

Identification of the preparation and of the company**Product name:** MemEx Membrane Protein Extraction Kit**Art. No.:** 800-MXK (former cat. no.: K 001)**Application of the preparation:** Laboratory chemical**Manufacturer/Supplier:** Synaptic Systems GmbH

Rudolf-Wissell-Straße 28A

37079 Göttingen

Phone:+49 (0)551-50556-358

Fax:+49 (0)551-50556-384

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Information in case of emergency:

Gifftinformation München

Phone: +49 (0)89 19240

Components:

| Common Name | Classification | Art. No. | Quantity |
|-----------------|----------------------------------|-----------|----------|
| MemEx Reagent A | Irritating – Xi, R41 | 800-MXK A | 10ml |
| MemEx Reagent B | -- | 800-MXK B | 30ml |
| MemEx Reagent C | Irritating – Xn, Xi, R22, R36/38 | 800-MXK C | 10ml |
| MemEx Dye | -- | 800-MXK D | 300µl |

1 Identification of the preparation and of the company

Product name: MemEx Reagent A

Art. No.: 800-MXK A **Quantity:** 10ml

Application of the preparation: Laboratory chemical

Synaptic Systems GmbH
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2 Hazards identification

Hazard description:



Xi Irritant

Information concerning particular hazards for human and environment:

This product is hazardous according to EEC directives 67/548/EEC and 1999/45/EC.

R 41 Risk of serious damage to eyes.

GHS label elements



Danger

H318 Causes severe eye damage.

Additional information:

All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

3 Composition/information on ingredients

Chemical characterization

Description: Aqueous solution.

Dangerous components:

CAS No. 9036-19-5 (1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol >1%

4 First-aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air and to be sure call for a doctor.

After skin contact:

Immediately wash off with soap and plenty of water. If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Rinse out mouth and drink a glass of water. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person.

5 Fire-fighting measures

Suitable extinguishing agents:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards caused by the substance, its products of combustion or resulting gases:

Decomposition products may include carbon oxides.

Protective equipment:

Wear self-contained respiratory protective device. Wear fully protective suit.

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| <p>6 Accidental release measures Person-related safety precautions: Wear protective clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Measures for environmental protection: Do not allow to enter sewers/surface or ground water. Measures for cleaning/collecting: Soak up with inert absorbent material.</p> |
| <p>7 Handling and storage Information for safe handling: Handling corresponding to laboratory safety guidelines. Information about fire - and explosion protection: No special measures required. Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Store away from foodstuffs. Further information about storage conditions: Storage temperature: 4 °C</p> |
| <p>8 Exposure controls/personal protection 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 at the workplace. Respiratory protection: Required when vapours/aerosols are generated. Protection of hands: Handle with gloves. Eye protection: Tightly sealed goggles Body protection: Protective work clothing</p> |
| <p>9 Physical and chemical properties General Information Form: viscous liquid Colour: colourless to slightly hazy. Odour: odourless Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined. Flash point: Not applicable. Self-igniting: Product is not self-igniting. Danger of explosion: Product does not present an explosion hazard. Density: Not determined. Solubility in / Miscibility with water: Soluble.</p> |
| <p>10 Stability and reactivity Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Materials to be avoided: Strong oxidizing agents. Dangerous decomposition products: Hazardous decomposition products formed under fire conditions. – Carbon oxides</p> |
| <p>11 Toxicological information Acute toxicity: LD/LC50 values relevant for classification: 9036-19-5 (1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol Oral LD50 4500 mg/kg (rat) Primary irritant effect: on the skin: Maybe irritating on the eye: Severely irritating (rabbit Draize test) after inhalation: Maybe harmful Sensitization: No sensitizing effects known. Further information: The product should be handled with the care usual when dealing with chemicals.</p> |
| <p>12 Ecological information Ecotoxicological effects: Acquatic toxicity: Quantitative data on the ecological effect of this product are not available. Water hazard class 1 (German regulation): slightly hazardous for water</p> |

13 Disposal considerations

Product: The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

Uncleaned packaging: Disposal according to official regulations.

14 Transport information

Land transport ADR/RID (cross-border) Not subject to transport regulations.

Maritime transport IMDG: Not dangerous goods.

Air transport ICAO-TI and IATA-DGR: Not dangerous goods.

15 Regulatory information

Labelling according to EU guidelines:

Hazard symbols: Xi – Irritant

Risk-Phrase: R41 – Risk of serious damage to eyes.

Safety-Phrase: S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S39 – Wear eye/face protection.

