



Material Data Safety Sheet

AutoGen, Inc.
84 October Hill Rd.
Holliston, MA 01746
(508) 429-5965

Date revised: 06-19
Emergency Telephone Number: (800) 424-9300
Agent: CHEMTREC

Section 1 – Product and Company Information

Product Name: 605 Cartridge
Recommended use: Laboratory Chemicals
Company: AutoGen, Inc.
Address: 84 October Hill Rd.
Holliston, MA 01746
Phone: (774) 223-3000
Fax: (508) 429-9765

E-mail: info@autogen.com

Section 2 – Composition/Information on Ingredients

Component 1:	Lysis buffer: 1 piece(s) Ingredients 20-50% Sodium chloride
Component 2:	Binding buffer: 1 piece(s) Ingredients 50~70% Isopropanol
Component 3:	Beads Mixture: 1 Piece (s) No hazardous substances in concentrations to be declared.
Component 4:	Wash 1 buffer: 1 Piece (s) Ingredients 50-60% Guanidine Hydrochloride
Component 5:	Wash 2 buffer: 1 Piece (s) No hazardous substances in concentrations to be declared.
Component 6:	DEPC water: 1 Piece (s) No hazardous substances in concentrations to be declared.



Component 7:

Proteinase K: 1 Piece (s)
No hazardous substances in concentrations to be declared.

Component 8:

Sula Oil: 1 Piece (s), pH:8.2, Boiling point: NA, Flash point: NA.
Ingredients 1% Sodium Dodecyl Sulfate; 99% Mineral Oil.

Section 3 - Hazards Identification

***** EMERGENCY OVERVIEW *****

Component 3, 5, 6, 7 and 8 - Occupational exposure presents little or no health hazard.

Component 1, 2, 4 - Warning! Irritant. Harmful if swallowed.

***** **Potential** *****

Health Effects:

Eye: Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

Skin: Can cause moderate skin irritation, defecting, and dermatitis. Not likely to cause permanent damage. Contact may irritate/inflame the skin.

Inhalation: Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache. No toxicity expected from inhalation.

Ingestion: Mildly irritating to mouth, throat, and stomach. Can cause abdominal discomfort. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Harmful if swallowed. May cause systemic poi. Chronic: No data on cancer.

Section 4- First Aid Measures

Eye: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Skin: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS.

Flash Point and Method: N/A

Erode character: No information available.

Note To Physician: Treat symptomatically.

Section 5- Fire Fighting Measures

Flashpoint Deg C: Not available.

Upper Flammable Limit %: Not available.

Lower Flammable Limit %: Not available.

Auto-ignition Temperature Deg C: Not available.

Extinguishing Media: **Component 3, 5, 6, 7 and 8** - Use means appropriate for surrounding materials.

Component 1, 2, 4 - Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do Not direct a stream of water into the hot burning liquid. Use water spray/fog for cooling.

Firefighting Techniques/Equipment: Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors

Hazardous Combustion Products: Includes carbon dioxide, carbon monoxide, and dense smoke.

Section 6 – Accidental Release Measures

Accidental releases may be subject to special reporting requirements and other regulatory mandates. Refer to Section 8 for personal protection equipment recommendations.

Spill Cleanup: **Component 3, 5, 6, 7 and 8** - Absorb spill. Common absorbent materials should be effective. Deposit in appropriate containers for removal and disposal.

Component 1, 2, 4 - Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section VIII at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7 – Handling and Storage

Storage of some materials is regulated by federal, state, and/ or local laws.

Storage Pressure: Ambient

Handling Procedures: **Component 3, 5, 6, 7 and 8-** Keep closed or covered when not in use.

Component 1, 2, 4 - Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well-ventilated area. Keep closed or covered when not in use.

Storage Procedures: Suitable for most general chemical storage areas.

Section 8 – Exposure controls/Personal Protection

Drinking, and when leaving work. Have a safety shower available

Respiratory: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Section 9 – Physical and Chemical Properties

Appearance/physical state: Liquid solution / suspension

Order: No odor.

Specific Gravity/Density: Not established.

Octanol/water Partition Coeff: Not established.

Volatiles: Not established.

Evaporation Rate: Not established.

Viscosity: Not established.

Section 10 – Stability and Reactivity

Stable under normal conditions.

Conditions to Avoid: Strong-oxidizing agents.

Hazardous Decomposition Products: Carbon dioxide. Carbon monoxide. Nitrogen oxides.
Hydrogen chloride.

Hazardous Polymerization: Hazardous polymerization will not occur.

Section 11 – Toxicological Information

No toxic, no infectious, no corrosive material inside.

Not applied to IATA DGR

Proper Shipping Name: Not determined.

Subsidiary Hazards: Not determined.

Section 12 – Ecological Information

Eco-toxicological Information: No ecological information available.

Environmental Fate (Degradation, Transformation, and Persistence): Bio-concentration is not expected to occur.

Section 13 – Disposal Considerations

Regulatory Information: Not applicable.

Disposal Method: Clean up and dispose of waste in accordance with all federal, state, and or local environmental.

Section 14 – Transport Information

No toxic, no infectious, no corrosive material inside.

Not applied to IATA DGR

Proper Shipping Name: Not determined.

Subsidiary Hazards: Not determined.

Section 15 – Regulatory Information

WHMIS Rating 0-4:

FIRE:0.

HEALTH: 2.

