MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF SUBSTANCE
Product Identifier: PerfeCt™ PreAmp SuperMix
Product Code(s): Catalog numbers: 95146-005; 95146-040
Part Numbers: 84261; 84262

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

MSDS Issue Date: 26 November, 2012

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SECTION 2 – COMPOSITION/DATA ON COMPONENTS

Chemical characterization
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

77-81-1 Tris(hydroxymethyl) aminomethane 1.0-2.5%

SECTION 3 – HAZARDS IDENTIFICATION

Hazard description: Not applicable
Information pertaining to particular dangers for man or environment:
The product does not have to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

NFPA ratings (scale 0 – 4)
Health = 0
Fire = 0
Reactivity = 0

WHMIS-ratings (scale (0 – 4)
Health = 0
Fire = 0
Reactivity = 0

SECTION 4 - FIRST AID MEASURES

EYES: Immediately flush with contaminated eye(s) with lukewarm, gently flowing water for at least 5 minutes, while holding the eyelids(s) open. Remove any contact lenses

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and continue rinsing. Get medical attention if irritation persists after washing.

SKIN: Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. If irritation develops and persists, get medical attention.

INGESTION: Rinse mouth thoroughly with water. If large amounts have been ingested, give 2 to 8 ounces of water. Get medical attention immediately.

INHALATION: If symptoms are experienced, remove source of contamination or move victim to fresh air. Obtain medical advice.

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment: No special measures required.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Person-related safety precautions Use personal protective equipment.

Measures for environmental protection Do not allow to enter sewer/ surface or ground water.

Methods for cleaning/collecting up Soak up with inert absorbent material.

SECTION 7 - HANDLING AND STORAGE

Handling Procedures Keep receptacles tightly sealed. Local exhaust is recommended. Avoid inhalation of vapors and spray mist and contact with skin and eyes. Wear approved safety goggles. Wear protective gloves and appropriate clothing to prevent skin contact. Observe good industrial hygiene practices.

Storage Procedures Store at -20°C in closed original container. Keep away from food, drink and animal feeding stuffs.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional Information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional Information: the lists valid during the making were used a basis.

Engineering controls: Use in well-ventilated area with mechanical exhaust when operations cause vapour or aerosol formation.

Personal Protective Equipment:

General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

Protection of hands: Use protective gloves.

Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the
Penetration time of glove material: The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Use safety glasses.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**General Information**

- **Form:** Light blue liquid
- **Colour:** According to product specification
- **Odour:** Characteristic
- **Melting/freezing point:** Undetermined
- **Initial boiling point & boiling range:** 100°C (212 °F)
- **Flash point:** Not applicable
- **Self-igniting:** Product is not self-igniting
- **Danger of explosion:** Product does not present an explosion hazard
- **Vapour pressure at 20°C:** 23 hPa
- **Density:** Not determined
- **Solubility in / Miscibility with water:** Fully miscible

### SECTION 10 – STABILITY AND REACTIVITY

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous decomposition products:** No dangerous decomposition products known.

### SECTION 11 – TOXICOLOGICAL INFORMATION

- **Acute toxicity:**
- **Primary irritant effect:**
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
  The product is not subject to classification according to internally approved calculation methods for preparations.

### SECTION 12 – ECOLOGICAL INFORMATION

- **General notes:**
  Water hazard class 1 (Self-assessment): slightly hazardous for water
  Do not allow product to reach ground water, water course or sewage system.

### SECTION 13 – DISPOSAL CONSIDERATIONS

- **Product:**
- **Recommendation:**
  Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

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Recommendation: disposal must be made according to official regulations.

SECTION 14 – TRANSPORT INFORMATION

DOT regulations:
Hazard class: -

Land transport ADR/RID (cross-border):
ADR/RID class: -

Maritime transport IMDG:
IMDG Class: -
Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:
ICACA/IATA Class: -

SECTION 15 – REGULATORY INFORMATION

Sara
Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.

TSCA (Toxic Substances Control Act):
Proposition 65
Chemicals known to cause cancer):
None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.
Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Cancerogenity categories
EPA (Environmental Protection Agency)
None of the ingredients is listed.
IARC (International Agency for Research on Cancer)
None of the ingredients is listed.
NTP (National Toxicology Program)
None of the ingredients is listed.
TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.
MAK (German Maximum Workplace Concentration)
None of the ingredients is listed.
NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.
OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

Product related hazard informations:
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations according to directives on hazardous materials.

National regulations:
Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

SECTION 16 – 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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