National regulations:

Waterhazard class: WGK1 – Slightly hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS: Department: Research and Development

Contact: Frau Dr. Geumann

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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| <p>1 Identification of the preparation and of the company</p> <p>Product name: MemEx Reagent B</p> <p>Art. No.: 800-MXK B Quantity: 30ml</p> <p>Application of the preparation: Laboratory chemical</p> <p>Synaptic Systems GmbH Rudolf-Wissell-Straße 28A 37079 Göttingen Phone:+49 (0)551-50556-358 Fax:+49 (0)551-50556-384 E-mail: support@sysy.com</p> |
| <p>2 Hazards identification</p> <p>Hazard description / Information concerning particular hazards for human and environment: This product is not hazardous according to EEC directives 67/548/EEC and 1999/45/EC.</p> <p>GHS label elements Void</p> |
| <p>3 Composition/information on ingredients</p> <p>Chemical characterization Description: Aqueous solution.</p> |
| <p>4 First-aid measures</p> <p>General information: No harmful ingredients.</p> |
| <p>5 Fire-fighting measures</p> <p>Suitable extinguishing agents: Not relevant.</p> |
| <p>6 Accidental release measures</p> <p>No hazardous incidents possible.</p> |
| <p>7 Handling and storage</p> <p>Information for safe handling: Handling corresponding to laboratory safety guidelines. Information about fire - and explosion protection: No special measures required. Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from foodstuffs. Further information about storage conditions: Storage temperature: 4 °C</p> |
| <p>8 Exposure controls/personal protection</p> <p>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 at the workplace. Protection of hands: Handle with gloves. Eye protection: Tightly sealed goggles Body protection: Protective work clothing</p> |
| <p>9 Physical and chemical properties</p> <p>General Information Form: liquid Colour: colourless Odour: odourless</p> <p>Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined. Flash point: Not applicable. Self-igniting: Product is not self-igniting. Danger of explosion: Product does not present an explosion hazard. Density: Not determined. Solubility in / Miscibility with water: Soluble.</p> |

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| <p>10 Stability and reactivity Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Materials to be avoided: None. Dangerous decomposition products: None.</p> |
| <p>11 Toxicological information Acute toxicity: None. Primary irritant effect: None. Sensitization: None. Further information: The product should be handled with the care usual when dealing with chemicals.</p> |
| <p>12 Ecological information Ecotoxicological effects: None.</p> |
| <p>13 Disposal considerations Product: The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities. Uncleaned packaging: Disposal according to official regulations.</p> |
| <p>14 Transport information Land transport ADR/RID (cross-border) Not subject to transport regulations. Maritime transport IMDG: Not dangerous goods. Air transport ICAO-TI and IATA-DGR: Not dangerous goods.</p> |
| <p>15 Regulatory information Labelling according to EU guidelines: No hazardous product. National regulations: Waterhazard class: Not classified.</p> |
| <p>16 Other information This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Department issuing MSDS: Department: Research and Development Contact: Frau Dr. Geumann Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals</p> |

1 Identification of the preparation and of the company

Product name: MemEx Reagent C

Art. No.: 800-MXK C **Quantity:** 10ml

Application of the preparation: Laboratory chemical

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Rudolf-Wissell-Straße 28A
37079 Göttingen
Phone:+49 (0)551-50556-358
Fax:+49 (0)551-50556-384
E-mail: support@sysy.com

2 Hazards identification

Hazard description:



Xi Irritant

Xn Harmful

Information concerning particular hazards for human and environment:

This product is hazardous according to EEC directives 67/548/EEC and 1999/45/EC.

R 22 Harmful if swallowed.

R36/38 Irritating to eyes and skin.

GHS label elements



Attention

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Additional information:

All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

3 Composition/information on ingredients

Chemical characterization

Description: Aqueous solution.

Dangerous components:

CAS No. 151-21-3

Sodium dodecyl sulphate

>1%

EINECS No. 205-788-1

4 First-aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air and to be sure call for a doctor.

After skin contact:

Immediately rinse with water. If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Rinse out mouth and drink a glass of water. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person.

5 Fire-fighting measures

Suitable extinguishing agents:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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| <p>Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.</p> |
| <p>6 Accidental release measures Person-related safety precautions: Wear protective clothing. Measures for environmental protection: Do not allow to enter sewers/surface or ground water. Measures for cleaning/collecting: Soak up with inert absorbent material.</p> |
| <p>7 Handling and storage Information for safe handling: Handling corresponding to laboratory safety guidelines. Information about fire - and explosion protection: No special measures required. Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from foodstuffs. Further information about storage conditions: Store in dry conditions. Protect from exposure to light.</p> |
| <p>8 Exposure controls/personal protection 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 at the workplace. Respiratory protection: Required when vapours/aerosols are generated. Protection of hands: Handle with gloves. Eye protection: Tightly sealed goggles Body protection: Protective work clothing</p> |
| <p>9 Physical and chemical properties General Information Form: liquid Colour: colourless Odour: odourless Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: 100°C Flash point: Not applicable. Self-igniting: Product is not self-igniting. Danger of explosion: Product does not present an explosion hazard. Density at 20°C: 0.934 g/cm³ Solubility in / Miscibility with water: Soluble.</p> |
| <p>10 Stability and reactivity Thermal decomposition / conditions to be avoided: Heating. Materials to be avoided: Strong oxidizing agents. Dangerous decomposition products: No information available.</p> |
| <p>11 Toxicological information Acute toxicity: LD/LC50 values relevant for classification: 151-21-3 Sodium dodecyl sulphate Oral LD50 1288 mg/kg (rat) Primary irritant effect: on the skin: Irritant to skin and mucous membranes. on the eye: Irritating effect. after inhalation: No irritating effect. Sensitization: No sensitizing effects known. Further information: The product should be handled with the care usual when dealing with chemicals.</p> |
| <p>12 Ecological information Ecotoxicological effects: Acquatic toxicity: Quantitative data on the ecological effect of this product are not available. Water hazard class 2 (German regulation): hazardous for water Do not allow product to reach ground water, water course or sewage system.</p> |
| <p>13 Disposal considerations Product: The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities. Uncleaned packaging: Disposal according to official regulations.</p> |

14 Transport information

Land transport ADR/RID (cross-border) Not subject to transport regulations.

