02/15/2024	Kit Components
Product code	Description
CLS760675	DNA 5K Reagent Kit
Components:	
701587	HT DNA 5K MARKER
701637	HT DNA HISENS DYE CONCENTRATE
720170	HT DNA STORAGE BUFFER

HT DNA 5K GEL MATRIX

HT DNA 5K LADDER

720171

720173



Printing date 02/15/2024 Reviewed on 05/18/2023

1 Identification

· Product identifier

· Trade name: HT DNA 5K MARKER

· Product number: 701587

· Application of the substance / the mixture Laboratory chemicals

· Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

- · Additional information: For the wording of the listed H phrases refer to section 16.
- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

Wash thoroughly after handling.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 0Reactivity = 0

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K MARKER

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

1310-73-2 sodium hydroxide 1-2.5%

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot \ Indication \ of \ any \ immediate \ medical \ attention \ and \ special \ treatment \ needed$

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

PAC-1:	
1310-73-2 sodium hydroxide	0.5 mg/m^3
29915-38-6 3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	30 mg/m^3
60-00-4 EDTA	4.1 mg/m^3
PAC-2:	
1310-73-2 sodium hydroxide	$5 mg/m^3$
29915-38-6 3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	330 mg/m³
60-00-4 EDTA	45 mg/m^3

(Contd. on page 3)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K MARKER

		(Contd. of page 2)
• PAC-3:		
1310-73-2	sodium hydroxide	50 mg/m^3
29915-38-6	3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	$2,000 \text{ mg/m}^3$
60-00-4	EDTA	200 mg/m^3

7 Handling and storage

- · Handling:
- Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

No special precautions are necessary if used correctly.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 8 B
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters

· Com	· Components with limit values that require monitoring at the workplace:		
1310	-73-2 sodium hydroxide (1-2.5%)		
PEL	Long-term value: 2 mg/m³		
REL	Ceiling limit value: 2 mg/m³		
TLV	Ceiling limit value: 2 mg/m³		

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · **Respiratory protection:** Suitable respiratory protective device recommended.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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 application.

(Contd. on page 4)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K MARKER

· Penetration time of glove material

(Contd. of page 3)

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

Physical and chemical proper	1150	
Information on basic physical and c	hemical properties	
General Information		
Appearance:		
Form:	Fluid	
Color:	According to product specification Characteristic	
Odor: Odor threshold:	Not determined.	
pH-value:	N/A	
Change in condition		
Melting point/Melting range:	0 °C (32 °F)	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1 g/cm³ (8.345 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
•		
Water:	97.5 %	
VOC content:	0.00 %	

(Contd. on page 5)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K MARKER

		(Contd. of page 4)
Solids content:	2.5 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · 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 shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Other information: N/A
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

(Contd. on page 6)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K MARKER

· Other adverse effects No further relevant information available.

(Contd. of page 5)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number ADR, IMDG, IATA	UN1760
UN proper shipping name ADR IMDG, IATA	1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE) CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE)
Transport hazard class(es)	
ADR, IMDG, IATA	
Class	8 Corrosive substances
Label	8
Packing group ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user Hazard identification number (Kemler code)	
EMS Number:	F-A,S-B
Segregation groups Stowage Category	(SGG18) Alkalis
Stowage Category Stowage Code	SW2 Clear of living quarters.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information: Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
 ADR	
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K MARKER

(Contd. of page 6)

• IMDG
• Limited quantities (LQ)
• Excepted quantities (EQ)

• Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

• UN "Model Regulation":

UN 1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE), 8, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

Hazardous Air Pollutants

None of the ingredients is listed.

