SAFETY DATA SHEET
rhAmpSeq™ CRISPR Library Kit

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name rhAmpSeq™ CRISPR Library Kit

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses For research and development purposes only.
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet
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

Integrated DNA Technologies Australia Pty Ltd
Unit 7/11-13 Brookhollow Avenue
Baulkham Hills, NSW 2153
Australia
custcare@idtdna.com

1.4. Emergency telephone number
Emergency telephone ChemTrec 800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indeling (classification)

2.2. Label elements

2.3. Other hazards
This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
rhAmpSeq™ CRISPR Library Kit

Composition comments
The exact percentage is withheld as a trade secret.

SECTION 4: First aid measures

4.1. 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.

4.2. 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. Spray/mists may cause respiratory tract irritation.

Ingestion
No specific symptoms known. May cause discomfort if swallowed.

Skin contact
No specific symptoms known. May cause discomfort.

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

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor
Treat symptomatically.

Specific treatments
No special treatment required.

SECTION 5: Firefighting measures

5.1. 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.

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

5.2. Special hazards arising from the substance or mixture

Specific hazards
Containers can burst violently or explode when heated, due to excessive pressure build-up.

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

5.3. Advice for firefighters

Protective actions during firefighting
Avoid breathing fire gases or vapours. 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 vapours and protect men stopping the leak.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter’s clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. 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.
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6.2. Environmental precautions
Environmental precautions  Avoid discharge into drains or watercourses or onto the ground.

6.3. 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.

6.4. Reference to other sections
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.

SECTION 7: Handling and storage

7.1. 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. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

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

7.2. 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.

7.3. Specific end use(s)
Specific end use(s)  The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters
8.2. Exposure controls

Protective equipment

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

Eye/face protection  Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

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 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls  Keep container tightly sealed when not in use.
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**SECTION 9: Physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Appearance</td>
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<td>Colour</td>
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<td>Odour</td>
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<td>Odour threshold</td>
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<td>pH</td>
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<td>Flammability (solid, gas)</td>
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<td>Upper/lower flammability or explosive limits</td>
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<td>Other flammability</td>
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<td>Vapour pressure</td>
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<td>9.2. Other information</td>
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</table>

**SECTION 10: Stability and reactivity**

10.1. Reactivity
Reactivity: See the other subsections of this section for further details.

10.2. Chemical stability
Stability: Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions: No potentially hazardous reactions known.

10.4. Conditions to avoid
rhAmpSeq™ CRISPR Library Kit

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

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

10.6. Hazardous decomposition products
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 vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological effects
Not regarded as a health hazard under current legislation.

Acute toxicity - oral
Notes (oral LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - dermal
Notes (dermal LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - inhalation
Notes (inhalation LC₅₀)
Based on available data the classification criteria are not met.

Skin corrosion/irritation
Animal data
Based on available data the classification criteria are not met.

Serious eye damage/irritation
Serious eye damage/irritation
Based on available data the classification criteria are not met.

Respiratory sensitisation
Respiratory sensitisation
Based on available data the classification criteria are not met.

Skin sensitisation
Skin sensitisation
Based on available data the classification criteria are not met.

Germ cell mutagenicity
Genotoxicity - in vitro
Based on available data the classification criteria are not met.

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

IARC carcinogenicity
Reproductive toxicity
Reproductive toxicity - fertility
Based on available data the classification criteria are not met.

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

Target organs
Respiratory system, lungs

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

Aspiration hazard
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.
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**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.

### SECTION 12: Ecological information

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

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

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

12.3. **Bioaccumulative potential**  
No data available on bioaccumulation.

12.4. **Mobility in soil**  
No data available.

12.5. **Results of PBT and vPvB assessment**  
None known.

12.6. **Other adverse effects**  
None known.

### SECTION 13: Disposal considerations

**General information**  
The generation of waste should be minimised 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. Dispose of contents/container in accordance with national regulations. Dispose of contents/container in accordance with regional regulations.

### SECTION 14: Transport information

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

14.1. **UN number**  
Not applicable.

14.2. **UN proper shipping name**  
Not applicable.

Proper Shipping Name (IATA)

14.3. **Transport hazard class(es)**
rhAmpSeq™ CRISPR Library Kit

No transport warning sign required.

IATA Hazard Class

14.4. Packing group
Not applicable.

IATA Packing Group

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user
Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations
Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

EU legislation

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

Inventories
EU - EINECS/ELINCS
None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
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.
**rhAmpSeq™ CRISPR Library Kit**

| Classification abbreviations and acronyms | Acute Tox. = Acute toxicity  
|                                           | Eye Dam. = Serious eye damage  
|                                           | Skin Corr. = Skin corrosion  
|                                           | STOT SE = Specific target organ toxicity-single exposure |
| Training advice | Only trained personnel should use this material. |
| Revision comments | Contact legal for statement |
| Revision date | 22/12/2020 |
| Revision | 1 |

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.