

# SAFETY DATA SHEET

---

## SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

---

### Contact information

#### General



Genapsys, Inc.  
200 Cardinal Way, 3rd Floor  
Redwood City, CA 94063  
Phone: +1 (650) 330-1096  
E-mail: support@genapsys.com

#### Emergency telephone number

Chemtrec (24-hour availability):  
+1 (800) 424-9300 (USA and Canada)  
+1 (703) 527-3887 (International; collect calls accepted)

---

#### Product identifier

G3 Sequencing Kit V3 - Dual Index (Box 1) - 1002267

#### Synonyms

Sequencing Kit Box 1 - Cleavage Mix

#### Trade names

G3 Sequencing Kit V3 - Dual Index (Box 1)

#### Chemical family

Mixture

#### Relevant identified uses of the substance or mixture and uses advised against

For research use only (RUO).

#### Note

The physical, chemical, toxicological and ecological properties of this product/mixture have not been fully characterized. This SDS will be revisited as more data become available.

---

## SECTION 2 - HAZARDS IDENTIFICATION

---

### Classification of the substance or mixture

#### Globally Harmonized System [GHS]

Corrosive (skin) - Category 1B. Corrosive (eye) - Category 1

#### Other/Supplemental

Mixture not yet fully tested

### Label elements

---

**SECTION 2 - HAZARDS IDENTIFICATION ...continued**

---

**GHS hazard pictogram****GHS signal word** Danger**GHS hazard statements** H314 - Causes severe skin burns and eye damage. H318 - Causes serious eye damage.**GHS precautionary statements** P260 - Do not breathe mist/vapors/spray. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves/eye protection/face protection. P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a Poison Center or doctor/physician. P363 - Wash contaminated clothing before reuse. P405 - Store locked up. P501 - Dispose of contents/container to location in accordance with local/regional/national/international regulations.**Other hazards** The potential health hazards associated with exposure/handling of this mixture are unknown; no data specific for the mixture were identified. The following data describe the hazards of individual ingredients, where applicable.**Note** This mixture is classified as hazardous under GHS as implemented by Regulation EC No 1272/2008 (EU CLP), WHMIS 2015 (Health Canada), and Hazard Communication Standard No. 1910.1200 (US OSHA).

---

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

---

<u>Ingredient</u>	<u>CAS #</u>	<u>EINECS/ELIN CS#</u>	<u>Amount</u>	<u>GHS Classification</u>
Tris(3-hydroxypropyl) phosphine (THPP)	4706-17-6	803-871-2	20-25%	SC1B:H314; ED1: H318

**Note** The ingredient(s) listed above are considered hazardous. Amounts are listed as ranges; the exact percentage of composition is withheld as a trade secret. The remaining components are non-hazardous and/or present at amounts below reportable limits. See Section 16 for full text of GHS classifications.

---

## SECTION 4 - FIRST AID MEASURES

---

### Description of first aid measures

<b>Immediate Medical Attention Needed</b>	Yes
<b>Eye Contact</b>	If easy to do, remove contact lenses, if worn. Immediately flush eyes with copious quantities of water for at least 15 minutes. If irritation occurs or persists, notify medical personnel and supervisor.
<b>Skin Contact</b>	Wash exposed area with soap and water and remove contaminated clothing/shoes. If irritation occurs or persists, notify medical personnel and supervisor.
<b>Inhalation</b>	Immediately move exposed subject to fresh air. If not breathing, give artificial respiration. If breathing is labored, administer oxygen. Immediately notify medical personnel and supervisor.
<b>Ingestion</b>	Do not induce vomiting unless directed by medical personnel. Do not give anything to drink unless directed by medical personnel. Never give anything by mouth to an unconscious person. Notify medical personnel and supervisor.
<b>Protection of first aid responders</b>	See Section 8 for Exposure Controls/Personal Protection recommendations.
<b>Most important symptoms and effects, both acute and delayed</b>	See Sections 2 and 11
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Medical conditions aggravated by exposure: None known or reported. Treat symptomatically and supportively.

---

## SECTION 5 - FIREFIGHTING MEASURES

---

<b>Extinguishing media</b>	Use water spray (fog), foam, dry powder, or carbon dioxide, as appropriate for surrounding fire and materials.
<b>Specific hazards arising from the substance or mixture</b>	May emit carbon monoxide, carbon dioxide, oxides of nitrogen, and phosphorus-containing compounds.
<b>Flammability/Explosivity</b>	No explosivity or flammability data identified. As product is an aqueous solution, it is not expected to be flammable or explosive.
<b>Advice for firefighters</b>	In case of fire in the surroundings: use the appropriate extinguishing agent. Wear full protective clothing and an approved, positive pressure, self-contained breathing apparatus. Decontaminate all equipment after use.

