



07 September 2017

## Kit Components

Product Code	Description
15200-1	NxSeq® Single Indexing Kit, Set B

## Components

NxSeq® Universal Adaptor	F813785-1
Adaptor Dilution Buffer	F883786-1
Primer Mix - Index 13	F813964-1
Primer Mix - Index 14	F813965-1
Primer Mix - Index 15	F813966-1
Primer Mix - Index 16	F813967-1
Primer Mix - Index 18	F813968-1
Primer Mix - Index 19	F813969-1
Primer Mix - Index 20	F813970-1
Primer Mix - Index 21	F813971-1
Primer Mix - Index 22	F813972-1
Primer Mix - Index 23	F813973-1
Primer Mix - Index 25	F813974-1
Primer Mix - Index 27	F813975-1

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : NxSeq® Universal Adaptor  
Product form : Mixture  
Product code : F813785

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Laboratory Chemicals.

#### 1.3. Details of the supplier of the safety data sheet

Lucigen Corporation  
2905 Parmenter Street  
Middleton, WI 53562  
U.S.A.  
Phone: (608) 831-9011  
Fax: (608) 831-9012  
E-mail: techserv@lucigen.com

#### 1.4. Emergency telephone number

Emergency number : 1-888-575-9695 (Lucigen: Monday-Friday, 8:00AM-5:00PM)

### SECTION 2: Hazards identification

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

##### GHS-US classification

Not a hazardous substance or mixture.

#### 2.2. Label elements

##### GHS-US labelling

Not a hazardous substance or mixture.

#### 2.3. Other hazards

No additional information available.

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

No data available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

No ingredients are hazardous according to OSHA criteria. No components need to be disclosed according to the applicable regulations.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
First-aid measures after inhalation	: IF INHALED: Remove to fresh air and keep at rest in a comfortable position for breathing. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with tepid water for at least 15 minutes. If symptoms continue, consult a physician.
First-aid measures after eye contact	: IF IN EYES: Immediately flush with tepid water for at least 15 minutes. Remove contact lenses if present and can easy to do so. Continue rinsing. If symptoms continue, consult a physician.
First-aid measures after ingestion	: IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting. Consult a physician if symptoms persist. Do not give anything by mouth to an unconscious person.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Not expected to present a significant acute hazard under anticipated conditions of normal use.
Symptoms/injuries after inhalation	: May cause upper respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

# NxSeq® Universal Adaptor.

## Safety Data Sheet

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

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : In case of fire, use water, dry chemical, chemical foam, or alcohol-resistance foam. Use agents most appropriate to extinguish the fire.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Product is not flammable.  
Explosion hazard : Product is not explosive.  
Reactivity : No dangerous reactions known under normal conditions of use.

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. In the event of fire and/or explosion, do not breathe fumes. Do not dispose of fire-fighting water in the environment.  
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

General measures : Ventilate area. Evacuate area. Keep upwind. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

#### 6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or inert absorbents (e.g., sand or vermiculite) to prevent migration and entry into sewers or streams.  
Methods for cleaning up : Soak up spills with inert absorbents, such as vermiculite and sand. This material and its container must be disposed of in a safe way, and as per local, state, and federal legislation.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wear recommended personal protective equipment. Wash hands and other exposed areas with mild soap and water after working with mixture, before leaving the laboratory, before eating, drinking or smoking and when leaving work. Avoid ingestion and inhalation. Keep container tightly closed.

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

Storage conditions : Store in at either -20°C or -70°C . Keep container tightly closed.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Components with workplace control parameters  
Contains no substances with occupational exposure limit values.

### 8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas. Emergency safety shower and eye wash should be available.

# NxSeq® Universal Adaptor.

## Safety Data Sheet

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

Personal protective equipment : Gloves. Protective goggles.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection : Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection : Wear long sleeves, and chemically impervious PPE to minimize bodily exposure.

Respiratory protection : Use NIOSH-approved dust/particulate respirator as needed. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid containing dissolved material
Color	: Colorless
Odor	: No data available
Odor Threshold	: No data available
pH	: ~ 7
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

#### 10.3. Possibility of hazardous reactions

None known.

#### 10.4. Conditions to avoid

None known.

#### 10.5. Incompatible materials

None known.

#### 10.6. Hazardous decomposition products

None known.

# NxSeq® Universal Adaptor.

## Safety Data Sheet

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

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity	: Not available
Skin corrosion/irritation	: Not available
Serious eye damage/irritation	: Not available
Respiratory or skin sensitisation	: Not available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not available
Reproductive toxicity	: Not available
Specific target organ toxicity (single exposure)	: Not available
Specific target organ toxicity (repeated exposure)	: Not available
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause upper respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available.

