PRO-LAB DIAGNOSTICS

SAFETY DATA SHEET

Prolex™ Streptococcal Grouping Latex Kits

Section 1. Identification

GHS product identifier : Prolex™ Streptococcal Grouping Latex Kits

Other means of identification : Not available.

Trade name :

	Code
Prolex™ *Streptococcal Grouping* Latex Kits:	PL.030 / PL.041
Streptococcal Grouping Reagent Latex Suspension Group A	PL.031
Streptococcal Grouping Reagent Latex Suspension Group B	PL.032
Streptococcal Grouping Reagent Latex Suspension Group C	PL.033
Streptococcal Grouping Reagent Latex Suspension Group D	PL.034
Streptococcal Grouping Reagent Latex Suspension Group F	PL.035
Streptococcal Grouping Reagent Latex Suspension Group G	PL.036
Streptococcal Grouping Reagent Extraction Reagent 1	PL.037
Streptococcal Grouping Reagent Extraction Reagent 2	PL.038
Streptococcal Grouping Reagent Extraction Reagent 3	PL.039
Streptococcal Grouping Reagent Positive Control	PL.040

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Provides a rapid method for the serological identification of groups A, B, C, D, F and G of the Lancefield groups of streptococci grown on agar plates.

Supplier's details :

Pro-Lab Diagnostics
20 Mural Street, Unit 4
Richmond Hill, ON
Canada L4B 1K3
Tel: +1-905-731-0300
Fax: +1-905-731-0206
www.pro-lab.com

Emergency telephone number (with hours of operation) : 905-731-0300 –Monday to Friday 8:30 am to 5:00 pm Eastern Standard Time.
416-230-0692 –Outside the above hours.

Section 2. Hazards 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 :

PL.031	Not classified.
PL.032	Not classified.
PL.033	Not classified.
PL.034	Not classified.
PL.035	Not classified.
PL.036	Not classified.
PL.037	OXIDIZING LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 CARCINOGENICITY - Category 1B AQUATIC HAZARD (ACUTE) - Category 1
PL.038	CORROSIVE TO METALS - Category 1 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1
PL.039	SKIN IRRITATION - Category 2

Section 2. Hazards identification

EYE IRRITATION - Category 2A

PL.040 Not classified.

GHS label elements

Hazard pictograms :



Signal word :

PL.031	No signal word.
PL.032	No signal word.
PL.033	No signal word.
PL.034	No signal word.
PL.035	No signal word.
PL.036	No signal word.
PL.037	Danger
PL.038	Danger
PL.039	Warning
PL.040	No signal word.

Hazard statements :

PL.031	No known significant effects or critical hazards.
PL.032	No known significant effects or critical hazards.
PL.033	No known significant effects or critical hazards.
PL.034	No known significant effects or critical hazards.
PL.035	No known significant effects or critical hazards.
PL.036	No known significant effects or critical hazards.
PL.037	May intensify fire; oxidizer. Harmful if swallowed. May cause cancer. Very toxic to aquatic life.
PL.038	May be corrosive to metals. Causes severe skin burns and eye damage.
PL.039	Causes serious eye irritation. Causes skin irritation.
PL.040	No known significant effects or critical hazards.

Precautionary statements

Prevention :

P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
P234 - Keep only in original container.
P273 - Avoid release to the environment.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.

Response :

P391 - Collect spillage.
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.
P406 - Store in a corrosion resistant container with a resistant inner liner.

Section 2. Hazards identification

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification/ HHNOC/PHNOC : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

Product code : PL.030/PL.041

Ingredient name	%	CAS number
Streptococcal Grouping Reagent Latex Suspension Group A - PL.031		
Boric acid	≤0.3	10043-35-3
Streptococcal Grouping Reagent Latex Suspension Group B - PL.032		
Boric acid	≤0.3	10043-35-3
Streptococcal Grouping Reagent Latex Suspension Group C - PL.033		
Boric acid	≤0.3	10043-35-3
Streptococcal Grouping Reagent Latex Suspension Group D - PL.034		
Boric acid	≤0.3	10043-35-3
Streptococcal Grouping Reagent Latex Suspension Group F - PL.035		
Boric acid	≤0.3	10043-35-3
Streptococcal Grouping Reagent Latex Suspension Group G - PL.036		
Boric acid	≤0.3	10043-35-3
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037		
Sodium nitrite	≥5 - <10	7632-00-0
Streptococcal Grouping Reagent Extraction Reagent 2 - PL.038		
Acetic acid	<25	64-19-7
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039		
Trometamol	≥10 - ≤25	77-86-1
Polyethylene Glycol	≥3 - ≤5	25322-68-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Section 4. First aid measures