---

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

---

<b>Personal precautions, protective equipment and emergency procedures</b>	If product is released or spilled, take proper precautions to minimize exposure by using appropriate personal protective equipment (see Section 8). Area should be adequately ventilated. Do not breathe mist/vapors/spray.
<b>Environmental precautions</b>	Avoid release to the environment.
<b>Methods and material for containment and cleaning up</b>	DO NOT CAUSE MATERIAL TO BECOME AIRBORNE. For small spills, soak up material with absorbent, e.g., paper towels. For large spills, cordon off spill area and minimize the spreading of spilled material. Soak up material with absorbent. Collect spilled material, absorbent, and rinse water into suitable containers for proper disposal in accordance with applicable waste disposal regulations (see Section 13). Decontaminate the area twice.
<b>Reference to other sections</b>	See Sections 8 and 13 for more information.

---

**SECTION 7 - HANDLING AND STORAGE**

---

<b>Precautions for safe handling</b>	Follow recommendations for handling caustic chemical agents (i.e., use of engineering controls and/or other personal protective equipment if needed). Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing vapor/mist/spray.
<b>Conditions for safe storage including any incompatibilities</b>	Store frozen at -20° C until ready for use.
<b>Specific end use(s)</b>	No information identified.

---

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**Note** Dispose of broken vials/syringes in a sharps container.

**Control Parameters/Occupational Exposure Limit Values**

<u>Compound</u>	<u>Issuer</u>	<u>Type</u>	<u>OEL</u>
Tris(3-hydroxypropyl) phosphine (THPP)	--	--	--

---

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION ...continued**

---

<b>Exposure/Engineering controls</b>	Selection and use of containment devices and personal protective equipment should be based on a risk assessment of exposure potential. Utilize closed and sealed systems whenever possible. Solutions used for procedures where aerosolization may occur (e.g., spraying, pumping, open transfers,) must be handled using an engineered local exhaust ventilation (LEV) and/or enclosure or isolator system. Control the potential for spills and leaks by securing all connections. Use clean-in-place systems.
<b>Respiratory protection</b>	Choice of respiratory protection should be appropriate to the task and the level of existing engineering controls. A powered air-purifying respirator (PAPR) with HEPA filters and head cover is required when performing aerosol generating operations. An airline respirator or self-contained breathing apparatus (SCBA) and disposable outerwear is required for spill cleanup.
<b>Hand protection</b>	Wear nitrile or other impervious gloves if skin contact is possible. Double gloves should be considered.
<b>Skin protection</b>	Wear appropriate gloves, lab coat, or other protective overgarment if skin contact is likely. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use.
<b>Eye/face protection</b>	Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available.
<b>Environmental Exposure Controls</b>	Avoid release to the environment and operate within closed systems wherever practicable. Air and liquid emissions should be directed to appropriate pollution control devices. In case of spill, do not release to drains. Implement appropriate and effective emergency response procedures to prevent release or spread of contamination and to prevent inadvertent contact by personnel.
<b>Other protective measures</b>	Wash hands in the event of contact with this product/mixture, especially before eating, drinking or smoking. Protective equipment is not to be worn outside the work area (e.g., in common areas or out-of-doors).

---

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

---

**Information on basic physical and chemical properties**

<b>Appearance</b>	Liquid
<b>Color</b>	Clear, colorless
<b>Odor</b>	No information identified.
<b>Odor threshold</b>	No information identified.
<b>pH</b>	No information identified.

---

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ...continued**

---

**Melting point/freezing point** No information identified.

**Initial boiling point and boiling range** No information identified.

**Flash point** No information identified.

**Evaporation rate** No information identified.

**Flammability (solid, gas)** No information identified.

**Upper/lower flammability or explosive limits** No information identified.

**Vapor pressure** No information identified.

**Vapor density** No information identified.

**Relative density** No information identified.

**Water solubility** Miscible in water.

**Solvent solubility** No information identified.

**Partition coefficient (*n*-octanol/water)** No information identified.

**Auto-ignition temperature** No information identified.

**Decomposition temperature** No information identified.

**Viscosity** No information identified.

**Explosive properties** No information identified.

**Oxidizing properties** No information identified.

**Other information**

**Molecular formula** Not applicable (Mixture)

**Molecular weight** Not applicable (Mixture)

---

**SECTION 10 - STABILITY AND REACTIVITY**

---

**Reactivity** No information identified.

**Chemical stability** Stable under normal handling and storage conditions.

---

**SECTION 10 - STABILITY AND REACTIVITY ...continued**

---

<b>Possibility of hazardous reactions</b>	No information identified.
<b>Conditions to avoid</b>	No information identified.
<b>Incompatible materials</b>	No information identified.
<b>Hazardous decomposition products</b>	No information identified.

---

**SECTION 11 - TOXICOLOGICAL INFORMATION**

---

**Information on toxicological effects**

**Route of entry** May be absorbed by inhalation, skin contact, and eye contact.

**Acute toxicity**

<u>Compound</u>	<u>Type</u>	<u>Route</u>	<u>Species</u>	<u>Dose</u>
Tris(3-hydroxypropyl) phosphine (THPP)	--	--	--	--

**Irritation/Corrosion** THPP is corrosive to the skin and eyes.

**Sensitization** No data on product formulation.

**STOT-single exposure** No data on product formulation.

**STOT-repeated exposure/Repeat-dose toxicity** No data on product formulation.

**Reproductive toxicity** No data on product formulation.

**Developmental toxicity** No data on product formulation.

**Genotoxicity** No data on product formulation.

**Carcinogenicity** No data on product formulation. None of the components of the product/mixture present at levels greater than or equal to 0.1% are listed by NTP, IARC, ACGIH or OSHA as a carcinogen.