#### 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. Waste treatment methods

Waste treatment methods	: Obtain the consent of pollution control authorities before discharging to wastewater treatment plants. Product should not be discharged to surface waters without a NPDES permit.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local, state, and federal regulations. Avoid release to the environment.

### SECTION 14: Transport information

#### In accordance with DOT

Not hazardous for transport

#### Additional information

Other information : No supplementary information available.

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### OSHA Hazards

No OSHA Hazards

##### CERCLA Reportable Quantity

This product does not contain any components with a CERCLA RQ.

# NxSeq® Universal Adaptor.

## Safety Data Sheet

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

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This product does not contain any components with a section 304 EHS RQ.

### SARA 311/312 Hazards

No SARA Hazards

### SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### 15.2. International regulations

No additional information available.

### 15.3. US State regulations

#### California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

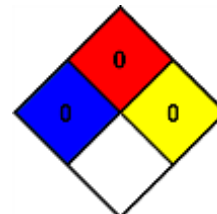
#### This mixture not listed on the following:

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Indication of changes : Revision X.0: New SDS Created.  
Revision date : 06/10/2017  
Other information : Author: .

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.  
NFPA fire hazard : 0 - Materials that will not burn.  
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

Health : 0  
Flammability : 0  
Physical : 0  
Personal Protection :

This information is disclosed to the best of Lucigen's knowledge. This document does not constitute a contractual relationship with product end users or handlers with respect to the possible presence of hazards in this item. Disposal should be in accordance with applicable regional, national and local laws and regulations.

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : Adaptor Dilution Buffer  
Product form : Mixture  
Product code : Product code for this component is F883786.

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Laboratory chemical.

#### 1.3. Details of the supplier of the safety data sheet

Lucigen Corporation  
2905 Parmenter Street  
Middleton, WI 53562  
U.S.A.  
Phone: (608) 831-9011  
Fax: (608) 831-9012  
E-mail: techserv@lucigen.com

#### 1.4. Emergency telephone number

Emergency number : 1-888-575-9695 (Lucigen: Monday-Friday, 8:00AM-5:00PM)

### SECTION 2: Hazards identification

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

##### GHS-US classification

Not classified.

#### 2.2. Label elements

##### GHS-US labelling

No labelling applicable.

#### 2.3. Other hazards

None.

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

No data available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixture

Name	Product identifier	%
<b>Tris, CAS # 77-86-1</b> EC# 201-064-4 Chemical Formula: C <sub>4</sub> H <sub>11</sub> NO <sub>3</sub> Molecular Weight: 121.14 g/mol Synonyms: 2-Amino-2-(hydroxymethyl)-1,3-propanediol, THAM, Trometamol, Tris base, Tris(hydroxymethyl)aminomethane	Ingredient in product.	3%

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : If exposed or concerned, consult a physician. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a comfortable position for breathing. If not breathing, give artificial respiration. Consult a physician.

First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin for at least 15 minutes with tepid water. Consult a physician.

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of tepid water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing. Consult a physician.

First-aid measures after ingestion : IF SWALLOWED: Rinse mouth thoroughly and consult a physician. Do not induce vomiting.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant acute hazard under anticipated conditions of normal use.

# Adaptor Dilution Buffer.

## Safety Data Sheet

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

Symptoms/injuries after inhalation	: May cause irritation to respiratory tract.
Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: May cause irritation, redness, and pain.
Symptoms/injuries after ingestion	: May cause gastrointestinal distress, nausea, and diarrhea.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray, carbon dioxide, dry chemical powder, alcohol-resistant foam, or appropriate foam.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Emits toxic fumes under fire conditions.
Explosion hazard	: No data available.
Reactivity	: Can react with oxidizing agents.

### 5.3. Advice for firefighters

Firefighting instructions	: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

General measures : Ventilate area. Evacuate area. Keep upwind. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear Personal Protective Equipment as described in Section 8.

#### 6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves, respirator, and eye or face protection. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment	: Contain any spills with dikes or inert absorbents (e.g., sand or vermiculite) to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Soak up spills with inert absorbants, such as sand or vermiculite as soon as possible. Place in closed waste container for disposal. This material and its container must be disposed of in a safe way, and as per local, state, and federal legislation.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wear recommended personal protective equipment. Wash hands and other exposed areas with mild soap and water after handling material, leaving the laboratory, before eating, drinking or smoking and when leaving work.

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

Storage conditions : Store in a -20°C freezer without a defrost cycle.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Contains no substances with occupational exposure limits.

### 8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas. Emergency safety shower and eye wash station should be available. Avoid prolonged or repeated exposure.