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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 : Wash out mouth with water. 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. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact :

PL.031	No known significant effects or critical hazards.
PL.032	No known significant effects or critical hazards.
PL.033	No known significant effects or critical hazards.
PL.034	No known significant effects or critical hazards.
PL.035	No known significant effects or critical hazards.
PL.036	No known significant effects or critical hazards.
PL.037	No known significant effects or critical hazards.
PL.038	Causes serious eye damage.
PL.039	Causes serious eye irritation.
PL.040	No known significant effects or critical hazards.

Inhalation :

PL.031	No known significant effects or critical hazards.
PL.032	No known significant effects or critical hazards.
PL.033	No known significant effects or critical hazards.
PL.034	No known significant effects or critical hazards.
PL.035	No known significant effects or critical hazards.
PL.036	No known significant effects or critical hazards.
PL.037	No known significant effects or critical hazards.
PL.038	No known significant effects or critical hazards.
PL.039	No known significant effects or critical hazards.
PL.040	No known significant effects or critical hazards.

Skin contact :

PL.031	No known significant effects or critical hazards.
PL.032	No known significant effects or critical hazards.
PL.033	No known significant effects or critical hazards.
PL.034	No known significant effects or critical hazards.
PL.035	No known significant effects or critical hazards.
PL.036	No known significant effects or critical hazards.
PL.037	No known significant effects or critical hazards.
PL.038	Causes severe burns.
PL.039	Causes skin irritation.
PL.040	No known significant effects or critical hazards.

Section 4. First aid measures

Ingestion :

PL.031	No known significant effects or critical hazards.
PL.032	No known significant effects or critical hazards.
PL.033	No known significant effects or critical hazards.
PL.034	No known significant effects or critical hazards.
PL.035	No known significant effects or critical hazards.
PL.036	No known significant effects or critical hazards.
PL.037	Harmful if swallowed.
PL.038	No known significant effects or critical hazards.
PL.039	No known significant effects or critical hazards.
PL.040	No known significant effects or critical hazards.

Over-exposure signs/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 : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

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 very 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:
carbon dioxide
carbon monoxide
nitrogen oxides

Special protective actions for fire-fighters : No special measures are required.

Section 5. Fire-fighting measures

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. Collect spillage.

Methods and materials for containment and cleaning up

Spill : Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. 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. Absorb spillage to prevent material damage.

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. 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. Store between the following temperatures: 2ºC (36ºF) to 8ºC (46ºF).

Section 8. Exposure controls/personal protection

Control parameters

United States

Occupational exposure limits

Ingredient name	Exposure limits
Streptococcal Grouping Reagent Latex Suspension Group A to G - PL. 031 to PL.036	
Boric acid	**ACGIH TLV (United States, 3/2015).** STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction
Streptococcal Grouping Reagent Extraction Reagent 2 - PL.038	
Acetic acid	**ACGIH TLV (United States, 3/2015).** STEL: 37 mg/m³ 15 minutes. STEL: 15 ppm 15 minutes. TWA: 25 mg/m³ 8 hours. TWA: 10 ppm 8 hours. **NIOSH REL (United States, 10/2013).** STEL: 37 mg/m³ 15 minutes. STEL: 15 ppm 15 minutes. TWA: 25 mg/m³ 10 hours. TWA: 10 ppm 10 hours. **OSHA PEL (United States, 2/2013).** TWA: 25 mg/m³ 8 hours. TWA: 10 ppm 8 hours.
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039	
Trometamol	None.
Polyethylene Glycol	**AIHA WEEL (United States, 10/2011).** TWA: 10 mg/m³ 8 hours. Form: Aerosol.

