SAFETY DATA SHEET

rNTP Mix


1. Identification

Product identifier
Product name       rNTP Mix
Product number     10006982

Recommended use of the chemical and restrictions on use
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet
Supplier               Integrated DNA Technologies
                        1710 Commercial Park
                        Coralville Iowa, 52241
                        41 Science Park Road
                        #01-28 The Gemini
                        Singapore Science Park II
                        Singapore 117610
                        Republic of Singapore
                        Interleuvenlaan 12A
                        B-3001 Leuven
                        Belgium
                        6828 Nancy Ridge Drive
                        San Diego, California 92121
                        USA
                        custcare@idtdna.com

Manufacturer           Integrated DNA Technologies
                        1710 Commercial Park
                        Coralville Iowa, 52241
                        41 Science Park Road
                        #01-28 The Gemini
                        Singapore Science Park II
                        Singapore 117610
                        Republic of Singapore
                        Interleuvenlaan 12A
                        B-3001 Leuven
                        Belgium
                        6828 Nancy Ridge Drive
                        San Diego, California 92121
                        USA
                        custcare@idtdna.com

Emergency telephone number
Emergency telephone    ChemTrec 800-424-9300
2. Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory Status
This Product is Not Hazardous under the OSHA Hazard Communication Standard.

Indelign (classification)
THIS PRODUCT IS CONSIDERED NON-HAZARDOUS. Per OSHA 29CFR1910.1200, Commonwealth of Australia [NOHSC: 1005, 1008(1999)], and the latest amendments to the European Union Directives (EC) No 1907/2006 and (EC) No 2015/830, this product does not require a Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS). This product does not contain more than 1% of a component classified as hazardous and does not contain more than 0.1% of a component classified as carcinogenic. This product is non-hazardous according to Regulation (EC) No 1272/2008. Despite the classification of certain products/components as non-hazardous, we strongly recommend using prudent laboratory practices: avoiding unnecessary contact and use of personal protective equipment, which may include gloves, eye protection, and lab coats, during the use of any laboratory reagent. IDT shall not be held liable for any damages resulting from handling or from contact with the above product.

Other hazards
This substance is not classified as PBT or vPvB according to current EU criteria.

3. Composition/information on ingredients

Substances
Product name rNTP Mix

4. First-aid measures

Description of first aid measures
General information
If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

Inhalation
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.

Ingestion
Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.

Skin Contact
Rinse with water.

Eye contact
Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.

Protection of first aiders
First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed
General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
No specific symptoms known.

Ingestion
No specific symptoms known.

Skin contact
No specific symptoms known.

Eye contact
No specific symptoms known. May be slightly irritating to eyes.

Indication of immediate medical attention and special treatment needed
Notes for the doctor
Treat symptomatically.

Specific treatments
No special treatment required.

5. Fire-fighting measures

Extinguishing media
Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
rNTP Mix

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture:

Specific hazards: None known.

Hazardous combustion products: Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

Advice for firefighters:

Protective actions during firefighting:
Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak.

Special protective equipment for firefighters:
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Personal precautions:
Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material.

Environmental precautions:
Avoid discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up:

Methods for cleaning up:
Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

Reference to other sections:
For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling:

Usage precautions:
Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs.

Advice on general occupational hygiene:
Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities:

Storage precautions:
Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

Storage class:
Unspecified storage.

Specific end uses(s):
The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Exposure controls:
rNTP Mix

Protective equipment

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection  Wear eye protection.

Hand protection  Wear protective gloves.

Other skin and body protection  Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures  Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

Respiratory protection  Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

Environmental exposure controls  Keep container tightly sealed when not in use.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance  Liquid.
Color  Colorless.
Odor  Mild.
Odor threshold  Not available.
pH  Not available.
Melting point  Not available.
Initial boiling point and range  Not available.
Flash point  No specific test data are available.
Evaporation rate  Not available.
Evaporation factor  Not available.
Flammability (solid, gas)  Not available.
Upper/lower flammability or explosive limits  Not available.
Other flammability  Not available.
Vapor pressure  Not available.
Vapor density  Not available.
Relative density  Not available.
Bulk density  Not available.
Solubility(ies)  Not available.
Partition coefficient  Not available.
Auto-ignition temperature  Not available.
Decomposition Temperature  Not available.
Viscosity  Not available.
### 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive properties</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive under the influence of a flame</td>
<td>Not considered to be explosive.</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

#### Reactivity

See the other subsections of this section for further details.

#### Stability

Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

#### Possibility of hazardous reactions

No potentially hazardous reactions known.