# Adaptor Dilution Buffer.

## Safety Data Sheet

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

Personal protective equipment

: Gloves. Protective goggles. Laboratory Coat.



Hand protection

: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suitable gloves for this specific application can be recommended by the glove supplier. Suggested glove materials are: Neoprene, Nitrile.

Eye protection

: Safety goggles should be worn when working with mixture. Avoid direct contact with eyes.

Skin and body protection

: Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection

: Use NIOSH/MSHA-approved dust/particulate respirator if exposure symptoms develop. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment. Do not breathe in vapour, mist, or dust.

## 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
pH	: No data available
Melting point	: No data available
Freezing point (50% aqueous solution)	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility in Water	: No data available
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

None.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid

Hygroscopic environments.

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide, nitrogen oxides.

# Adaptor Dilution Buffer.

## Safety Data Sheet

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

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity	: No data available
Skin corrosion/irritation	: No data available
Serious eye damage/irritation	: No data available
Respiratory or skin sensitisation	: No data available
Germ cell mutagenicity	: No data available
Carcinogenicity	: IARC – No component of this product present at levels greater than or equal to 0.1% is identified as probablye, possible, or confirmed human carcinogen by IARC. ACGIH – No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP – No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA – No component of this product present at levels greater than or equal to 0.1% is identified as a carcinoen or potential carcinogen by OSHA.
Reproductive toxicity	: No data available
Specific target organ toxicity (single exposure)	: No data available
Specific target organ toxicity (repeated exposure)	: No data available
Aspiration hazard	: No data available
Symptoms/injuries after inhalation	: May cause irritation to respiratory tract.
Symptoms/injuries after skin contact	: May cause mild irritation to skin.
Symptoms/injuries after eye contact	: May cause irritation, redness, and pain.
Symptoms/injuries after ingestion	: May cause gastrointestinal distress, nausea, and diarrhea.
Additional Information	: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 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. Waste treatment methods

Waste treatment methods : Obtain the consent of pollution control authorities before discharging to wastewater treatment plants. Product should not be discharged to surface waters without a NPDES permit.

Waste disposal recommendations : Dispose in a safe manner in accordance with local, state, and federal regulations. Avoid release to the environment.

### SECTION 14: Transport information

#### DOT

Not dangerous goods

#### IMDG

Not dangerous goods

#### IATA

Not dangerous goods

# Adaptor Dilution Buffer.

## Safety Data Sheet

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

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This product does not contain any components with a section 304 EHS RQ.

##### SARA 311/312 Hazards

No SARA Hazards

##### SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

##### SARA 313

This materials does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### 15.2. International regulations.

None.

#### 15.3. US State regulations

##### California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm.

##### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

##### New Jersey Right to Know Hazardous Substance List

Tris(hydroxymethyl)aminomethane, CAS 77-86-1

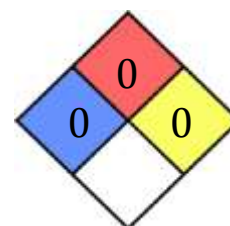
##### Pennsylvania Right to Know List

Tris(hydroxymethyl)aminomethane, CAS 77-86-1

### SECTION 16: Other information

Indication of changes	: Revision X.0: Updated format.
Revision date	: 09/07/2017
Other information	: Author:

NFPA health hazard	: 0 – Poses no health hazard, no precautions necessary and would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	: 0 – Material that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone and sand.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



#### HMIS III Rating

Health	: 0
Flammability	: 0
Physical Hazard	: 0
Personal Protection	:

This information is disclosed to the best of Lucigen's knowledge. This document does not constitute a contractual relationship with product end users or handlers with respect to the possible presence of hazards in this item. Disposal should be in accordance with applicable regional, national and local laws and regulations.

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : Primer Mix Index 13-16, 18-23, 25, 27  
Product form : Mixture  
Product code : F813964  
F813965  
F813966  
F813967  
F813968  
F813969  
F813970  
F813971  
F813972  
F813973  
F813974  
F813975

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Laboratory Chemicals.

#### 1.3. Details of the supplier of the safety data sheet

Lucigen Corporation  
2905 Parmenter Street  
Middleton, WI 53562  
U.S.A.  
Phone: (608) 831-9011  
Fax: (608) 831-9012  
E-mail: techserv@lucigen.com

#### 1.4. Emergency telephone number

Emergency number : 1-888-575-9695 (Lucigen: Monday-Friday, 8:00AM-5:00PM)

### SECTION 2: Hazards identification

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

##### GHS-US classification

Not a hazardous substance or mixture.

