

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF SUBSTANCE

Product Identifier: **PerfeCTa MultiPlex qPCR ToughMix (5X)**
 Product Code(s): Catalog numbers: 95147-250; 95147-01K; 95147-05K
 Part Numbers: 84263; 84264

General Use: Laboratory reagent
 For Research Use Only, Not for Use in Diagnostic Procedures

MSDS Issue Date: 6 June, 2013

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SECTION 2 – HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

No classification is assigned based on classification criteria.
 Review the entire data sheet for any additional information which did not result in a classification.

GHS LABEL ELEMENTS

Symbol(s)
 None needed according to classification criteria.

Signal Word
 None needed according to classification criteria.

Hazard Statement(s)
 None needed according to classification criteria.

Precautionary Statement(s)
Prevention
 None needed according to classification criteria.

Response
 None needed according to classification criteria.

Storage
 None needed according to classification criteria.

Disposal
 None needed according to classification criteria.

SECTION 3 – COMPOSITION/DATA ON COMPONENTS

CAS	Component	Percent
57-55-6	1,2-Propylene glycol	10-30
56-81-5	Glycerin	1-5

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SECTION 4 - FIRST AID MEASURES

Description of Necessary Measures

Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

Skin Contact

Wash with plenty of soap and water. Get medical attention if irritation develops or persists.

Eye Contact

Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Ingestion

It is unlikely that first aid will be required. If a large amount is ingested, seek medical attention.

Most Important Symptoms/Effects

Acute

No information on significant adverse effects.

Delayed

No information on significant adverse effects.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

regular dry powder, carbon dioxide, water spray, alcohol resistant foam

Unsuitable Extinguishing Media

None known.

Special Hazards Arising from the Chemical

Hazardous Combustion Products

Combustion: oxides of carbon

Special Protective Equipment and Precautions for Firefighters

Slight fire hazard. Fire fighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.

Sensitivity to Mechanical Impact

No

Sensitivity to Static Discharge

No

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment.

Methods and Materials for Containment and Cleaning Up

Collect with appropriate absorbent and place into suitable container. Keep out of water supplies and sewers.

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing vapor or mist. Avoid contact with skin and eyes. Wash thoroughly after handling. Use only in well ventilated areas. Use in accordance with good industrial hygiene practices.

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Conditions for Safe Storage, including any Incompatibilities

Store and handle in accordance with all current regulations and standards. Store at -20 °C. Store in a cool, dry place. Store in a well-ventilated area. Keep away from heat. Keep container tightly closed. Keep away from food, drink and animal feed. Keep separated from incompatible substances.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Glycerin (56-81-5)

OSHA: 15 mg/m³ TWA (mist, total particulate); 5 mg/m³ TWA (mist, respirable fraction)

Mexico 10 mg/m³ TWA LMPE-PPT (mist)

Biological Exposure Limits

There are no biological limit values for any of this product's components.

Appropriate Engineering Controls

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eyes/Face Protection

Wear chemical safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

Wear appropriate chemical resistant clothing.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Respiratory Protection

Respiratory protection is not required under normal conditions of use.

If ventilation is not sufficient to effectively prevent buildup of mists or vapors, appropriate respiratory protection must be provided.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Appearance:	clear liquid
Color:	Clear	Physical Form:	liquid
Odor:	odorless	Odor Threshold:	Not available
pH:	8.65	Melting Point:	Not available
Boiling Point:	100 °C	Decomposition Temperature:	Not available
Flammability (solid, gas)	Not applicable	Flash Point:	No data available
Evaporation Rate:	Not available	Lower Explosive Limit:	Not available
Upper Explosive Limit:	Not available	Auto Ignition Temperature:	Not available
Vapor Pressure:	23 hPa @ 20 °C	Vapor Density (air = 1):	Not available
Density:	1.9 g/ml	Specific Gravity (water = 1):	Not available
Water Solubility:	Soluble	Coeff. Water/Oil Dist:	Not available
Viscosity:	Not available	Volatility:	Not available
Oxidizing Properties:	Not available		

SECTION 10 – STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

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Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Prolonged storage above -20 °C. Avoid excessive heat and ignition sources. Avoid contact with incompatible materials.

Incompatible Materials

strong oxidizing materials

Hazardous Decomposition

Combustion: oxides of carbon

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity

May cause respiratory tract irritation. May cause irritation of the skin and eyes.

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

1,2-Propylene glycol (57-55-6)

Dermal LD50 Rabbit 20800 mg/kg; Oral LD50 Rat 20000 mg/kg

Glycerin (56-81-5)

Dermal LD50 Rabbit >10 g/kg; Inhalation LC50 Rat >570 mg/m3 1 h

Information on Likely Routes of Exposure

Inhalation

May cause respiratory tract irritation.

Ingestion

No information on significant adverse effects.

Skin Contact

May cause irritation.

Eye Contact

May cause irritation.

Immediate Effects

respiratory tract irritation, skin irritation, eye irritation

Delayed Effects

No information on significant adverse effects.

Medical Conditions Aggravated by Exposure

None known.

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Germ Cell Mutagenicity

No data available.

Carcinogenicity

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity - Single Exposure

No significant target organ effects reported.

Specific Target Organ Toxicity - Repeated Exposure

No significant target organ effects reported.

Aspiration Hazard

No data available.

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SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity

May be harmful to aquatic life.

Component Analysis - Aquatic Toxicity

1,2-Propylene glycol (57-55-6)

Fish: 96 Hr LC50 Oncorhynchus mykiss: 51600 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 41 - 47 mL/L [static]; 96 Hr LC50 Pimephales promelas: 51400 mg/L [static]; 96 Hr LC50 Pimephales promelas: 710 mg/L

Algae: 96 Hr EC50 Pseudokirchneriella subcapitata: 19000 mg/L

Invertebrate: 24 Hr EC50 Daphnia magna: >10000 mg/L; 48 Hr EC50 Daphnia magna: >1000 mg/L [Static]

Glycerin (56-81-5)

Fish: 96 Hr LC50 Oncorhynchus mykiss: 51 - 57 mL/L [static]

Invertebrate: 24 Hr EC50 Daphnia magna: >500 mg/L

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Ecological Information

Keep out of water supplies and sewers

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with all applicable regulations. Reprocess whenever possible.

Disposal of Contaminated Packaging

Recycle if possible.

SECTION 14 – TRANSPORT INFORMATION

US DOT Information

Not regulated as a hazardous material.

TDG Information

Not regulated as dangerous goods.

SECTION 15 – REGULATORY INFORMATION

U.S. Federal Regulations

Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312

Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No

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U.S. State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
1,2-Propylene glycol	57-55-6	No	No	Yes	Yes	Yes
Glycerin	56-81-5	No	Yes	Yes	Yes	Yes

Not regulated under California Proposition 65

Canada Regulations

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS CLASSIFICATION: Uncontrolled product according to WHMIS classification criteria

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL.

1,2-Propylene glycol (57-55-6)

1 %

Inventory

For research and development purposes only.

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
1,2-Propylene glycol	57-55-6	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Glycerin	56-81-5	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes

SECTION 16 – OTHER INFORMATION

History

Revision 1.0000, 6 June 2013: original

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; CAS - Chemical Abstracts Service; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; Kow - Octanol/water partition coefficient; LEL - Lower Explosive Limit; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NIOSH - National Institute for Occupational Safety and Health; NTP = National Toxicology Program; RID - European Rail Transport; STEL - Short-term Exposure Limit; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UEL - Upper Explosive Limit

Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

For research and development purposes only.

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