- · 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.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with

(Contd. on page 8)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K MARKER

(Contd. of page 7)

caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

· Contact:

· Date of preparation / last revision 02/15/2024

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

- US

Printing date 02/15/2024 Reviewed on 05/18/2023

1 Identification

- · Product identifier
- · Trade name: HT DNA HISENS DYE CONCENTRATE
- · Product number: 701637
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

- · Additional information: For the wording of the listed H phrases refer to section 16.
- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

Wash thoroughly after handling.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 1Reactivity = 0

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA HISENS DYE CONCENTRATE

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

67-68-5 dimethyl sulfoxide

75-100%

4 First-aid measures

- Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

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

- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:	
67-68-5 dimethyl sulfoxide	150 ppm
· PAC-2:	
67-68-5 dimethyl sulfoxide	290 ррт
· PAC-3:	
67-68-5 dimethyl sulfoxide	I,800 ppm

LIS.

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA HISENS DYE CONCENTRATE

(Contd. of page 2)

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

No special precautions are necessary if used correctly.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 10
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

67-68-5 dimethyl sulfoxide (75-100%)

WEEL Long-term value: 250 ppm

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Respiratory protection:** Suitable respiratory protective device recommended.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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 application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA HISENS DYE CONCENTRATE

· Eye protection:

(Contd. of page 3)



Tightly sealed goggles

Information on basic physical and c General Information	chemical properties	
Appearance: Form: Color: Odor: Odor threshold:	Fluid According to product specification Characteristic Not determined.	
pH-value:	N/A	
Change in condition Melting point/Melting range: Boiling point/Boiling range:	18.45 °C (65.2 °F) 189 °C (372.2 °F)	
Flash point:	95 °C (203 °F)	
Flammability (solid, gaseous):	Not applicable.	
Auto igniting:	270 °C (518 °F)	
Decomposition temperature:	Not determined.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits: Lower: Upper:	1.8 Vol % 63 Vol %	
Vapor pressure at 20 °C (68 °F):	2.5 hPa (1.9 mm Hg)	
Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate	1.1 g/cm³ (9.1795 lbs/gal) Not determined. Not determined. Not determined.	
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity: Dynamic: Kinematic:	Not determined. Not determined.	
Solvent content: Organic solvents: VOC content:	100.0 % 99.99 %	

(Contd. on page 5)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA HISENS DYE CONCENTRATE

(Contd. of page 4)

· Other information

No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · 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 shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Other information: N/A
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

US -

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA HISENS DYE CONCENTRATE

(Contd. of page 5)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information	
· UN-Number · ADR, IMDG, IATA	not regulated
· UN proper shipping name · ADR, IMDG, IATA	not regulated
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA · Class	not regulated
· Packing group · ADR, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· UN "Model Regulation":	not regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

67-68-5 dimethyl sulfoxide

ACTIVE

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

(Contd. on page 7)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA HISENS DYE CONCENTRATE

(Contd. of page 6)

· 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.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

- · Contact:
- · Date of preparation / last revision 02/15/2024
- · Abbreviations and acronyms:

 $ADR: Accord\ relatif\ au\ transport\ international\ des\ marchandises\ dangereuses\ par\ route\ (European\ Agreement\ Concerning\ the\ International\ Concerning\ the\ Concern$

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

- US

Printing date 02/15/2024 Reviewed on 05/18/2023

1 Identification

- · Product identifier
- · Trade name: HT DNA STORAGE BUFFER
- · Product number: 720170
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity, Inc 549 Albany Street

Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300

If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

- · Additional information: For the wording of the listed H phrases refer to section 16.
- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

Wash thoroughly after handling.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 0 Reactivity = 0

Reviewed on 05/18/2023 Printing date 02/15/2024

Trade name: HT DNA STORAGE BUFFER

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- Dangerous components:

1310-73-2 sodium hydroxide 1-2.5%

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:	
1310-73-2 sodium hydroxide	0.5 mg/m^3
29915-38-6 3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	30 mg/m^3
60-00-4 EDTA	4.1 mg/m ³
· PAC-2:	
1310-73-2 sodium hydroxide	5 mg/m ³
29915-38-6 3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	330 mg/m³
60-00-4 EDTA	45 mg/m ³
	(Contd. on page 3