Maritime transport IMDG: Not dangerous goods.

Air transport ICAO-TI and IATA-DGR: Not dangerous goods.

15 Regulatory information

Labelling according to EU guidelines:

Hazard symbols: Xi – Irritant, Xn – Harmful

Risk-Phrases: R 22 – Harmful if swallowed. R36/38 – Irritating to eyes and skin.

Safety-Phrases: S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36 – Wear suitable protective clothing. S37 – Wear suitable gloves.

National regulations:

Waterhazard class: WGK2 – Hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS: Department: Research and Development

Contact: Frau Dr. Geumann

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| <p>1 Identification of the preparation and of the company</p> <p>Product name: MemEx Dye</p> <p>Art. No.: 800-MXK D Quantity: 300µl</p> <p>Application of the preparation: Laboratory chemical</p> <p>Synaptic Systems GmbH Rudolf-Wissell-Straße 28A 37079 Göttingen Phone:+49 (0)551-50556-358 Fax:+49 (0)551-50556-384 E-mail: support@sysy.com</p> |
| <p>2 Hazards identification</p> <p>Hazard description / Information concerning particular hazards for human and environment: This product is not hazardous according to EEC directives 67/548/EEC and 1999/45/EC.</p> <p>GHS label elements Void</p> <p>Additional information: All chemicals are potentially dangerous. They should only be handled by specially trained personnel.</p> |
| <p>3 Composition/information on ingredients</p> <p>Chemical characterization</p> <p>Description: Aqueous solution.</p> |
| <p>4 First-aid measures</p> <p>General information: Immediately remove any clothing soiled by the product.</p> <p>After inhalation: Supply fresh air.</p> <p>After skin contact: Immediately rinse with water. If skin irritation continues, consult a doctor.</p> <p>After eye contact: Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.</p> <p>After swallowing: Rinse out mouth and drink a glass of water. Do not induce vomiting.</p> |
| <p>5 Fire-fighting measures</p> <p>Suitable extinguishing agents: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</p> <p>Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.</p> |
| <p>6 Accidental release measures</p> <p>Person-related safety precautions: Avoid formation of dust.</p> <p>Measures for environmental protection: Do not allow to enter sewers/surface or ground water.</p> <p>Measures for cleaning/collecting: Soak up with inert absorbent material.</p> |
| <p>7 Handling and storage</p> <p>Information for safe handling: Handling corresponding to laboratory safety guidelines.</p> <p>Information about fire - and explosion protection: No special measures required.</p> <p>Requirements to be met by storerooms and receptacles: No special requirements.</p> <p>Information about storage in one common storage facility: Store away from foodstuffs.</p> <p>Further information about storage conditions: Storage temperature: 4 °C</p> |
| <p>8 Exposure controls/personal protection</p> <p>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 at the workplace.</p> <p>Protection of hands: Handle with gloves.</p> <p>Eye protection: Tightly sealed goggles</p> <p>Body protection: Protective work clothing</p> |
| <p>9 Physical and chemical properties</p> <p>General Information</p> <p>Form: liquid</p> |

Colour: blue
Odour: odourless
Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.
Flash point: Not applicable.
Self-igniting: Product is not flammable.
Danger of explosion: Product does not present an explosion hazard.
Density: Not determined.
Solubility in / Miscibility with water: Soluble.

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: Heating.
Materials to be avoided: Strong oxidizing agents.
Dangerous decomposition products: None.

11 Toxicological information

Acute toxicity: Quantitative data on the toxicity of this product are not available.
Primary irritant effect: Slight irritations.
Sensitization: No sensitizing effect known.
Additional toxicological information: After swallowing nausea and vomiting.
Further information: The product should be handled with the care usual when dealing with chemicals.

12 Ecological information

Ecotoxicological effects:
Acquatic toxicity: Quantitative data on the ecological effect of this product are not available.
Water hazard class 2 (German regulation): hazardous for water
Do not allow product to reach ground water, water course or sewage system.

13 Disposal considerations

Product: The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.
Uncleaned packaging: Disposal according to official regulations.

14 Transport information

Land transport ADR/RID (cross-border) Not subject to transport regulations.
Maritime transport IMDG: Not dangerous goods.
Air transport ICAO-TI and IATA-DGR: Not dangerous goods.

15 Regulatory information

Labelling according to EU guidelines: No hazardous product.
National regulations:
Waterhazard class: WGK2 – Hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
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