REACTIVITY: 0

Abbreviations

N/A - Data is not applicable or not available

SARA - Superfund and Reauthorization Act

HMIS - Hazard Material Information System

WHMIS - Workplace Hazard Materials Information System

NTP - National Toxicology Program

OSHA - Occupational Health and Safety Administration

IARC - International Agency for Research on Cancer

PROP 65 - California Safe Drinking Water and Toxic Enforcement Act of 1986

EINECS - European Inventory of Existing Commercial Chemical Substances

Section 16 – Other Information

This bulletin is for your guidance and is based upon information and tests believed to be reliable. AutoGen makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages thereto. The data are offered solely for your consideration, investigation, and verification. These suggestions should not be confused with state, municipal, or insurance requirements, or with national safety codes and constitute no warranty. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state, and local regulations.



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Emergency Telephone Number: (800) 424-9300

Agent: CHEMTREC

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Product Name: DNase I reaction buffer

Recommended use: Laboratory Chemicals

Company: AutoGen, Inc.

Address: 84 October Hill Rd.
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Section 2 – Composition/Information on Ingredients

Substance/Mixture: Mixture

Hazardous ingredients

No hazardous ingredients

Section 3 - Hazards Identification

GHS Classification:

Not a hazardous substance or mixture

GHS Label element:

Not a hazardous substance or mixture

Potential Health Effects:

Aggravated Medical Condition: None known.

Symptoms of Overexposure: No information available.

Carcinogenicity

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No ingredient 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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Section 4- First Aid Measures

General advice:

Show this material safety data sheet to the doctor in attendance.

If inhaled:

Move to fresh air. If symptoms persist, call a physician.

In case of skin contact:

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

In case of eye contact:

Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed:

If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

No information available.

Note to Physician:

No information available.

Section 5- Fire Fighting Measures

Suitable Extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards during firefighting:

Exposure to decomposition products may be a hazard to health.

Hazardous combustion products:

No hazardous combustion products are known.

Specific extinguishing methods:

In the event of fire and/or explosion don't breathe fumes.

Special protective equipment for fire-fighters:

Wear self-contained breathing apparatus for firefighting if necessary

Section 6 – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid dust formation. Avoid breathing dust/fume/gas/mist/vapors/spray.

Methods and materials for containment and cleaning up:

Keep in suitable, closed containers for disposal.

Section 7 – Handling and Storage

Advice on safe handling:

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Section 8 – Exposure controls/Personal Protection

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Hand protection remarks:

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact)

Eye protection:

Safety glasses.

Skin and body protection:

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Footwear protecting against chemicals.

Hygiene measures:

Keep away from food and drink. When using do not eat, drink or smoke.

Section 9 – Physical and Chemical Properties

Appearance: Liquid

Color: colorless.

Odor: characteristic.

Odor Threshold: No data available.

pH: 7-8

Melting point/range: 0°C.

Boiling point/range: 100°C/No data available

Flash point: Not applicable.

Evaporation rate: No data available.

Burning rate: No data available.

Upper explosion limit: No data available.

Lower explosion limit: No data available.

Vapor pressure: No data available.

Relative vapor density: No data available.

Relative density: No data available.

Density: 1.0 g/cm³.

Solubility: No data available.

Water solubility: completely miscible.

Solubility in other solvents: No data available.

Partition coefficient n-octanol/water: No data available.

Auto ignition temperature: doesn't ignite..

Thermal decomposition: No data available.

Viscosity: No data available.

Viscosity, dynamic: No data available.

Viscosity, kinematic: No data available.

Explosive properties: No data available.

Oxidizing properties: No data available.

Section 10 – Stability and Reactivity

Reactivity: No decomposition if stored and applied as directed.

Chemical stability: No decomposition if stored and applied as directed.

Possibility of hazardous reactions: Stable under recommended storage conditions.

Conditions to avoid: Heat, Flames and sparks.

Incompatible materials: No data available

Hazardous decomposition products: No decomposition if stored and applied as directed.

Section 11 – Toxicological Information

Acute toxicity

Product:

Acute oral toxicity: No data available

Acute inhalation toxicity: No data available

Acute dermal toxicity: No data available

Skin corrosion/irritation

Product:

May cause skin irritation susceptible persons.

Serious eye damage/eye irritation

Product:

Remarks: May irritate eyes.

Respiratory or skin sensitization

No data available.

Germ Cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration toxicity

No data available

Further information

No data available

Section 12 – Ecological Information

Eco toxicity

Product

Toxicity to fish: No data available

Toxicity to algae: No data available

Toxicity to bacteria: No data available

Persistence and degradability

No data available

Bio accumulative potential

Product

Bio accumulation: No data available

Partition coefficient n-octanol/water: No data available

Mobility in soil

No data available

Other adverse effects

No data available

Section 13 – Disposal Considerations

Disposal Methods

Waste from residues

Dispose of contents/container in accordance with local regulation.

Contaminated packaging:

Empty containers should be taken to an approved waste handling site for recycling or disposal containers.

Section 14 – Transport Information

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code



No data available

Domestic regulation

49 CFR

Not regulated as a dangerous good

Special precaution for user:

Remarks: Not classified as dangerous in the meaning of transport regulations.

Section 15 – Regulatory Information

OSHA Hazards: No OSHA Hazards

EPCRA-Emergency Planning and Community Right-to-Know

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material 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.

US State Regulations

California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth or any other reproductive defects.

Section 16 – Other Information

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