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA STORAGE BUFFER

		(Contd. of page 2)
• PAC-3:		
1310-73-2	sodium hydroxide	50 mg/m^3
29915-38-6	3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	$2,000 \text{ mg/m}^3$
60-00-4	EDTA	200 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

No special precautions are necessary if used correctly.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 8 B
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters

· Com	· Components with limit values that require monitoring at the workplace:		
1310	-73-2 sodium hydroxide (1-2.5%)		
PEL	Long-term value: 2 mg/m³		
REL	Ceiling limit value: 2 mg/m³		
TLV	Ceiling limit value: 2 mg/m³		

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · **Respiratory protection:** Suitable respiratory protective device recommended.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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 application.

(Contd. on page 4)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA STORAGE BUFFER

· Penetration time of glove material

(Contd. of page 3)

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

Physical and chemical proper	ties
Information on basic physical and c General Information	nemical properties
Appearance:	
Form:	Fluid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value:	N/A
Change in condition	
Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
Density at 20 °C (68 °F):	1 g/cm³ (8.345 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wate	er): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Water:	97.4 %
VOC content:	0.00 %

(Contd. on page 5)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA STORAGE BUFFER

		(Contd. of page 4)
Solids content:	2.6 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · 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 shows the following dangers according to internally approved calculation methods for preparations: Irritant

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Other information: N/A
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

(Contd. on page 6)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA STORAGE BUFFER

· Other adverse effects No further relevant information available.

(Contd. of page 5)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number ADR, IMDG, IATA	UN1719
UN proper shipping name ADR	1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)
IMDG, IATA	CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)
Transport hazard class(es)	
ADR, IMDG, IATA	
Class Label	8 Corrosive substances 8
Packing group ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user Hazard identification number (Kemler code).	Warning: Corrosive substances : 80
EMS Number:	F-A,S-B
Segregation groups	(SGG18) Alkalis
Stowage Category Segregation Code	SG22 Stow "away from" ammonium salts SG35 Stow "separated from" SGG1-acids
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information: Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA STORAGE BUFFER

· ADR
· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· IMDG
· Limited quantities (LQ)
· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation":

UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM)

HYDROXIDE), 8, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

- · 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.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA STORAGE BUFFER

(Contd. of page 7)

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

· Contact:

· Date of preparation / last revision 02/15/2024

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

US

Printing date 02/15/2024 Reviewed on 05/18/2023

1 Identification

- · Product identifier
- · Trade name: HT DNA 5K GEL MATRIX
- · Product number: 720171
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Revvity, Inc 549 Albany Street

Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300

If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

- · Additional information: For the wording of the listed H phrases refer to section 16.
- Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

Wash thoroughly after handling.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 0 Reactivity = 0

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K GEL MATRIX

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

1310-73-2 sodium hydroxide 1-2.5%

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot \ Indication \ of \ any \ immediate \ medical \ attention \ and \ special \ treatment \ needed$

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

1.01001110.1	ienon erwerus	
• PAC-1:		
1310-73-2	sodium hydroxide	0.5 mg/m^3
29915-38-6	3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	30 mg/m^3
60-00-4	EDTA	4.1 mg/m³
79-10-7	acrylic acid	1.5 ppm
• PAC-2:		
1310-73-2	sodium hydroxide	5 mg/m ³
29915-38-6	3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	330 mg/m³

(Contd. on page 3)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K GEL MATRIX

		(Contd. of page 2)
60-00-4	EDTA	45 mg/m^3
79-10-7	acrylic acid	46 ppm
· PAC-3:		
1310-73-2	sodium hydroxide	50 mg/m ³
29915-38-6	3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	$2,000 \text{ mg/m}^3$
60-00-4	EDTA	200 mg/m³
79-10-7	acrylic acid	180 ppm

7 Handling and storage

- · Handling:
- Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

No special precautions are necessary if used correctly.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 8 B
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see section 7.
- · Control parameters