#### 2.2. Label elements

##### GHS-US labelling

Not a hazardous substance or mixture.

#### 2.3. Other hazards

No additional information available.

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

No data available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

No ingredients are hazardous according to OSHA criteria. No components need to be disclosed according to the applicable regulations.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a comfortable position for breathing. If not breathing, give artificial respiration. Consult a physician.

# Primer Mix Indexes 13-16, 18-23, 25, 27.

## Safety Data Sheet

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

First-aid measures after skin contact	: IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with tepid water for at least 15 minutes. If symptoms continue, consult a physician.
First-aid measures after eye contact	: IF IN EYES: Immediately flush with tepid water for at least 15 minutes. Remove contact lenses if present and can easily do so. Continue rinsing. If symptoms continue, consult a physician.
First-aid measures after ingestion	: IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting. Consult a physician if symptoms persist. Do not give anything by mouth to an unconscious person.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Not expected to present a significant acute hazard under anticipated conditions of normal use.
Symptoms/injuries after inhalation	: May cause upper respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistance foam. Use agents most appropriate to extinguish the fire.
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### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Product is not flammable.
Explosion hazard	: Product is not explosive.
Reactivity	: No dangerous reactions known under normal conditions of use.

### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. In the event of fire and/or explosion, do not breathe fumes. Do not dispose of fire-fighting water in the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

General measures	: Ventilate area. Evacuate area. Keep upwind. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).
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#### 6.1.1. For non-emergency personnel

Protective equipment	: Wear Protective equipment as described in Section 8.
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#### 6.1.2. For emergency responders

Protective equipment	: Wear suitable protective clothing, gloves and eye or face protection. For further information refer to section 8: "Exposure controls/personal protection".
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### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment	: Contain any spills with dikes or inert absorbents (e.g., sand or vermiculite) to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Soak up spills with inert absorbents, such as vermiculite and sand. This material and its container must be disposed of in a safe way, and as per local, state, and federal legislation.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Wear recommended personal protective equipment. Wash hands and other exposed areas with mild soap and water after working with mixture, before leaving the laboratory, before eating, drinking or smoking and when leaving work. Avoid ingestion and inhalation. Keep container tightly closed.
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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in at either -20°C or -70°C . Keep container tightly closed.
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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2. Exposure controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas. Emergency safety shower and eye wash should be available.

Personal protective equipment

: Gloves. Protective goggles.



Hand protection

: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection

: Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection

: Wear long sleeves, and chemically impervious PPE to minimize bodily exposure.

Respiratory protection

: Use NIOSH-approved dust/particulate respirator as needed. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

### SECTION 9: Physical and chemical properties

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

Physical state : Liquid containing dissolved material

Color : Colorless

Odor : No data available

Odor Threshold : No data available

pH : ~ 7

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Relative evaporation rate : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : No data available

Log Pow : No data available

Log Kow : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

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### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

None known.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not available
Skin corrosion/irritation	: Not available
Serious eye damage/irritation	: Not available
Respiratory or skin sensitisation	: Not available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not available
Reproductive toxicity	: Not available
Specific target organ toxicity (single exposure)	: Not available
Specific target organ toxicity (repeated exposure)	: Not available
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause upper respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available.

### 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. Waste treatment methods

Waste treatment methods	: Obtain the consent of pollution control authorities before discharging to wastewater treatment plants. Product should not be discharged to surface waters without a NPDES permit.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local, state, and federal regulations. Avoid release to the environment.

## SECTION 14: Transport information

### In accordance with DOT

Not hazardous for transport

### Additional information

Other information : No supplementary information available.

### Transport by sea

No additional information available

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### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### OSHA Hazards

No OSHA Hazards

#### CERCLA Reportable Quantity

This product does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This product does not contain any components with a section 304 EHS RQ.

#### SARA 311/312 Hazards

No SARA Hazards

#### SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### 15.2. International regulations

No additional information available.

### 15.3. US State regulations

#### California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

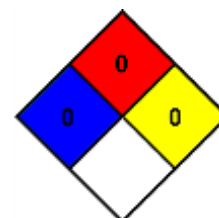
#### This mixture not listed on the following:

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Indication of changes : Revision X.0: New SDS Created.  
Revision date : 06/10/2017  
Other information : Author: .

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.  
NFPA fire hazard : 0 - Materials that will not burn.  
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



#### HMIS III Rating

Health : 0  
Flammability : 0  
Physical : 0  
Personal Protection :

This information is disclosed to the best of Lucigen's knowledge. This document does not constitute a contractual relationship with product end users or handlers with respect to the possible presence of hazards in this item. Disposal should be in accordance with applicable regional, national and local laws and regulations.



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