contain and is not derived from any specific risk materials (skull, brain, eyes, tonsils and spinal cord).
2. 5. 03. 03. Additional information: When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
2. 5. 04. First aid measures
2. 5. 04. 01. General advice: In case of complaints, consult a physician. Show this safety data sheet to the doctor in attendance.
2. 5. 04. 02. After inhalation: If breathed in, move person into fresh air.
2. 5. 04. 03. After skin contact: Generally this product does not irritate the skin. Wash off with water, remove contaminated clothing.
2. 5. 04. 04. After eye contact: Rinse out with plenty of water with the eyelid held open. Remember to remove contact lenses.
2. 5. 04. 05. After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
2. 5. 05. Fire fighting measures
2. 5. 05. 01. Suitable extinguishing agents: Adapt to surroundings
2. 5. 05. 02. Protective equipment: When extinguishing fire use self-contained breathing device.
2. 5. 06. Accidental release measures
2. 5. 06. 01. Person-related safety precautions: Avoid substance contact
2. 5. 06. 02. Measures for environmental protection: None required
2. 5. 06. 03. Measures for cleaning/collecting: Soak with absorbent tissue and dispose as stated in 2.5.13.
2. 5. 07. Handling and storage
2. 5. 07. 01. Handling: Avoid inhalation of vapours/aerosols. Wear protective gloves and goggles during refilling.
2. 5. 07. 02. Storage: Cannot be stored indefinitely. Store at 2-8°C in the original, tightly closed container.
2. 5. 08. Exposure controls and personal protection gear
2. 5. 08. 01. Exposure controls
2. 5. 08. 01. 1. Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored.
2. 5. 08. 02. Personal protective gear
2. 5. 08. 02. 1. General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of workday.
2. 5. 08. 02. 2. Respiratory protection: Avoid inhalation of vapours/aerosols.
2. 5. 08. 02. 3. Protection of hands: Protective gloves during refilling
2. 5. 08. 02. 4. Eye protection: Protective goggles during refilling
2. 5. 09. Physical and chemical properties
2. 5. 09. 01. Form: Liquid
2. 5. 09. 02. Colour: green
2. 5. 09. 03. Odour: Faint, specific
2. 5. 09. 04. pH-value (20°C): Near neutral
2. 5. 09. 05. Melting point: Not available
2. 5. 09. 06. Boiling point: Not available
2. 5. 09. 07. Ignition temperature: Not available
2. 5. 09. 08. Flash point: Not available
2. 5. 09. 09. Explosion limits (lower/upper): Not available
2. 5. 09. 10. Relative vapour density: Not available

Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

- 2. 5. 09. 11. Density (20°C): Not available
- 2. 5. 09. 12. Solubility in / miscibility with water (20°C): fully miscible
- 2. 5. 10. Stability and reactivity
 - 2. 5. 10. 01. Conditions to be avoided: Heating (>35°C)
 - 2. 5. 10. 02. Substances to be avoided: None with regard to safety
 - 2. 5. 10. 3. Hazardous decomposition products: None if used according to specifications; unknown under fire conditions
- 2. 5. 11. Toxicological information
 - 2. 5. 11. 01. Acute toxicity: No data available
 - 2. 5. 11. 02. Irritation and corrosion: No irritant effect known; no corrosive effect
 - 2. 5. 11. 03. Sensitisation: No sensitising effect known
 - 2. 5. 11. 04. Subacute to chronic toxicity: No data available
- 2. 5. 12. Ecological information: In the amount and concentration delivered, the product does not constitute a hazard for the environment (self-assessment).
- 2. 5. 13. Disposal considerations
 - 2. 5. 13. 01. Product recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. If not officially specified differently, this product may be disposed of like household waste.
 - 2. 5. 13. 02. Uncleaned packaging recommendation: Handle wetted packaging in the same way as the substance itself (see above).
- 2. 5. 14. Transport information
 - 2. 5. 14. 01. Land transport ADR/RID (cross-border): Not dangerous goods
 - 2. 5. 14. 02. Maritime transport IMDG: Not dangerous goods
 - 2. 5. 14. 03. Air transport ICAO-TI and IATA-DGR: Not dangerous goods
- 2. 5. 15. Regulations
 - 2. 5. 15. 01. Labelling according to EU guidelines
 - 2. 5. 15. 01. 1. Hazard symbol(s): None
 - 2. 5. 15. 01. 2. R-phrase(s): None
 - 2. 5. 15. 01. 3. S-phrase(s): None
 - 2. 5. 15. 01. 4. Hazardous components which must be listed on the label: None
- 2. 5. 16. Other information: See 3.
- 2. 6. Substrate
 - 2. 6. 01. Identification
 - 2. 6. 01. 01. Id.-No.: S002, respectively 05116C00.AED
 - 2. 6. 01. 02. Chemical characterisation: liquid preparation
 - 2. 6. 01. 03. Amount: 14 mL
 - 2. 6. 01. 04. Description: Solution of nonhazardous substances with hazardous additions listed below
 - 2. 6. 02. Composition / information on hazardous ingredients
 - 2. 6. 02. 01. 3,3',5,5'-tetramethylbenzidine (TMB)
 - 2. 6. 02. 01. 1. Concentration: <0,02% (w/w)
 - 2. 6. 02. 01. 2. CAS-No.: 54827-17-7
 - 2. 6. 02. 01. 3. EINECS/ELINCS-No.: 259-364-6
 - 2. 6. 02. 01. 4. Hazard symbols: Xn (harmful), N (dangerous for the environment)
 - 2. 6. 02. 01. 5. R-phrases
 - 2. 6. 02. 01. 5. 1. R22: Harmful if swallowed
 - 2. 6. 02. 01. 5. 2. R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - 2. 6. 02. 01. 6. S-phrases: None
 - 2. 6. 03. Hazard description: Due to the low concentration of TMB (2.6.2.1.1.), the health risk is negligible.
 - 2. 6. 04. First aid measures
 - 2. 6. 04. 01. General advice: In case of complaints, consult a physician. Show this safety data sheet to the doctor in attendance.
 - 2. 6. 04. 02. After inhalation: Supply fresh air, keep at rest. If person feels queasy/discomfort, consult a physician.
 - 2. 6. 04. 03. After skin contact: Wash off with soap and of water. Remove contaminated clothing.
 - 2. 6. 04. 04. After eye contact: Rinse out with plenty of water with the eyelid held open. Remember to remove contact lenses. If irritations persists, seek medical advice.
 - 2. 6. 04. 05. After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth and drink plenty of water. Keep under surveillance. If person feels queasy/discomfort, consult a physician.
 - 2. 6. 05. Fire fighting measures
 - 2. 6. 05. 01. Suitable extinguishing agents: Adapt to surroundings
 - 2. 6. 05. 02. Protective equipment: When extinguishing fire use self-contained breathing device.
 - 2. 6. 05. 03. Specific hazards: See 2.6.10.3.
 - 2. 6. 06. Accidental release measures
 - 2. 6. 06. 01. Person-related safety precautions: Do not inhale vapours/aerosols. Avoid substance contact. See 2.6.8.
 - 2. 6. 06. 02. Measures for environmental protection: Not required due to the low TMB concentration (2.6.2.1.1.) and the low amount of product delivered (2.6.1.3.) (self-assessment).
 - 2. 6. 06. 03. Measures for cleaning/collecting: Soak with absorbent tissue and dispose as stated in 2.6.13.
 - 2. 6. 07. Handling and storage
 - 2. 6. 07. 01. Handling: Avoid inhalation of vapours/aerosols. Wear protective gloves and goggles when risk of splashes.
 - 2. 6. 07. 02. Storage: Cannot be stored indefinitely. Store light-protected at 2-8°C in the original, tightly closed container.
 - 2. 6. 08. Exposure controls and personal protection gear
 - 2. 6. 08. 01. Exposure controls
 - 2. 6. 08. 01. 1. Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored.
 - 2. 6. 08. 02. Personal protective gear

