Safety Data Sheet

Cat. # DG001

Nonidet® P-40 Substitute, 10% Aqueous Solution (Proteomic Grade)

Size: 5 x 10ml Vials
## SECTION 1: Identification

<table>
<thead>
<tr>
<th>1.1. Identification</th>
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<tbody>
<tr>
<td><strong>Product form</strong></td>
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<tr>
<td><strong>Substance name</strong></td>
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<tr>
<td><strong>CAS No.</strong></td>
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<tr>
<td><strong>Product code</strong></td>
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<tr>
<td><strong>Formula</strong></td>
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<tr>
<td><strong>Synonyms</strong></td>
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**SECTION 2: Hazards Identification**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>GHS Classification</strong></td>
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</tbody>
</table>

**SECTION 3: First Aid Measures**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>EmergencyPharmacological</strong></td>
</tr>
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</table>

**SECTION 4: Fire Fighting Measures**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Extinguishing Media</strong></td>
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</table>

**SECTION 5: Handling and Storage**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Stability</strong></td>
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</table>

**SECTION 6: Exposure Controls**

<table>
<thead>
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<tbody>
<tr>
<td><strong>Engineering Controls</strong></td>
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</table>

**SECTION 7: Physical and Chemical Properties**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Appearance</strong></td>
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</tbody>
</table>

**SECTION 8: Toxicological Information**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Routes of Entry</strong></td>
</tr>
</tbody>
</table>

**SECTION 9: Experimental算学**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Tests</strong></td>
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</table>

**SECTION 10: Stability and Reactions**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Conditions to Avoid</strong></td>
</tr>
</tbody>
</table>

**SECTION 11: Toxicological Effects**

<table>
<thead>
<tr>
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<tr>
<td><strong>Human</strong></td>
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**SECTION 12: Ecological Information**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Biological Data</strong></td>
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**SECTION 13: Disposal Considerations**

<table>
<thead>
<tr>
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<tr>
<td><strong>Reason for Disposal</strong></td>
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</table>

**SECTION 14: Transport Information**

<table>
<thead>
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<tr>
<td><strong>UN Number</strong></td>
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**SECTION 15: Regulatory Information**

<table>
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<tbody>
<tr>
<td><strong>National Regulations</strong></td>
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**SECTION 16: Other Information**

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<td><strong>Revised:</strong></td>
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**SECTION 17: Additional Information**

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<tr>
<td><strong>NTP Study</strong></td>
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**Revision date:** 05/11/2017  Version: 7.1
Nonidet P-40 Substitute
Safety Data Sheet

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

Hazardous to the aquatic environment - Chronic Hazard Category 4 H413 May cause long lasting harmful effects to aquatic life
Full text of H statements : see section 16

BIG No : 31813

1.2. Recommended use and restrictions on use
Use of the substance/mixture : Detergent according to Regulation (EC) No 648/2004 Polymer

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
Hazardous to the aquatic environment - Chronic Hazard Category 4 H413 May cause long lasting harmful effects to aquatic life

Full text of H statements : see section 16
Nonidet P-40 Substitute
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. GHS Label elements, including precautionary statements
GHS US labeling
Hazard statements (GHS US) : H413 - May cause long lasting harmful effects to aquatic life
Precautionary statements (GHS US) : P273 - Avoid release to the environment.
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

SECTION 3: Composition/Information on ingredients
3.1. Substances
## Nonidet P-40 Substitute

### Safety Data Sheet

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name (Synonyms)</th>
<th>Product Identifier</th>
<th>%</th>
<th>GHS US classification</th>
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06/28/2019 EN (English US)
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Nonidet P-40 Substitute
Safety Data Sheet

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

3.2. Mixtures
Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact: Wash immediately with lots of water. Take victim to a doctor if irritation persists.

First-aid measures after eye contact: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.


4.2. Most important symptoms and effects (acute and delayed)
Potential Adverse human health effects and symptoms: Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Irritant to the skin. Slightly harmful by inhalation. Irritant to the eyes.

Symptoms/effects after skin contact: Tingling/irritation of the skin.

Symptoms/effects after eye contact: Irritation of the eye tissue.

