



SAFETY DATA SHEET

Genes

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

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

1.1. Product identifier

Product name	Genes
Synonyms; trade names	Synthetic Genes, Plasmids, Vectors, gBlock Gene Fragments, Screening Fragments

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

Supplier	Integrated DNA Technologies 1710 Commercial Park Coralville Iowa, 52241 custcare@idtdna.com
Manufacturer	Integrated DNA Technologies 1710 Commercial Park Coralville Iowa, 52241 custcare@idtdna.com

1.4. Emergency telephone number

Emergency telephone	ChemTrec 800-424-9300
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

Indeling (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.

2.2. Label elements

Hazard statements	NC Not Classified
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2.3. Other hazards

This substance is not classified as PBT or vPvB according to current UK criteria.

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SECTION 3: Composition/information on ingredients

3.1. Substances

Product name	Genes
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	No specific recommendations. If throat irritation or coughing persists, proceed as follows. 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 any discomfort continues.
Ingestion	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.
Skin contact	No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.
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	Use protective equipment appropriate for surrounding materials.

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.
Ingestion	No specific symptoms known. May cause discomfort if swallowed.
Skin contact	Prolonged contact may cause dryness of the skin.
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	None known.
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.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No specific recommendations. For personal protection, see Section 8.

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 Reuse or recycle products wherever possible. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. 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. Keep container tightly sealed when not in use.

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). No specific recommendations.

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 No specific ventilation requirements.

Eye/face protection No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection No specific hand protection recommended. Large Spillages: 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 No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls Not regarded as dangerous for the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Appearance	Solid.
Colour	Translucent or opaque flake, film or powder like substance
Odour	Odourless.
Odour threshold	Not available.
pH	Not available.
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	°C/°F
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.
Vapour pressure	Not available.
Vapour 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.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not available.
Oxidising properties	Not available.
9.2. Other information	
Other information	None.

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

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

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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 LD ₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - dermal Notes (dermal LD ₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Notes (inhalation LC ₅₀)	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	None of the ingredients are listed or exempt.
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
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 Aspiration hazard	Not relevant. Solid.
General information	No specific health hazards known. 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. May cause discomfort if swallowed.

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Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	No specific symptoms known. May be slightly irritating to eyes.
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	
Toxicity	Based on available data the classification criteria are not met.
12.2. Persistence and degradability	
Persistence and degradability	The degradability of the product is not known.
12.3. Bioaccumulative potential	
Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	Not available.
12.4. Mobility in soil	
Mobility	No data available.
12.5. Results of PBT and vPvB assessment	
12.6. Other adverse effects	
Other adverse effects	None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
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.
Disposal methods	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

SECTION 14: Transport information

General	Not regulated.
14.1. UN number	
UN No. (IATA)	
14.2. UN proper shipping name	
Proper Shipping Name (IATA)	
14.3. Transport hazard class(es)	
IATA Hazard Class	
14.4. Packing group	
IATA Packing Group	
14.5. Environmental hazards	
14.6. Special precautions for user	
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	

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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.

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.
 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.

Training advice Only trained personnel should use this material.

Revision date 05/10/2022

Revision 3

SDS number 4696

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.