Canada

Occupational exposure limits

Ingredient name	Exposure limits
Streptococcal Grouping Reagent Latex Suspension Group A to G - PL.031 to PL.036	
Boric acid	**CA British Columbia Provincial (Canada, 5/2015).** TWA: 2 mg/m³ 8 hours. Form: Inhalable STEL: 6 mg/m³ 15 minutes. Form: Inhalable **CA Ontario Provincial (Canada, 7/2015).** TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction **CA Saskatchewan Provincial (Canada).** STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction
Streptococcal Grouping Reagent Extraction Reagent 2 - PL.038	
Acetic acid	**CA Alberta Provincial (Canada, 4/2009).** 8 hrs OEL: 10 ppm 8 hours. 8 hrs OEL: 25 mg/m³ 8 hours. 15 min OEL: 37 mg/m³ 15 minutes. 15 min OEL: 15 ppm 15 minutes. **CA British Columbia Provincial (Canada, 5/2015).** TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. **CA Ontario Provincial (Canada, 7/2015).** TWA: 10 ppm 8 hours. TWA: 25 mg/m³ 8 hours. STEL: 15 ppm 15 minutes. STEL: 37 mg/m³ 15 minutes. **CA Quebec Provincial (Canada, 1/2014).** TWAEV: 10 ppm 8 hours. TWAEV: 25 mg/m³ 8 hours. STEV: 15 ppm 15 minutes. STEV: 37 mg/m³ 15 minutes. **CA Saskatchewan Provincial (Canada).**

Section 8. Exposure controls/personal protection

	STEL: 15 ppm 15 minutes. TWA: 10 ppm 8 hours.
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039 Polyethylene Glycol	**AIHA WEEL (United States, 10/2011).** TWA: 10 mg/m³ 8 hours. Form: Aerosol.

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

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

Appearance

Physical state :

PL.031	Liquid. [Suspension.]
PL.032	Liquid. [Suspension.]
PL.033	Liquid. [Suspension.]
PL.034	Liquid. [Suspension.]
PL.035	Liquid. [Suspension.]
PL.036	Liquid. [Suspension.]
PL.037	Liquid. [Solution.]
PL.038	Liquid. [Solution.]
PL.039	Liquid. [Solution.]

Section 9. Physical and chemical properties

		PL.040	Liquid. [Solution.]
Color	:	**PL.031**	Blue.
		PL.032	Blue.
		PL.033	Blue.
		PL.034	Blue.
		PL.035	Blue.
		PL.036	Blue.
		PL.037	Yellow, transparent.
		PL.038	Red, transparent.
		PL.039	Blue, transparent.
		PL.040	Colorless, clear.
Odor	:	Not available.	
Odor threshold	:	Not available.	
pH	:	**PL.031**	8
		PL.032	8
		PL.033	8
		PL.034	8
		PL.035	8
		PL.036	8
		PL.037	7.5
		PL.038	2
		PL.039	7.8
		PL.040	6 to 7
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	:	Miscible in water.	
Partition coefficient: n-octanol/water	:	Not available.	
Auto-ignition temperature	:	Not available.	
Decomposition temperature	:	Not available.	
Viscosity	:	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.

Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials and acids.

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

Product/ingredient name	Result	Species	Dose	Exposure
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037				
Sodium nitrite	LD50 Oral	Rat	85 mg/kg	-
Streptococcal Grouping Reagent Extraction Reagent 2 - PL.038				
Acetic acid	LC50 Inhalation Vapor	Rat	11000 mg/m³	4 hours
	LD50 Dermal	Rabbit	1060 mg/kg	-
	LD50 Oral	Rat	3310 mg/kg	-
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039				
Trometamol	LD50 Oral	Mouse	5500 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Streptococcal Grouping Reagent Latex Suspension Group A to G - PL.031 to PL.036					
Boric acid	Skin - Mild irritant	Human	-	72 hours 15 mg Intermittent	-
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037					
Sodium nitrite	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
Streptococcal Grouping Reagent Extraction Reagent 2 - PL.038					
Acetic acid	Eyes - Mild irritant	Rabbit	-	0.5 minutes 5 mg	-
	Skin - Mild irritant	Human	-	24 hours 50 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 50 mg	-
	Skin - Severe irritant	Rabbit	-	525 mg	-
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039					
Trometamol	Skin - Moderate irritant	Rabbit	-	25%	-
	Skin - Severe irritant	Rabbit	-	500 mg	-
	Skin - Moderate irritant	Woman	-	1%	-
Polyethylene Glycol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

Classification

Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Sodium nitrite	-	2A	-	-	-	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039 Polyethylene Glycol	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact :

PL.031	No known significant effects or critical hazards.
PL.032	No known significant effects or critical hazards.
PL.033	No known significant effects or critical hazards.
PL.034	No known significant effects or critical hazards.
PL.035	No known significant effects or critical hazards.
PL.036	No known significant effects or critical hazards.
PL.037	No known significant effects or critical hazards.
PL.038	Causes serious eye damage.
PL.039	Causes serious eye irritation.
PL.040	No known significant effects or critical hazards.