Symptoms/effects after ingestion: Irritation of the gastric/intestinal mucosa.

4.3. Immediate medical attention and special treatment, if necessary
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Unsuitable extinguishing media: Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

5.2. Specific hazards arising from the chemical
No additional information available

5.3. Special protective equipment and precautions for fire-fighters
Precautionary measures fire: Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions: Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.


SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Protective equipment: Gloves. Face-shield. Protective clothing.
Emergency procedures: Mark the danger area. Wash contaminated clothes.

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
Prevent soil and water pollution. Prevent spreading in sewers.
6.3. Methods and material for containment and cleaning up

For containment: Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill.

Methods for cleaning up: Take up liquid spill into inert absorbent material, e.g.: sand. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

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: Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain.

Hygiene measures: 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 in a well-ventilated place. Keep cool.

Storage temperature: 5 - 40 °C

Heat-ignition: KEEP SUBSTANCE AWAY FROM: heat sources.

Information on mixed storage: KEEP SUBSTANCE AWAY FROM: water/moisture.

Storage area: Store in a dry area. Meet the legal requirements.

Special rules on packaging: SPECIAL REQUIREMENTS: closing, dry, clean, correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials: SUITABLE MATERIAL: stainless steel. synthetic material.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Nonidet P-40 Substitute (9016-45-9)</th>
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</thead>
<tbody>
<tr>
<td>No additional information available</td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls

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

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Gloves

Eye protection:
Face shield

Skin and body protection:
Protective clothing

Respiratory protection:
Respiratory protection not required in normal conditions

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor</td>
<td>Almost odourless</td>
</tr>
</tbody>
</table>
Nonidet P-40 Substitute
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Odor threshold : No data available
pH : 6 - 7
Melting point : 18 °C
Freezing point : No data available
Boiling point : > 200 °C
Flash point : > 200 °C
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Not applicable.
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : 1.1 (40 °C)
Molecular mass : 880 g/mol
Solubility : Soluble in water.
          : Water: soluble, Literature
Log Pow : No data available
Auto-ignition temperature : > 400 °C
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : 0.3 Pa·s (40 °C)
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information
Other properties : Hygroscopic. Slightly volatile.

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
Hygroscopic.

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

Nonidet P-40 Substitute (9016-45-9)

LD50 oral rat : > 2000 mg/kg (Rat)
LD50 dermal rabbit : > 2000 mg/kg (Rabbit)
Skin corrosion/irritation : Not classified
          : pH: 6 - 7
Serious eye damage/irritation : Not classified
          : pH: 6 - 7
Respiratory or skin sensitization : Not classified

06/28/2019 EN (English US)
Nonidet P-40 Substitute
Safety Data Sheet

Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity – single exposure: Not classified
Specific target organ toxicity – repeated exposure: Not classified
Aspiration hazard: Not classified
Viscosity, kinematic: No data available
Potential Adverse human health effects and symptoms: Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Irritant to the skin. Slightly harmful by inhalation. Irritant to the eyes.
Symptoms/effects after skin contact: Tingling/irritation of the skin.
Symptoms/effects after eye contact: Irritation of the eye tissue.
Symptoms/effects after ingestion: Irritation of the gastric/intestinal mucosa.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: May cause long lasting harmful effects to aquatic life.
Ecology - air: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water: Water pollutant (surface water).

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods
Product/Packaging disposal recommendations: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery.
Additional information: Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not applicable

Transportation of Dangerous Goods
Not applicable

Transport by sea
Not applicable
Nonidet P-40 Substitute
Safety Data Sheet

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

Air transport
Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations
Nonidet P-40 Substitute (9016-45-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

| EPA TSCA Regulatory Flag | SP - SP - indicates a substance that is identified in a proposed Significant New Use Rule. |

15.2. International regulations

CANADA
Nonidet P-40 Substitute (9016-45-9)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

National regulations
No additional information available

15.3. US State regulations

SECTION 16: Other information

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

Revision date : 05/11/2017

Full text of H-phrases:

| H413 | May cause long lasting harmful effects to aquatic life |

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.