Material Safety Data Sheet



Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

2. 6. 08. 02. 1. General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of workday.
2. 6. 08. 02. 2. Respiratory protection: Avoid inhalation of vapours/aerosols.
2. 6. 08. 02. 3. Protection of hands: Protective gloves during refilling
2. 6. 08. 02. 4. Eye protection: Protective goggles during refilling
2. 6. 09. Physical and chemical properties
2. 6. 09. 01. Form: Liquid
2. 6. 09. 02. Colour: Colourless
2. 6. 09. 03. Odour: Odourless
2. 6. 09. 04. pH-value (20°C): Near neutral
2. 6. 09. 05. Melting point: Not available
2. 6. 09. 06. Boiling point: About 100°C
2. 6. 09. 07. Ignition temperature: Not available
2. 6. 09. 08. Flash point: Not available
2. 6. 09. 09. Explosion limits (lower/upper): Not available
2. 6. 09. 10. Relative vapour density: Not available
2. 6. 09. 11. Density (20°C): about 1,0 g/mL
2. 6. 09. 12. Solubility in / miscibility with water (20°C): fully miscible
2. 6. 10. Stability and reactivity
2. 6. 10. 01. Conditions to be avoided: None with regard to safety
2. 6. 10. 02. Substances to be avoided: None with regard to safety
2. 6. 10. 03. Hazardous decomposition products: None if used according to specifications. When heated to dryness, the solution may form hazardous decomposition products.
2. 6. 11. Toxicological information
2. 6. 11. 01. Acute toxicity: No data available
2. 6. 11. 02. Irritation and corrosion: May be irritant to eyes and skin; non-corrosive
2. 6. 11. 03. Sensitisation: No data available
2. 6. 11. 04. After ingestion: Product may cause irritation of the gastrointestinal tract.
2. 6. 11. 05. Subacute to chronic toxicity: TMB has shown a possible mutagenic effect in experimental animals (mice).
2. 6. 12. Ecological information
2. 6. 12. 01. Biodegradability / persistence: TMB is not readily biodegradable.
2. 6. 12. 02. Further information on ecology: TMB is toxic to aquatic organisms.
2. 6. 12. 03. General note: Due to the very low amount of TMB, the product is considered harmless to the environment (self-assessment).
2. 6. 13. Disposal considerations
2. 6. 13. 01. Product recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. If not officially specified differently, residual amounts (low mL-range) of this product may be disposed of like household waste.
2. 6. 13. 02. Uncleaned packaging recommendation: Handle wetted packaging in the same way as the substance itself (see above).
2. 6. 14. Transport information
2. 6. 14. 01. Land transport ADR/RID (cross-border): Not dangerous goods
2. 6. 14. 02. Maritime transport IMDG: Not dangerous goods
2. 6. 14. 03. Air transport ICAO-TI and IATA-DGR: Not dangerous goods
2. 6. 15. Regulations
2. 6. 15. 01. Labelling according to EU guidelines
2. 6. 15. 03. 1. Hazard symbol(s): None
2. 6. 15. 01. 2. R-phrases: None
2. 6. 15. 01. 3. S-phrases: None
2. 6. 15. 01. 4. Hazardous components which must be listed on the label: None
2. 6. 16. Other information: See 3.
2. 7. Stop solution
2. 7. 01. Identification
2. 7. 01. 01. Id.-No.: S003, respectively 10051C05.AED
2. 7. 01. 02. Chemical characterisation: liquid preparation
2. 7. 01. 03. Amount: 14 mL
2. 7. 01. 04. Description: Solution of nonhazardous substances with hazardous additions listed below
2. 7. 02. Composition / information on hazardous ingredients
2. 7. 02. 01. Sulphuric acid (H₂SO₄)
2. 7. 02. 01. 1. Concentration: <2% (w/v)
2. 7. 02. 01. 2. CAS-No.: 7664-93-9
2. 7. 02. 01. 3. EC-No.: 231-639-5
2. 7. 02. 01. 4. EC-Index-No.: 016-020-00-8
2. 7. 02. 01. 5. Hazard symbols: C (corrosive)
2. 7. 02. 01. 6. R-phrases
2. 7. 02. 01. 6. 1. R35: Causes severe burns
2. 7. 02. 01. 7. S-phrases
2. 7. 02. 01. 7. 1. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
2. 7. 02. 01. 7. 2. S30: Never add water to this product.
2. 7. 02. 01. 7. 3. S36/39: Wear suitable protective clothing, gloves and eye/face protection.
2. 7. 02. 01. 7. 4. S45: In case of accident or if you feel unwell, seek medical advice immediately.
2. 7. 03. Hazard description: Not classified as dangerous according to EC Directives but contains a hazardous component.
2. 7. 04. First aid measures

Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

2. 7. 04. 01. General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.
2. 7. 04. 02. After inhalation: Remove from exposure, rest and keep warm. In case of complaints obtain medical attention.
2. 7. 04. 03. After skin contact: Wash off with plenty of water. Dab with polyethylene glycol 400. Remove contaminated clothing immediately. In severe cases obtain medical attention.
2. 7. 04. 04. After eye contact: Rinse out with plenty of water (for at least 10 minutes) with the eyelid held open. Remember to remove contact lenses. Call in ophthalmologist immediately.
2. 7. 04. 05. After swallowing: Rinse mouth with water. Make victim drink plenty of water (up to several liters). Avoid vomiting (danger of perforation). Do not attempt to neutralise. Never give anything by mouth to an unconscious person. Consult a physician immediately.
2. 7. 05. Fire fighting measures
2. 7. 05. 01. Suitable extinguishing agents: Adapt to surroundings
2. 7. 05. 02. Protective equipment: When extinguishing fire use self-contained breathing device.
2. 7. 05. 03. Specific hazards: Product is inflammable. Development of hazardous combustion gases or vapours possible in the event of fire; sulphur oxides may develop. Hydrogen may form upon contact with metals (danger of explosion).
2. 7. 06. Accidental release measures
2. 7. 06. 01. Person-related safety precautions: Do not inhale vapours/aerosols. Avoid substance contact. See 2.7.8.
2. 7. 06. 02. Measures for environmental protection: Not required due to the low amount (2.7.1.3.) and concentration (2.7.2.1.1.) of the product.
2. 7. 06. 03. Measures for cleaning/collecting: Soak with inert absorbent material (e.g. sand, sawdust, Chemisorb) and dispose as stated in 2.7.13.
2. 7. 07. Handling and storage
2. 7. 07. 01. Handling: Avoid inhalation of vapours/aerosols. Wear protective gloves and goggles during refilling.
2. 7. 07. 02. Storage: Store in the original, tightly closed container.
2. 7. 08. Exposure controls and personal protection gear
2. 7. 08. 01. Exposure controls
2. 7. 08. 01. 1. Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored.
2. 7. 08. 02. Personal protective gear
2. 7. 08. 02. 1. General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of workday.
2. 7. 08. 02. 2. Respiratory protection: Avoid inhalation of vapours/aerosols.
2. 7. 08. 02. 3. Protection of hands: Protective gloves during refilling
2. 7. 08. 02. 4. Eye protection: Protective goggles during refilling
2. 7. 09. Physical and chemical properties
2. 7. 09. 01. Form: Liquid
2. 7. 09. 02. Colour: Colourless
2. 7. 09. 03. Odour: Odourless
2. 7. 09. 04. pH-value (20°C): Acidic (< 1)
2. 7. 09. 05. Melting point: Not available
2. 7. 09. 06. Boiling point: About 100°C
2. 7. 09. 07. Ignition temperature: Not available
2. 7. 09. 08. Flash point: Not available
2. 7. 09. 09. Explosion limits (lower/upper): Not available
2. 7. 09. 10. Relative vapour density: Not available
2. 7. 09. 11. Density (20°C): about 1,02 g/mL
2. 7. 09. 12. Solubility in / miscibility with water (20°C): fully miscible (under heat generation)
2. 7. 10. Stability and reactivity
2. 7. 10. 01. Conditions to be avoided: Heating
2. 7. 10. 02. Substances to be avoided: Bases, various metals. Reactivity towards other substances cannot be excluded.
2. 7. 10. 03. Hazardous decomposition products: None if used according to specifications. Under fire conditions: see 2.7.5.3.
2. 7. 11. Toxicological information
2. 7. 11. 01. Acute toxicity: Corrosive effect
2. 7. 11. 01. 1. After inhalation of vapours/aerosols: May irritate the affected mucous membranes
2. 7. 11. 01. 2. After skin contact: May cause slight transient irritation
2. 7. 11. 01. 3. After eye contact: May irritate
2. 7. 11. 01. 4. After swallowing: Irritation of the mucous membranes of the mouth, pharynx, oesophagus, and gastrointestinal tract
2. 7. 11. 02. Subacute to chronic toxicity
2. 7. 11. 02. 1. Bacterial mutagenicity: Ames test negative
2. 7. 11. 02. 2. Teratogenic effect: None in animal experiments
2. 7. 12. Ecological information
2. 7. 12. 01. Biodegradability / persistence: Methods for the determination of biodegradability are not applicable to inorganic substances. Accumulation in organisms is not to be expected.
2. 7. 12. 02. Further information on ecology: Harmful to aquatic organisms due to pH shift.
2. 7. 13. Disposal considerations
2. 7. 13. 01. Product recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. If not officially specified differently, residual product (low mL-range) may be given to the sewage (self-assessment).
2. 7. 13. 02. Uncleaned packaging recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. If not officially specified differently, packaging may be cleaned and disposed of like household waste (selfassessment).
2. 7. 14. Transport information
2. 7. 14. 01. UN-No.: 3264
2. 7. 14. 02. Class: 8
2. 7. 14. 03. Packaging group: III
2. 7. 14. 04. Proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID SOLUTION)
2. 7. 15. Regulations

Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

2. 7. 15. 01. Labelling according to EC directives: Not classified as dangerous but contains hazardous components

2. 7. 15. 01. 1. Hazard symbol(s): None

2. 7. 15. 01. 2. R-phrases(s): None

2. 7. 15. 01. 3. S-phrases(s): None

2. 7. 15. 01. 4. Hazardous components which must be listed on the label: 7664-93-9 Sulphuric acid

2. 7. 16. Other information: See 3.

2. 8. Streptavidin-HRP conjugate

2. 8. 01. Identification

2. 8. 01. 01. Id.-no.: S004

2. 8. 01. 02. Chemical characterisation: Liquid preparation

2. 8. 01. 03. Amount: 12 mL

2. 8. 01. 04. Description: Solution of nonhazardous substances with hazardous additions listed below

2. 8. 02. Composition / information on hazardous ingredients

2. 8. 02. 01. Methylisothiazolone (= 2-Methyl-4-isothiazoline-3-one)

2. 8. 02. 01. 1. Concentration: <0,015% (w/v)

2. 8. 02. 01. 2. CAS-No.: 0026172-54-3

2. 8. 02. 01. 3. Hazard symbol: C (corrosive)

2. 8. 02. 01. 4. R-phrases

2. 8. 02. 01. 4. 1. R22: Harmful if swallowed

2. 8. 02. 01. 4. 2. R34: Causes burns

2. 8. 02. 01. 4. 3. R43: May cause sensitisation by skin contact

2. 8. 02. 01. 5. Note: Substance is hazardous to water and ground water.

2. 8. 02. 01. 6. S-phrases

2. 8. 02. 01. 6. 1. S61: Avoid release to the environment.

2. 8. 02. 02. Bronidox (= 5-Bromo-5-nitro-1,3-dioxan)

2. 8. 02. 02. 1. Concentration: <0,015% (w/v)

2. 8. 02. 02. 2. CAS-No.: 57-55-6

2. 8. 02. 02. 3. EINECS/ELINCS-No.: 2003380

2. 8. 02. 02. 4. Hazard symbol: C (corrosive)

2. 8. 02. 02. 5. R-phrases

2. 8. 02. 02. 5. 1. R34: Causes burns

2. 8. 02. 02. 6. S-phrases

2. 8. 02. 02. 6. 1. S26: In case of eye contact immediately rinse opened eye thoroughly with water; seek medical advice.

2. 8. 02. 02. 6. 2. S28: In case of skin contact wash immediately with plenty of water; seek medical advice.

2. 8. 02. 03. Bovine-derived serum protein

2. 8. 02. 03. 1. Concentration: unknown (proprietary formulation of the supplier)

2. 8. 03. Hazard description

2. 8. 03. 01. Preservatives: The mercury-free preservatives Methylisothiazolone and Bronidox can produce adverse health effects in their concentrated forms. Though complete toxicity information on the preparation is not available, none of its components are known to be toxic or hazardous at use concentrations.

2. 8. 03. 02. Bovine serum protein: The suppliers of the serum protein certify that the bovine plasma from which it was purified was collected entirely from domestic animals in abattoirs regulated by the United States Dept. of Agriculture. The animals received ante- and post-mortem inspection at the time of slaughter and appeared free of infectious and contagious diseases and injurious parasites. The product does not contain and is not derived from any specific risk materials (skull, brain, eyes, tonsils and spinal cord).

2. 8. 03. 03. Additional information: When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

2. 8. 04. First aid measures

2. 8. 04. 01. General advice: In case of complaints, consult a physician. Show this safety data sheet to the doctor in attendance.

2. 8. 04. 02. After inhalation: If breathed in, move person into fresh air.

2. 8. 04. 03. After skin contact: Generally this product does not irritate the skin. Wash off with water, remove contaminated clothing.

2. 8. 04. 04. After eye contact: Rinse out with plenty of water with the eyelid held open. Remember to remove contact lenses.

2. 8. 04. 05. After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

2. 8. 05. Fire fighting measures

2. 8. 05. 01. Suitable extinguishing agents: Adapt to surroundings

2. 8. 05. 02. Protective equipment: When extinguishing fire use self-contained breathing device.