Inhalation :

PL.031	No known significant effects or critical hazards.
PL.032	No known significant effects or critical hazards.
PL.033	No known significant effects or critical hazards.
PL.034	No known significant effects or critical hazards.
PL.035	No known significant effects or critical hazards.
PL.036	No known significant effects or critical hazards.
PL.037	No known significant effects or critical hazards.
PL.038	No known significant effects or critical hazards.
PL.039	No known significant effects or critical hazards.
PL.040	No known significant effects or critical hazards.

Skin contact :

PL.031	No known significant effects or critical hazards.
PL.032	No known significant effects or critical hazards.
PL.033	No known significant effects or critical hazards.
PL.034	No known significant effects or critical hazards.
PL.035	No known significant effects or critical hazards.
PL.036	No known significant effects or critical hazards.
PL.037	No known significant effects or critical hazards.
PL.038	Causes severe burns.
PL.039	Causes skin irritation.
PL.040	No known significant effects or critical hazards.

Section 11. Toxicological information

Ingestion :

PL.031	No known significant effects or critical hazards.
PL.032	No known significant effects or critical hazards.
PL.033	No known significant effects or critical hazards.
PL.034	No known significant effects or critical hazards.
PL.035	No known significant effects or critical hazards.
PL.036	No known significant effects or critical hazards.
PL.037	Harmful if swallowed.
PL.038	No known significant effects or critical hazards.
PL.039	No known significant effects or critical hazards.
PL.040	No known significant effects or critical hazards.

Symptoms related to the physical, 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

Delayed and immediate effects 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.

Long term exposure

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 : No known significant effects or critical hazards.

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

Route	ATE value
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037 Oral	944.4 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Streptococcal Grouping Reagent Latex Suspension Group A to G - PL.031 to PL.036			
Boric acid	Acute LC50 45.5 mg/L Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 133000 µg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 75 mg/L Marine water	Fish - Pagrus major	96 hours
	Chronic NOEC 6000 µg/L Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 2100 µg/L Fresh water	Fish - Oncorhynchus mykiss	87 days
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037			
Sodium nitrite	Acute EC50 159000 µg/L Marine water	Algae - Tetraselmis chuii	72 hours
	Acute EC50 1600000 µg/L Marine water	Algae - Tetraselmis chuii	96 hours
	Acute LC50 1100 µg/L Fresh water	Crustaceans - Cherax quadricarinatus	48 hours
	Acute LC50 48 µg/L Fresh water	Fish - Ictalurus punctatus - Fingerling	96 hours
	Chronic NOEC 0.912 mg/L Marine water	Fish - Hippocampus abdominalis - Juvenile (Fledgling, Hatchling, Weanling)	35 days
Streptococcal Grouping Reagent Extraction Reagent 2 - PL.038			
Acetic acid	Acute EC50 73400 µg/L Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 65000 µg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 50.1 ul/L Marine water	Crustaceans - Artemia sp.	48 hours
	Acute LC50 75000 µg/L Fresh water	Fish - Lepomis macrochirus	96 hours
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039			
Polyethylene Glycol	Acute LC50 >1000000 µg/L Fresh water	Fish - Salmo salar - Parr	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037			
Sodium nitrite	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Streptococcal Grouping Reagent Latex Suspension Group A to G - PL.031 to PL.036			
Boric acid	-1.09	-	low
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037			
Sodium nitrite	-3.7	-	low
Streptococcal Grouping Reagent Extraction Reagent 2 - PL.038			
Acetic acid	-0.17	3.16	low
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039			
Polyethylene Glycol	-	3.2	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : There is no data available.

Section 12. Ecological information

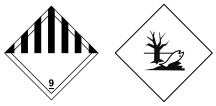
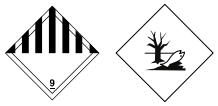
Mobility : There is no data available.