· Com	· Components with limit values that require monitoring at the workplace:		
1310	1310-73-2 sodium hydroxide (1-2.5%)		
PEL	Long-term value: 2 mg/m³		
REL	Ceiling limit value: 2 mg/m³		
TLV	Ceiling limit value: 2 mg/m³		

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Respiratory protection: Suitable respiratory protective device recommended.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 4)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K GEL MATRIX

· Material of gloves

(Contd. of page 3)

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 application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

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		A A 144 1 A A I	nuanautias
		11.31111.WIII	properties
2 _ 0,00000			properties

Information on basic physical and c	chemical properties
General Information	
Appearance:	
Form:	Fluid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value:	N/A
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
Density:	Not determined.
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wate	er): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.

(Contd. on page 5)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K GEL MATRIX

		(Contd. of page 4
· Solvent content:		
Water:	94.9 %	
VOC content:	0.00 %	
Solids content:	2.9 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · 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 shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
79-10-7 acrylic acid	
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Other information: N/A
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.

(Contd. on page 6)

Reviewed on 05/18/2023 Printing date 02/15/2024

Trade name: HT DNA 5K GEL MATRIX

· vPvB: Not applicable.

(Contd. of page 5)

· Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number ADR, IMDG, IATA	UN1719
UN proper shipping name ADR	1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUI HYDROXIDE)
IMDG, IATA	CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)
Transport hazard class(es)	
ADR, IMDG, IATA	
Class	8 Corrosive substances
Label	8
Packing group ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user Hazard identification number (Kemler code):	Warning: Corrosive substances
EMS Number:	F-A,S-B
Segregation groups	(SGG18) Alkalis
Stowage Category Segregation Code	A SG22 Stow "away from" ammonium salts SG35 Stow "separated from" SGG1-acids
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information: Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K GEL MATRIX

(Contd. of page 6) $\cdot ADR$ · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml \cdot IMDG · Limited quantities (LQ) 5L· Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM · UN "Model Regulation": HYDROXIDE), 8, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section 3.	55 (extrem	ely hazardous	substances):
--------------	------------	---------------	--------------

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

79-10-7 acrylic acid

TSCA (Toxic Substances Control Act):			
7732-18-5	Water	ACTIVE	
1310-73-2	1310-73-2 sodium hydroxide		
29915-38-6	3-(tris(hydroxymethyl)methylamino)propane-1-sulphonic acid	ACTIVE	
60-00-4	EDTA	ACTIVE	
79-10-7	acrylic acid	ACTIVE	

· Hazardous Air Pollutants

79-10-7 acrylic acid

- · 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.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

79-10-7 acrylic acid

(Contd. on page 8)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K GEL MATRIX

(Contd. of page 7)

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

- · Contact:
- · Date of preparation / last revision 02/15/2024
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A

- US

Printing date 02/15/2024 Reviewed on 05/18/2023

1 Identification

· Product identifier

· Trade name: HT DNA 5K LADDER

· Product number: 720173

· Application of the substance / the mixture Laboratory chemicals

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

- · Additional information: For the wording of the listed H phrases refer to section 16.
- · Lahel elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

Wash thoroughly after handling.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 0Reactivity = 0

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K LADDER

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

1310-73-2 sodium hydroxide

<1%

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot \ Indication \ of \ any \ immediate \ medical \ attention \ and \ special \ treatment \ needed$

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:		
77-86-1	TRIS	18 mg/m³
6381-92-6	EDTA disodium dihydrate	30 mg/m³
1310-73-2	sodium hydroxide	0.5 mg/m
7647-01-0	hydrochloric acid	1.8 ppm
· PAC-2:		
77-86-1	TRIS	190 mg/m
6381-92-6	EDTA disodium dihydrate	330 mg/m
		(Contd. on page

- US

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K LADDER

	(Contd. of page
1310-73-2 sodium hydroxide	5 mg/m^3
7647-01-0 hydrochloric acid	22 ppm
· PAC-3:	
77-86-1 TRIS	1,200 mg/m
6381-92-6 EDTA disodium dihydrate	2,000 mg/m
1310-73-2 sodium hydroxide	50 mg/m^3
7647-01-0 hydrochloric acid	100 ppm