2. 8. 06. Accidental release measures

2. 8. 06. 01. Person-related safety precautions: Avoid substance contact

2. 8. 06. 02. Measures for environmental protection: None required

2. 8. 06. 03. Measures for cleaning/collecting: Soak with absorbent tissue and dispose as stated in 2.5.13.

2. 8. 07. Handling and storage

2. 8. 07. 01. Handling: Avoid inhalation of vapours/aerosols. Wear protective gloves and goggles during refilling.

2. 8. 07. 02. Storage: Cannot be stored indefinitely. Store at 2-8°C in the original, tightly closed container.

2. 8. 08. Exposure controls and personal protection gear

2. 8. 08. 01. Exposure controls

2. 8. 08. 01. 1. Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored.

2. 8. 08. 02. Personal protective gear

2. 8. 08. 02. 1. General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of workday.

2. 8. 08. 02. 2. Respiratory protection: Avoid inhalation of vapours/aerosols.

Material Safety Data Sheet



Product Number **E021**
Revision Number **RN2.0**

Revision Date 02.12.2021

- 2. 8. 08. 02. 3. Protection of hands: Protective gloves during refilling
- 2. 8. 08. 02. 4. Eye protection: Protective goggles during refilling
- 2. 8. 09. Physical and chemical properties
 - 2. 8. 09. 01. Form: Liquid
 - 2. 8. 09. 02. Colour: green
 - 2. 8. 09. 03. Odour: Faint, specific
 - 2. 8. 09. 04. pH-value (20°C): Near neutral
 - 2. 8. 09. 05. Melting point: Not available
 - 2. 8. 09. 06. Boiling point: Not available
 - 2. 8. 09. 07. Ignition temperature: Not available
 - 2. 8. 09. 08. Flash point: Not available
 - 2. 8. 09. 09. Explosion limits (lower/upper): Not available
 - 2. 8. 09. 10. Relative vapour density: Not available
 - 2. 8. 09. 11. Density (20°C): Not available
 - 2. 8. 09. 12. Solubility in / miscibility with water (20°C): full y miscible
- 2. 8. 10. Stability and reactivity
 - 2. 8. 10. 01. Conditions to be avoided: Heating (>35°C)
 - 2. 8. 10. 02. Substances to be avoided: None with regard to safety
 - 2. 8. 10. 3. Hazardous decomposition products: None if used according to specifications; unknown under fire conditions
- 2. 8. 11. Toxicological information
 - 2. 8. 11. 01. Acute toxicity: No data available
 - 2. 8. 11. 02. Irritation and corrosion: No irritant effect known; no corrosive effect
 - 2. 8. 11. 03. Sensitisation: No sensitising effect known
 - 2. 8. 11. 04. Subacute to chronic toxicity: No data available
- 2. 8. 12. Ecological information: In the amount and concentration delivered, the product does not constitute a hazard for the environment (self-assessment).
- 2. 8. 13. Disposal considerations
 - 2. 8. 13. 01. Product recommendation: Disposal must be in accordance with appropriate local, federal or national legislation. If not officially specified differently, this product may be disposed of like household waste.
 - 2. 8. 13. 02. Uncleaned packaging recommendation: Handle wetted packaging in the same way as the substance itself (see above).
- 2. 8. 14. Transport information
 - 2. 8. 14. 01. Land transport ADR/RID (cross-border): Not dangerous goods
 - 2. 8. 14. 02. Maritime transport IMDG: Not dangerous goods
 - 2. 8. 14. 03. Air transport ICAO-TI and IATA-DGR: Not dangerous goods
- 2. 8. 15. Regulations
 - 2. 8. 15. 01. Labelling according to EU guidelines
 - 2. 8. 15. 01. 1. Hazard symbol(s): None
 - 2. 8. 15. 01. 2. R-phrase(s): None
 - 2. 8. 15. 01. 3. S-phrase(s): None
 - 2. 8. 15. 01. 4. Hazardous components which must be listed on the label: None
- 2. 8. 16. Other information: See 3.

3. Other information

- 3. 1. This product is intended to be used by trained personnel.
- 3. 2. The above information is believed to be correct to the best of our current knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Also, Zedira GmbH does not guarantee this to be all-inclusive and shall not be held liable for any damages resulting from handling of or contact with the above product. All materials and mixtures may present unknown hazards and should be used with caution. For additional information, see "Directions for use".