

A Geno Technology, Inc. (USA) brand name

# **Safety Data Sheet**

Cat. # 786-926

MOPS/SDS Running Buffer [20X] (1M MOPS, 1M Tris, 20.5mM EDTA, 69.3mM SDS

Size: 1L





# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 06/03/2013 Revision date: 05/11/2017 Version: 7.1

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture

Product name : MOPS SDS Running Buffer [20X]

Product code : 155M

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

Geno Technology, Inc./ G-Biosciences 9800 Page Avenue Saint Louis, 63132-1429 - United States T 800-628-7730 - F 314-991-1504

technical@GBiosciences.com - www.GBiosciences.com

#### 1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)

#### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2

Specific target organ toxicity (single exposure) Category 3

H315

Causes skin irritation

H319

Causes serious eye irritation

H335

May cause respiratory irritation

Full text of H statements: see section 16

#### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements (GHS US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - If on skin: Wash with plenty of water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P312 - Call a poison center or doctor if you feel unwell

P321 - Specific treatment (see supplemental first aid instruction on this label)

P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

# 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

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# **SECTION 3: Composition/Information on ingredients**

# 3.1. Substances

Not applicable

3.2. Mixtures

| Name | Common Name (Synonyms)   | Product identifier  | %       | GHS US classification  |
|------|--|---------------------|---------|--|
| MOPS | 3-(N-morpholino)propanesulfonic acid / 3-(N-morpholino)propanesulphonic acid / 3-morpholinopropanesulphonic acid / 4-morpholinepropanesulfonic acid / MOPS / MOPS, DNase, RNase, protease free / morpholinepropanesulfonic acid / N-(3-sulfopropyl)morpholine / WAS 15 | (CAS-No.) 1132-61-2 | 10 - 50 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335 |