7 Handling and storage

- · Handling:
- Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

No special precautions are necessary if used correctly.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 8 B
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see section 7.
- · Control parameters

· Com	Components with limit values that require monitoring at the workplace:		
1310	310-73-2 sodium hydroxide (<1%)		
PEL	Long-term value: 2 mg/m³		
REL	Ceiling limit value: 2 mg/m³		
TLV	Ceiling limit value: 2 mg/m³		

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Respiratory protection: Suitable respiratory protective device recommended.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 4)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K LADDER

· Material of gloves

(Contd. of page 3)

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 application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

of hysical and chemical properties			
Information on basic physical and chemical properties			
General Information			
· Appearance: Form:	Fluid		
Color:	According to product specification		
· Odor:	Characteristic		
Odor threshold:	Not determined.		
pH-value:	N/A		
Change in condition			
Melting point/Melting range:	Undetermined.		
Boiling point/Boiling range:	100 °C (212 °F)		
Flash point:	Not applicable.		
Flammability (solid, gaseous):	Not applicable.		
Decomposition temperature:	Not determined.		
Ignition temperature:	Product is not selfigniting.		
Danger of explosion:	Product does not present an explosion hazard.		
Explosion limits:			
Lower:	Not determined.		
Upper:	Not determined.		
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)		
Density:	Not determined.		
Relative density	Not determined.		
Vapor density	Not determined.		
Evaporation rate	Not determined.		
Solubility in / Miscibility with			
Water:	Not miscible or difficult to mix.		
Partition coefficient (n-octanol/wat	er): Not determined.		
· Viscosity:			
Dynamic:	Not determined.		
Kinematic:	Not determined.		

(Contd. on page 5)

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K LADDER

		(Contd. of page 4)
· Solvent content:		
Water:	95.0 %	
VOC content:	0.00 %	
Solids content:	1.0 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · 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 shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
7647-01-0 hydrochloric acid	3
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Other information: N/A
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.

(Contd. on page 6)

Reviewed on 05/18/2023 Printing date 02/15/2024

Trade name: HT DNA 5K LADDER

· vPvB: Not applicable.

(Contd. of page 5)

· Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

Transport information	
UN-Number ADR, IMDG, IATA	UN1760
UN proper shipping name ADR IMDG, IATA	1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE) CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE)
Transport hazard class(es)	
ADR, IMDG, IATA	
Class	8 Corrosive substances
Label	8
Packing group ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user Hazard identification number (Kemler code) EMS Number:	Warning: Corrosive substances : 80 F-A,S-B
Segregation groups	(SGG18) Alkalis
Stowage Category	A
Stowage Code	SW2 Clear of living quarters.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information: Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
ADR Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

Reviewed on 05/18/2023 Printing date 02/15/2024

Trade name: HT DNA 5K LADDER

(Contd. of page 6) · IMDG · Limited quantities (LQ) 5L· Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml UN 1760 CORROSIVE LIQUID, N.O.S. (SODIUM · UN "Model Regulation": HYDROXIDE), 8, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara
· Section 355 (extremely hazardous substances):

Section 313 (Specific toxic chemical listings):

7647-01-0 hydrochloric acid

7647-01-0 hydrochloric acid

· TSCA (Toxic Substances Control Act):

7732-18-5	Water	ACTIVE
77-86-1	TRIS	ACTIVE
1310-73-2	sodium hydroxide	ACTIVE
7647-01-0	hydrochloric acid	ACTIVE

- · Hazardous Air Pollutants
- 7647-01-0 hydrochloric acid
- 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.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

7647-01-0 hydrochloric acid

A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Printing date 02/15/2024 Reviewed on 05/18/2023

Trade name: HT DNA 5K LADDER

(Contd. of page 7)

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

· Contact:

· Date of preparation / last revision 02/15/2024

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

US