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	TDG	IMDG	IATA
UN number	UN3316	UN3316	UN3316	UN3316
UN proper shipping name	CHEMICAL KIT. RQ (Sodium nitrite)	CHEMICAL KIT. Marine pollutant (Sodium nitrite)	CHEMICAL KIT. Marine pollutant (Sodium nitrite)	CHEMICAL KIT
Transport hazard class(es)	9 	9 	9 	9 
Packing group	-	-	-	-
Environmental hazards	No	Yes.	Yes.	No.
Additional information	**Remarks** Limited Quantity Exemption	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail. **Remarks** Limited Quantity Exemption	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Emergency schedules (EmS)** F-A, S-P **Remarks** Limited Quantity Exemption	The environmentally hazardous substance mark may appear if required by other transportation regulations. **Remarks** Limited Quantity Exemption

AERG : 171

DOT-RQ Details : **Streptococcal Grouping Reagent Extraction Reagent 1-PL.037**

Sodium nitrite 100 lbs / 45.4 kg

Section 14. Transport information

Special precautions for user : **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 5(a)2 final significant new use rules**: Sodium nitrite

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

Clean Water Act (CWA) 311: Sodium phosphate, dibasic; Acetic acid; Sodium nitrite

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : 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

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Streptococcal Grouping Reagent Latex Suspension Group A - PL.031						
Sodium azide	<0.1	Yes.	500	-	1000	-
Streptococcal Grouping Reagent Latex Suspension Group B - PL.032						
Sodium azide	<0.1	Yes.	500	-	1000	-
Streptococcal Grouping Reagent Latex Suspension Group C - PL.033						
Sodium azide	<0.1	Yes.	500	-	1000	-
Streptococcal Grouping Reagent Latex Suspension Group D - PL.034						
Sodium azide	<0.1	Yes.	500	-	1000	-
Streptococcal Grouping Reagent Latex Suspension Group F - PL.035						
Sodium azide	<0.1	Yes.	500	-	1000	-
Streptococcal Grouping Reagent Latex Suspension Group G - PL.036						
Sodium azide	<0.1	Yes.	500	-	1000	-
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037						
Sodium azide	<0.1	Yes.	500	-	1000	-
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039						

Section 15. Regulatory information

Sodium azide	<0.1	Yes.	500	-	1000	-
Streptococcal Grouping Reagent Positive Control - PL.040						
Sodium azide	<0.1	Yes.	500	-	1000	-

SARA 304 RQ : 1103706.8 lbs / 501082.9 kg

SARA 311/312

Classification : Reactive
Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Streptococcal Grouping Reagent Latex Suspension Group A - PL.031						
Boric acid	≤0.3	No.	No.	No.	No.	Yes.
Streptococcal Grouping Reagent Latex Suspension Group B - PL.032						
Boric acid	≤0.3	No.	No.	No.	No.	Yes.
Streptococcal Grouping Reagent Latex Suspension Group C - PL.033						
Boric acid	≤0.3	No.	No.	No.	No.	Yes.
Streptococcal Grouping Reagent Latex Suspension Group D - PL.034						
Boric acid	≤0.3	No.	No.	No.	No.	Yes.
Streptococcal Grouping Reagent Latex Suspension Group F - PL.035						
Boric acid	≤0.3	No.	No.	No.	No.	Yes.
Streptococcal Grouping Reagent Latex Suspension Group G - PL.036						
Boric acid	≤0.3	No.	No.	No.	No.	Yes.
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037						
Sodium nitrite	≥5 - <10	Yes.	No.	No.	Yes.	No.
Streptococcal Grouping Reagent Extraction Reagent 2 - PL.038						
Acetic acid	<25	Yes.	No.	No.	Yes.	No.
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039						
Trometamol	≥10 - ≤25	No.	No.	No.	Yes.	No.
Polyethylene Glycol	≥3 - ≤5	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Sodium nitrite	7632-00-0	≥5 - <10
Supplier notification	Sodium nitrite	7632-00-0	≥5 - <10

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : None of the components are listed.

Section 15. Regulatory information

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Methanol	No.	Yes.	No.	No.

Canada

Canadian lists

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

Canada inventory : All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Streptococcal Grouping Reagent Extraction Reagent 1- PL.037	
OXIDIZING LIQUIDS - Category 3	Expert judgment
ACUTE TOXICITY (oral) - Category 4	Calculation method
CARCINOGENICITY - Category 1B	Expert judgment
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
Streptococcal Grouping Reagent Extraction Reagent 2 - PL.038	
CORROSIVE TO METALS - Category 1	Expert judgment
SKIN CORROSION - Category 1	Expert judgment
SERIOUS EYE DAMAGE - Category 1	Expert judgment
Streptococcal Grouping Reagent Extraction Reagent 3 - PL.039	
SKIN IRRITATION - Category 2	Expert judgment
EYE IRRITATION - Category 2A	Expert judgment

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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.