



## SAFETY DATA SHEET Alt-R™ HDR Enhancer V2

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 Alt-R™ HDR Enhancer V2  
Synonyms; trade names Alt-R™ HDR Enhancer V2, 150 µL, Alt-R™ HDR Enhancer V2, 30 µL

#### 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  
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

Classification (SI 2019 No. 720)  
Physical hazards Not Classified  
Health hazards Not Classified  
Environmental hazards Not Classified

#### Indeling (classification)

#### 2.2. Label elements

Hazard statements NC Not Classified

#### 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

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.

## Alt-R™ HDR Enhancer V2

Ingestion	IF SWALLOWED: Get medical attention. Do not induce vomiting unless under the direction of medical personnel.
Skin contact	Rinse with water. Continue to rinse for at least 15 minutes. 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. 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 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	No specific recommendations. For personal protection, see Section 8.
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#### 6.2. Environmental precautions

Environmental precautions	Avoid discharge into drains or watercourses or onto the ground.
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#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.
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#### 6.4. Reference to other sections

## Alt-R™ HDR Enhancer V2

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. 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). 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.
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### 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	Wear eye protection.
Hand protection	Wear protective gloves.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of 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

Appearance	Liquid.
Colour	Colourless.
Odour	Odourless.
Odour threshold	Not available.
pH	Not available.
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	87°C/188.6°F
Evaporation rate	Not available.

## Alt-R™ HDR Enhancer V2

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 available.
Explosive under the influence of a flame	Not available.
Oxidising properties	Not available.
Comments	Information given is applicable to the major ingredient.
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.

#### 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.

## Alt-R™ HDR Enhancer V2

Acute toxicity - oral Notes (oral LD <sub>50</sub> )	Based on available data the classification criteria are not met.
Acute toxicity - dermal Notes (dermal LD <sub>50</sub> )	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Notes (inhalation LC <sub>50</sub> )	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.
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	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. 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.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
Toxicological information on ingredients.	

DMSO

Toxicological effects

Not regarded as a health hazard under current legislation.

## Alt-R™ HDR Enhancer V2

Acute toxicity - oral	
Notes (oral LD <sub>50</sub> )	Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Notes (dermal LD <sub>50</sub> )	Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC <sub>50</sub> )	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.
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	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. 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.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.

## Alt-R™ HDR Enhancer V2

Acute toxicity - oral

ATE oral (mg/kg) 100.0

### 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	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
14.1. UN number	
Not applicable.	
UN No. (IATA)	
14.2. UN proper shipping name	
Not applicable.	
Proper Shipping Name (IATA)	
14.3. Transport hazard class(es)	
No transport warning sign required.	
IATA Hazard Class	
14.4. Packing group	
Not applicable.	
IATA Packing Group	

## Alt-R™ HDR Enhancer V2

### 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.

### 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). EC <sub>50</sub> : 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
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
Classification procedures according to SI 2019 No. 720	Acute Tox. 4 - H312: Acute Tox. 4 - H332: Acute Tox. 4 - H302: Eye Dam. 1 - H318: Skin Corr. 1A - H314: STOT SE 3 - H335: : Calculation method.
Training advice	Only trained personnel should use this material.
Revision comments	Contact legal for statement
Revision date	07/09/2021
Revision	1
SDS number	4744



## Alt-R™ HDR Enhancer V2