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| Name                    | Common Name (Synonyms)   | Product identifier | %     | GHS US classification                              |
|-------------------------|--|--------------------|-------|--|
| sodium dodecyl sulphate | Al3-00356 / akyposal SDS /   | (CAS-No.) 151-21-3 | 2 - 5 | Acute Tox. 4 (Oral), H302                          |
|                         | aquarex ME / aquarex methyl /<br>avirol 101 / avirol 118 conc / berol        |                    |       | Acute Tox. 4 (Dermal), H312<br>Skin Irrit. 2, H315 |
|                         | 452 / carsonol SLS / carsonol SLS  |                    |       | Eye Irrit. 2, H319                                 |
|                         | paste B / carsonol SLS special /   |                    |       | ,  |
|                         | casonol SLS pasta B / conco<br>sulfate WA / conco sulfate                    |                    |       |  |
|                         | WA1200 / conco sulfate WA-1200 /   |                    |       |  |
|                         | conco sulfate WA1245 / conco   |                    |       |  |
|                         | sulfate WA-1295 / conco sulfate<br>WAG / conco sulfate WAN / conco           |                    |       |  |
|                         | sulfate WAS / conco sulfate WN /   |                    |       |  |
|                         | cycloryl 21 / cycloryl 31 / cycloryl   |                    |       |  |
|                         | 580 / cycloryl 585N / dehydag<br>sulfate GL emulsion / dehydag               |                    |       |  |
|                         | sulphate GL emulsion / detergent   |                    |       |  |
|                         | 66 / dodecyl alcohol,hydrogen sulfate, sodium salt / dodecyl                 |                    |       |  |
|                         | sodium sulfate / dodecyl sulfate   |                    |       |  |
|                         | sodium / dodecyl sulfate sodium  |                    |       |  |
|                         | salt / dodecylhydrogensulfate<br>sodium salt / dreft / duponal /             |                    |       |  |
|                         | duponal WAQE / duponol /   |                    |       |  |
|                         | duponol C / duponol ME / duponol<br>METHYL / duponol QX / duponol            |                    |       |  |
|                         | WA / duponol WA dry / duponol  |                    |       |  |
|                         | WAQ / duponol WAQA / duponol   |                    |       |  |
|                         | WAQE / duponol WAQM / EMAL 0<br>/ EMAL 10 / emersal 6400 /                   |                    |       |  |
|                         | empicol LPZ / empicol LS 30 /  |                    |       |  |
|                         | empicol LX / emulsifier n° 104 /   |                    |       |  |
|                         | finasol osr(sub 2) / gaedinol /<br>hexamol SLS / incronol SLS / irium        |                    |       |  |
|                         | / jordanol SL-300 / lanette wax S /  |                    |       |  |
|                         | lauryl sodium sulfate / lauryl sulfate sodium / lauryl sulfate sodium salt / |                    |       |  |
|                         | maprobix neu / maprofix 563 /  |                    |       |  |
|                         | maprofix LK / maprofix WAC /   |                    |       |  |
|                         | maprofix wac LA / melanol CL /<br>melanol CL 30 / monododecyl                |                    |       |  |
|                         | sodium sulfate / monogen Y 100 /   |                    |       |  |
|                         | montopol la paste / n-dodecyl sulfate sodium / neutrazyme /                  |                    |       |  |
|                         | nikkol SLS / odoripon AL 95 / orvus  |                    |       |  |
|                         | WA paste / P and G emulsifier 104  |                    |       |  |
|                         | / perklankrol ESD 60 / perlandrol L<br>/ perlankrol L / product n° 161 /     |                    |       |  |
|                         | product n° 75 / quolac EX-UB /   |                    |       |  |
|                         | rewopol NLS 30 / richonol A /<br>richonol AF / richonol C / SDS (=           |                    |       |  |
|                         | sodium dodecyl sulphate) / silfopon  |                    |       |  |
|                         | WA 1 special / silfopon WA 2 /   |                    |       |  |
|                         | sinnopon LS 100 / sinnopon LS 95<br>/ sintapon L / sipex OP / sipex SB /     |                    |       |  |
|                         | sipex SD / sipex SP / sipex UB /   |                    |       |  |
|                         | sipon LS / sipon LS 100 / sipon<br>LSB / sipon PD / sipon WD / SLS           |                    |       |  |
|                         | (= sodium lauryl sulfate) / sodium   |                    |       |  |
|                         | dodecyl sulphate / sodium lauryl   |                    |       |  |
|                         | sulfate / sodium lauryl sulfate,<br>powder / sodium lauryl sulphate /        |                    |       |  |
|                         | sodium monododecyl sulfate /   |                    |       |  |
|                         | sodium monolauryl sulfate /<br>sodium N-dodecyl sulfate / solsol             |                    |       |  |
|                         | needles / standapol 112 conc /   |                    |       |  |
|                         | standapol NLS 90 / standapol WA-<br>AC / standapol WAQ / standapol           |                    |       |  |
|                         | WAQ special / standapol WAS100   |                    |       |  |
|                         | / steinapol NLS 90 / stepanol ME /   |                    |       |  |
|                         | stepanol ME DRY / stepanol ME<br>DRY AW / stepanol methyl /                  |                    |       |  |
|                         | stepanol METHYL DRY AW /   |                    |       |  |
|                         | stepanol WA / stepanol WA /  |                    |       |  |
|                         | stepanol WA paste / stepanol WA-<br>100 / stepanol WAC / stepanol            |                    |       |  |
|                         | WAQ / sterling WA paste / sterling   |                    |       |  |
|                         | WAQ-CH / sterling waq-cosmetic /<br>sulfetal L 95 / sulfopon WA3 /           |                    |       |  |
|                         | sulfopon WAL / sulfotex WA /   |                    |       |  |
| 06/08/2040              | sulfotex WALA / sulfuric acid  |                    |       | 0/2  |
| 06/28/2019              | monodEndeEynesisser,USD)dium salt /<br>sulfuric acid, monododecyl ester,     |                    |       | 3/8  |
|                         | sodium salt / swascol 1P / swascol   |                    |       |  |
|                         | 3L / swascol 4L / syntapon L /<br>syntapon L pasta / tarapon K12 /           |                    |       |  |
|                         | texapon DL conc / texapon K12 /  |                    |       |  |
|                         | ,  | i e                | 1     |  |

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Full text of hazard classes and H-statements : see section 16

#### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison

center/doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get

medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

No additional information available

#### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable pr

 Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with

skin and eyes.

### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

# 6.2. Environmental precautions

Avoid release to the environment.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

#### SECTION 7: Handling and storage

# 7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing

dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Wear personal protective

equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

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# **SECTION 8: Exposure controls/personal protection**

#### 8.1. **Control parameters**

#### MOPS SDS Running Buffer [20X]

No additional information available

#### sodium dodecyl sulphate (151-21-3)

No additional information available

#### MOPS (1132-61-2)

No additional information available

#### **Appropriate engineering controls**

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

# Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

Oxidizing properties

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

# **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : No data available Odor : No data available Odor threshold No data available рΗ : No data available Melting point : Not applicable Freezing point No data available : No data available Boiling point : No data available Flash point : No data available Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) : Not applicable. Vapor pressure No data available : No data available Relative vapor density at 20 °C Relative density : No data available Solubility : No data available Log Pow : No data available Auto-ignition temperature No data available : No data available Decomposition temperature Viscosity, kinematic : No data available Viscosity, dynamic : No data available **Explosion limits** : No data available Explosive properties No data available : No data available

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#### 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

Hazardous decomposition products.

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| sodium dodecyl sulphate (151-21-3) |   |
|------------------------------------|---|
| LD50 oral rat                      | 1200 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))           |
| LD50 dermal rat                    | < 2000 mg/kg (Rat; Literature study)  |
| LD50 dermal rabbit                 | > 2000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Read-across, Dermal, 14 day(s)) |
| ATE US (oral)                      | 1200 mg/kg body weight  |
| ATE US (dermal)                    | 1100 mg/kg body weight  |

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : May cause respiratory irritation.

| MOPS (1132-61-2)                                 |                                   |
|--|-----------------------------------|
| Specific target organ toxicity – single exposure | May cause respiratory irritation. |

Specific target organ toxicity - repeated

exposure

: Not classified

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

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#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

#### 12.2. Persistence and degradability

| sodium dodecyl sulphate (151-21-3)                            |  |  |
|---|--|--|
| Persistence and degradability Readily biodegradable in water. |  |  |
| MOPS (1132-61-2)  |  |  |
| · · · · · · · · · · · · · · · · · ·                           |  |  |

#### 12.3. Bioaccumulative potential

| sodium dodecyl sulphate (151-21-3) |   |
|------------------------------------|---|
| BCF fish 1                         | 3.9 - 5.3 (72 h, Cyprinus carpio)   |
| BCF fish 2                         | 7.15 (Pisces, Chronic)  |
| Log Pow                            | <= -2.03 (Calculated, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C) |
| Bioaccumulative potential          | Not bioaccumulative.  |
| MOPS (1132-61-2)                   |   |
| Bioaccumulative potential          | No bioaccumulation data available.  |

# 12.4. Mobility in soil

| sodium dodecyl sulphate (151-21-3) |   |
|------------------------------------|---|
| Surface tension                    | 0.0252 N/m (23 °C, 1 g/l, EU Method A.5: Surface tension) |
| Log Koc                            | 1.545 (log Koc, SRC PCKOCWIN v2.0, Experimental value)    |
| Ecology - soil                     | Highly mobile in soil.                                    |

#### 12.5. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

Waste treatment methods : Waste treatment methods.

# **SECTION 14: Transport information**

### **Department of Transportation (DOT)**

In accordance with DOT

Not regulated

**Transportation of Dangerous Goods** 

#### Transport by sea

Not regulated

Air transport

Not regulated

# **SECTION 15: Regulatory information**

# 15.1. US Federal regulations

# sodium dodecyl sulphate (151-21-3)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

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#### MOPS (1132-61-2)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

# 15.2. International regulations

#### **CANADA**

#### **EU-Regulations**

### **National regulations**

No additional information available

15.3. US State regulations

# **SECTION 16: Other information**

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Revision date : 05/11/2017

#### Full text of H-phrases:

| H302 | Harmful if swallowed             |
|------|----------------------------------|
| H312 | Harmful in contact with skin     |
| H315 | Causes skin irritation           |
| H319 | Causes serious eye irritation    |
| H335 | May cause respiratory irritation |

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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