PD-MSDS-00031

Version : Issue Date: 12/30/2018 4

SAFETY DATA SHEET

MAX Lysis Reagent

Section 1. Identi	fication
GHS product identifier	: MAX Lysis Reagent
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses o	f the substance or mixture and uses advised against
Identified uses	: Chemical Lysis reagent.
Supplier/Manufacturer	 DNA Genotek Inc., a subsidiary of OraSure Technologies, Inc. 3000 - 500 Palladium Drive Ottawa, ON, Canada K2V 1C2 Tel: +1-613-723-5757 Fax: +1-613-723-5057 Toll Free: +1-866-813-6354 (North America) Toll Free: +1-613-723-5757 (all other countries) Email: support@dnagenotek.com Web site: www.dnagenotek.com
Emergency telephone number (with hours of operation)	: For Emergencies involving dangerous goods call Canutec's 24-hour number 613-996-6666 General: Toll Free: +1 866-813-6354
Section 2. Hazar	ds identification
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 SKIN CORROSION/IRRITATION - Category 1C SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (thyroid) - Category 1 AQUATIC HAZARD (ACUTE) - Category 2
GHS label elements Hazard pictograms	
Signal word	: Danger
Hazard statements	 H314 - Causes severe skin burns and eye damage. H372 - Causes damage to organs through prolonged or repeated exposure. (thyroid) H401 - Toxic to aquatic life.
Precautionary statement	<u>S</u>

DNA genotek

......

2018 DNA Genotek Inc., a subsidiary of OraSure Technologies, Inc., 3000 - 500 Palladium Drive, Ottawa, ON, Canada K2V 1C2 Emergency Tel.: 613.996.6666 • Tel.: 613.723.5757 • www.dnagenotek.com

1/11

PD-MSDS-00031

4

Issue Date: 12/30/2018

DNA genotek

Version :

Section 2. Hazards identification

Prevention	 P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing. P273 - Avoid release to the environment. P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.
Response	 P314 - Get medical attention if you feel unwell. P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 + P363 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: P405 - Store locked up.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

Ingredient name	%	CAS number
Inorganic Salt Solution	5 - 10	*

* HMIRA registration number:9574. Filing date: 28/7/2015.

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

DNA genotek

MAX Lysis Reagent

PD-MSDS-00031

Issue Date: 12/30/2018 Ve

Version: 4

Section 4. First aid measures

Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health	effects
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes severe burns.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/s	symptoms
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Indication of immediate	medical attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

DNAgenotek

MAX Lysis Reagent

PD-MSDS-00031

Issue Date: 12/30/2018 Vers

Version: 4

=:::===:

Section 4. First aid measures

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: This material is toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

DNA genotek

MAX Lysis Reagent

PD-MSDS-00031

Issue Date: 12/30/2018

Version: 4

Section 6. Accidental release measures

Spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

United States

Occupational exposure limits

Ingredient name	Exposure limits
Inorganic Salt Solution	None.

<u>Canada</u>

Occupational exposure lim	its
None.	
Appropriate engineering controls	 If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	 Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

PD-MSDS-00031

4

Section 8. Exposure controls/personal protection

DNA genotek

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	 Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	:	Liquid. [Clear.]
Color	:	Colorless.
Odor	:	Odorless.
Odor threshold	:	Not available.
рН	:	4
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.

6/11

DNA genotek

MAX Lysis Reagent

PD-MSDS-00031

Issue Date: 12/30/2018

Version : 4

Section 9. Physical and chemical properties

Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Not available.
Flow time (ISO 2431)	:	Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects Acute toxicity There is no data available. Irritation/Corrosion There is no data available. Sensitization There is no data available. Mutagenicity There is no data available. Carcinogenicity There is no data available. Reproductive toxicity There is no data available. **Teratogenicity** There is no data available. Specific target organ toxicity (single exposure) There is no data available. Specific target organ toxicity (repeated exposure) Name Category Target organs Inorganic Salt Solution Category 1 thyroid

Aspiration hazard

Issue Date: 12/30/2018

Version: 4

DNA genotek

Section 11. Toxicological information

There is no data available.

