

Material Safety Data Sheet

Section 1: Identification of the Substance or Mixture

Product Code: 10056, 100158

Product Name: Revolution cfDNA Protease Buffer

For *In Vitro* Diagnostic Use in conjunction with nRichDX Revolution cfDNA Max 20XL, Max 20, and Reagent 0.5 kits.

Details of the supplier of the material safety data sheet

Address: 15339 Barranca Parkway
Irvine, CA 92618 USA



Phone: +1.949.341.1980

Fax: +1.949.341.1982

Support: info@nrichdx.com

Website: www.nrichdx.com

24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, or Accident: Call CHEMTREC

+1.703.741.5970 / 1.800.424.9300

Section 2: Hazards Identification

GHS Classification

Signal Word: Warning.

Hazard pictograms:



Health Hazards:

H317 – May cause an allergic skin reaction

Precautionary Statements

Prevention:

P261 – Avoid breathing mist or spray.

P272 – Contaminated work clothing should not be allowed out of the workplace.

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P280 – Wear protective gloves and clothing, and eye protection.

Response: Not Applicable.

Storage: Not Applicable.

Disposal: Not Applicable.

HMIS:

Health: 1
Flammability: 0
Reactivity: 0

Section 3: Composition/Information on Ingredients

Component	CAS No.	EINECS-No.	Concentration
cfDNA Protease Buffer (contains proclin 300)	Not Available	Not Available	< 0.05%

Section 4: First Aid Measures

Description of First Aid Measures

Skin contact: IF ON SKIN: Wash with plenty of soap and water (P302+P352). Immediately remove any contaminated clothing and cautiously wash affected area with plenty of water for at least 15 minutes. If skin irritation or rash occurs: Get medical attention (P333+P313). Wash clothing and shoes thoroughly before reuse (P363).

Eye contact: May cause irritation with redness, pain or burning. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Consult physician.

Ingestion: Harmful if swallowed. May cause burns. If you feel unwell, seek medical advice.

Inhalation: May be harmful if inhaled. Materials may be destructive to the tissue of the mucous membranes and upper respiratory tract.

Notes to physician: Treat symptomatically.

Indication of any immediate medical attention and special treatment needed: Persons with pre-existing skin disorders or eye problems, or impaired respiratory function may be more susceptible. May cause asthmatic response in person with asthma.

Section 5: Firefighting Measures

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Suitable extinguishing media: Use dry chemical or powder, foam, carbon dioxide or water.

Special hazards arising from the substance or mixture: Not known.

Advice for fire-fighters: Standard procedure for chemical fires.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment.

Environmental precautions: Do not let the material enter drains, or contact surface water or ground water, and do not flush the spill to the sewer.

Methods and material for containment and cleaning up: Contain the spill by surrounding with absorbent or inert material (e.g. vermiculite, dry sand). Do not use combustible materials such as saw dust for containing or absorbing the spill. Do not allow the spill to enter drains or flush to the sewer. Carefully clean up spilled material and place into dry container for disposal.

Reference to other sections: See Sections 8 and 13 for more detail.

Section 7: Handling and Storage

Precautions for safe handling: Prevent generation of mists or fumes. Avoid splashing or forming an aerosol during extraction. Keep away from drains.

Conditions for safe storage, including any incompatibilities: Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s): For in vitro diagnostic use in conjunction with nRichDX Revolution cfDNA Max 20XL, Max 20, and Reagent 0.5 kits.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	EINECS-No
cfDNA Protease Buffer (contains proclin 300)	Not Listed	Not Listed	Not Listed

Exposure Controls

Personal protective equipment: Wear appropriate protective clothing to prevent exposure.

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Respiratory protection: In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Hand protection: Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

Eye protection: Tightly fitting safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance: Clear, liquid.

Odor: No data available.

Odor Threshold: No data available.

pH: No data available.

Melting point/melting range: No data available.

Boiling point/boiling range: No data available.

Flash point: No data available.

Autoignition temperature: No data available.

Decomposition temperature: No data available.

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper explosion limit: No data available.

Lower explosion limit: No data available.

Vapor pressure: No data available.

Relative density: No data available.

Specific gravity: No data available.

Solubility: No data available.

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

Viscosity: No data available.

Explosive properties: No data available.

Oxidizing properties: No data available.

Other information: No data available.

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Section 10: Stability and Reactivity

Reactivity: None known.

Chemical stability: Stable if stored in accordance with information listed in the instructions for use.

Possibility of hazardous reactions: No data available.

Conditions to avoid: No data available.

Incompatible materials: No data available.

Hazardous decomposition products: No data available.

Section 11: Toxicological Information

Information on Toxicological Effects

Chemical Name	LD50 (oral – rat/mouse)	LD50 (dermal – rat/mouse)	LC50 (inhalation – rat/mouse)
cfDNA Protease Buffer (contains proclin 300)	Not available	Not available	Not available

Physical Routes of Exposure

Irritation: Not available.

Corrosivity: Not available.

Sensitization: May cause sensitization by inhalation.

Specific Target Organ Toxicity – single exposure: May cause respiratory irritation.

Specific Target Organ Toxicity – repeated exposure: Not available.

Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Mutagenicity: Not available.

Reproductive toxicity: Not available.

Aspiration hazard: Not available.

Potential adverse human health effects and symptoms: May cause serious eye irritation. May cause skin irritation. May cause allergy or asthma symptoms or breathing

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difficulties if inhaled. Dust from this product may cause respiratory irritation. Ingestion may cause irritation of the gastrointestinal tract.

Section 12: Ecological Information

Ecotoxicity

Chemical Name	Algae Toxicity	Daphnia and Other Aquatic Invertebrates Toxicity	Fish Toxicity	Microtox Data	Log Pow
cfDNA Protease Buffer (contains proclin 300)	Not available	Not available	Not available	Not available	Not available

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Results of PBT and vPvB assessment: Not available.

Other adverse effects: Not available.

Section 13: Disposal Considerations

Waste Treatment Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

Section 14: Transport Information

IAT/ADR/DOT-US/IMDG: Not regulated.

UN number: Not regulated.

UN proper shipping name: Not regulated.

Transport hazard class(es): Not regulated.

Packing group: Not regulated.

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Environmental hazards: Not regulated.

Special precautions for user: Not regulated.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable.

Section 15: Regulatory Information

Component	US TSCA
cfDNA Protease Buffer (contains proclin 300)	Not available

US Federal Regulations

SARA 313: This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):
This product does not contain HAPs.

US State Regulations

California Proposition 65: This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class: Not applicable.

Section 16: Other Information

Reason for revision: Original document

Revision number: A

Revision date: 11-October-2019

Use: For in vitro diagnostic use in conjunction with nRichDX Revolution cfDNA Max 20XL, Max 20, and Reagent 0.5 kits.

References:

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution.

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Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

End of Safety Data Sheet