#### Conditions to avoid

There are no known conditions that are likely to result in a hazardous situation.

#### Materials to avoid

No specific material or group of materials is likely to react with the product to produce a hazardous situation.

#### Hazardous decomposition products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

### 11. Toxicological information

#### Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification criteria not met based on available data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicological effects</td>
<td>Not regarded as a health hazard under current legislation.</td>
</tr>
<tr>
<td>Acute toxicity - oral</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Notes (oral LD₅₀)</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Acute toxicity - dermal</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Notes (dermal LD₅₀)</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Acute toxicity - inhalation</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Notes (inhalation LC₅₀)</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Animal data</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Genotoxicity - in vitro</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>None of the ingredients are listed or exempt.</td>
</tr>
<tr>
<td>IARC carcinogenicity</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Reproductive toxicity - fertility</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Reproductive toxicity - development</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
</tbody>
</table>
rNTP Mix

Specific target organ toxicity - single exposure
STOT - single exposure  Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure  Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard
Based on available data the classification criteria are not met.

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
No specific symptoms known.

Ingestion
No specific symptoms known.

Skin Contact
No specific symptoms known.

Eye contact
No specific symptoms known.

Route of exposure
Ingestion Inhalation Skin and/or eye contact

Target Organs
No specific target organs known.

12. Ecological information

Ecotoxicity
Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Toxicity
Based on available data the classification criteria are not met.

Persistence and degradability
The degradability of the product is not known.

Bioaccumulative potential
No data available on bioaccumulation.

Bio-Accumulative Potential
No data available.

Partition coefficient
Not available.

Mobility in soil
No data available.

Mobility

Other adverse effects
None known.

13. Disposal considerations

Waste treatment methods
The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods
Do not empty into drains.

14. Transport information

General
The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number
Not applicable.
rNTP Mix

UN No. (DOT) Not applicable.
UN No. (IATA) Not applicable.
UN proper shipping name Not applicable.
Proper shipping name (International) Not applicable.
Proper shipping name (DOT) Not applicable.
Proper Shipping Name (IATA) Not applicable.
Transport hazard class(es)
Transport Labels (International) No transport warning sign required.
IATA Hazard Class Not applicable.
DOT transport labels
No transport warning sign required.
Packing group
Packing group (International) Not applicable.
DOT packing group Not applicable.
IATA Packing Group Not applicable.
Environmental hazards
Environmentally Hazardous Substance No.
Special precautions for user
Not applicable.
DOT reportable quantity Not applicable.
DOT TIH Zone Not applicable.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed or exempt.

SARA 313 Emission Reporting
None of the ingredients are listed or exempt.

CAA Accidental Release Prevention
None of the ingredients are listed or exempt.

FDA - Essential Chemical
None of the ingredients are listed or exempt.
rNTP Mix

FDA - Precursor Chemical
None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories
None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals
None of the ingredients are listed or exempt.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I)
None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances
None of the ingredients are listed or exempt.

Massachusetts "Right To Know" List
None of the ingredients are listed or exempt.

Rhode Island "Right To Know" List
None of the ingredients are listed or exempt.

Minnesota "Right To Know" List
None of the ingredients are listed or exempt.

New Jersey "Right To Know" List
None of the ingredients are listed or exempt.

Pennsylvania "Right To Know" List
None of the ingredients are listed or exempt.

Inventories
US - TSCA
None of the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
None of the ingredients are listed or exempt.

16. Other information

Abbreviations and acronyms used in the safety data sheet

TDG: The transport of dangerous goods act
IATA: International air transport association.
ICAO: Technical instructions for the safe transport of dangerous goods by air.
IMDG: International maritime dangerous goods.
CAS: Chemical abstracts service.
ATE: Acute toxicity estimate.
LC₅₀: Lethal concentration to 50% of a test population.
LD₅₀: Lethal dose to 50% of a test population (median lethal dose).
EC₅₀: 50% of maximal effective concentration.
PBT: Persistent, bioaccumulative and toxic substance.
vPvB: Very persistent and very bioaccumulative.
**rNTP Mix**

**Training advice**  
Only trained personnel should use this material.

**Revision date**  
6/7/2020

**Revision**  
1

<table>
<thead>
<tr>
<th>NFPA - health hazard</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA - flammability hazard</td>
<td>0</td>
</tr>
<tr>
<td>NFPA - instability hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

The information in this safety data sheet is, to the best of our knowledge, correct as of the date it was issued. We do not guarantee that this safety data sheet includes all the information necessary for your intended use. You (the user) are responsible for determining whether this material or product is suitable for your particular purpose.