Information on the likely routes of exposure	:	Dermal contact. Eye contact. Inhalation. Ingestion.	
Potential acute health effects			
Eye contact	:	Causes serious eye damage.	
Inhalation	:	No known significant effects or critical hazards.	
Skin contact	:	Causes severe burns.	
Ingestion	:	No known significant effects or critical hazards.	
Symptoms related to the phy	sic	al, chemical and toxicological characteristics	
Eye contact		Adverse symptoms may include the following: pain watering redness	
Inhalation		No known significant effects or critical hazards.	
Skin contact	:	Adverse symptoms may include the following: pain or irritation redness blistering may occur	
Ingestion	:	Adverse symptoms may include the following: stomach pains	
Delaved and immediate effec	ts a	and also chronic effects from short and long term exposure	
Short term exposure			
Potential immediate effects	:	No known significant effects or critical hazards.	
Potential delayed effects	:	No known significant effects or critical hazards.	
<u>Long term exposure</u>			
Potential immediate effects	:	No known significant effects or critical hazards.	
Potential delayed effects	:	No known significant effects or critical hazards.	
Potential chronic health effects			
General	:	Causes damage to organs through prolonged or repeated exposure.	
Carcinogenicity	:	No known significant effects or critical hazards.	
Mutagenicity	:	No known significant effects or critical hazards.	
Teratogenicity	:	No known significant effects or critical hazards.	
Developmental effects	:	No known significant effects or critical hazards.	
Fertility effects	:	No known significant effects or critical hazards.	

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Issue Date: 12/30/2018

Version: 4

Section 12. Ecological information

<u>Toxicity</u>

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	ΙΑΤΑ
UN number	UN3266	UN3266	UN3266	UN3266
UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Inorganic Salt Solution)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Inorganic Salt Solution)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium periodate)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium periodate)
Transport hazard class(es)	8 Connoste	8	8	8
Packing group	111	111		
Environmental hazards	No.	No.	No.	No.

Additional information

AERG : 154

DNAGENOTEK

MAX Lysis Reagent

PD-MSDS-00031

4

Issue Date: 12/30/2018 Version :

Section 14. Transport information

	•	
TDG Classification	 Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8). 	
IMDG	: <u>Emergency schedules</u> F-A, S-B	
Special precautions for user	r : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	

Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are listed or exempted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List II Chemicals (Essential Chemicals)	: Not listed
<u>SARA 302/304</u>	
Composition/information	on ingredients
No products were found.	
SARA 304 RQ	: Not applicable.
<u>SARA 311/312</u>	
Classification	: SKIN CORROSION/IRRITATION - Category 1C SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (thyroid) - Category 1

Composition/information on ingredients

Name	Classification
	OXIDIZING SOLIDS - Category 1 SKIN CORROSION/IRRITATION - Category 1C SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (thyroid) - Category 1

SARA 313

There is no data available.

State regulations

- Massachusetts : None of the components are listed.
- **New York** : None of the components are listed.
- **New Jersey** : None of the components are listed.

PD-MSDS-00031

11/11

Issue Date: 12/30/2018

Version: 4

Section 15. Regulatory information

Pennsylvania

: None of the components are listed.

California Prop. 65

DNA genotek

This product does not require a Safe Harbor warning under California Prop. 65.

<u>Canada</u>	
<u>Canadian lists</u>	
Canadian NPRI	: None of the components are listed.
CEPA Toxic substances	: None of the components are listed.
Canada inventory (DSL NDSL)	: All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 1C	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (thyroid) - Category	Calculation method
1	
AQUATIC HAZARD (ACUTE) - Category 2	Calculation method

<u>History</u>

Date of issue mm/dd/yyyy	: 12/30/2018
Date of previous issue	: 07/30/2015
Version	: 4
Prepared by	: KMK Regulatory Services Inc.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.