**Aspiration hazard** No data on product formulation.

**Human health data** See "Section 2 - Other Hazards"

**Additional information** The toxicological properties of this mixture have not been fully characterized.

---

**SECTION 12 - ECOLOGICAL INFORMATION**

---

**Toxicity**

<u>Compound</u>	<u>Type</u>	<u>Species</u>	<u>Concentration</u>
Tris(3-hydroxypropyl) phosphine (THPP)	--	--	--

**Persistence and Degradability** No data available.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Results of PBT and vPvB assessment** Not performed.

**Other adverse effects** No data available.

**Note** The environmental characteristics of this product/mixture have not been fully investigated. Releases to the environment should be avoided.

---

**SECTION 13 - DISPOSAL CONSIDERATIONS**

---

**Waste treatment methods** Used product should be disposed of according to local, state, and federal regulations. Dispose of wastes in accordance to prescribed federal, state, and local guidelines, e.g., appropriately permitted chemical waste incinerator. Do not send down the drain or flush down the toilet. All wastes containing the material should be properly labeled. Rinse waters resulting from spill cleanups should be discharged in an environmentally safe manner, e.g., appropriately permitted municipal or on-site wastewater treatment facility.

---

**SECTION 14 - TRANSPORT INFORMATION**

---

**Note** The following applies to product packaged for distribution in shipping containers (combination packaging) weighing more than 1 kg/1 L. May be eligible for shipment as an excepted quantity (Maximum net quantity per inner packaging 30 g/30 mL; Maximum net quantity per outer packaging 1 kg/1 L).

**Transport** Based on the available data, this product/mixture is regulated as a hazardous material/dangerous good under EU ADR/RID, US DOT, Canada TDG, IATA, or IMDG.

**UN number** 3265

**UN proper shipping name** Corrosive liquid, acidic, organic, n.o.s. (contains Tris(3-hydroxypropyl)phosphine).

**Transport hazard classes and packing group** Hazard Class - 8; Packing Group III.

**Environmental hazards** Based on the available data, this product/mixture is not regulated as an environmental hazard or a marine pollutant.



---

**SECTION 14 - TRANSPORT INFORMATION ...continued**

---

**Special precautions for users** Due to lack of data, avoid release to the environment.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

---

**SECTION 15 - REGULATORY INFORMATION**

---

**Safety, health and environmental regulations/legislation specific for the substance or mixture** This SDS generally complies with the requirements listed under current guidelines in the US, EU and Canada. Consult your local or regional authorities for more information.

**Chemical safety assessment** Not conducted.

**TSCA status** Not listed.

**SARA section 313** Not listed.

**California proposition 65** Not listed.

**Additional information** No other information identified.

---

**SECTION 16 - OTHER INFORMATION**

---

**Full text of H phrases and GHS classifications** SC1B - Skin corrosion Category 1B. H314 - Causes severe skin burns and eye damage. ED1 - Eye Damage Category 1. H318 - Causes serious eye damage.

**Sources of data** Information from published literature and internal company data.

**Abbreviations** ACGIH - American Conference of Governmental Industrial Hygienists; ADR/RID - European Agreement Concerning the International Carriage of Dangerous Goods by Road/Rail; AIHA - American Industrial Hygiene Association; CAS# - Chemical Abstract Services Number; CLP - Classification, Labelling, and Packaging of Substances and Mixtures; DNEL - Derived No Effect Level; DOT - Department of Transportation; EINECS - European Inventory of New and Existing Chemical Substances; ELINCS - European List of Notified Chemical Substances; EU - European Union; GHS - Globally Harmonized System of Classification and Labeling of Chemicals; IARC - International Agency for Research on Cancer; IDLH - Immediately Dangerous to Life or Health; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; LOEL - Lowest Observed Effect Level; LOAEL - Lowest Observed Adverse Effect Level; NIOSH - The National Institute for Occupational Safety and Health; NOEL - No Observed Effect Level; NOAEL - No Observed Adverse Effect Level; NTP - National Toxicology Program; OEL - Occupational Exposure Limit; OSHA - Occupational Safety and Health Administration; PBT - Persistent, Bioaccumulative, and Toxic; PNEC - Predicted No Effect Concentration; SARA - Superfund Amendments and Reauthorization Act;

---

**SECTION 16 - OTHER INFORMATION ...continued**

---

<b>Abbreviations ...continued</b>	STOT - Specific Target Organ Toxicity; STEL - Short Term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System
<b>Issue Date</b>	11 June 2020
<b>Revisions</b>	This is the first version of this SDS.
<b>Disclaimer</b>	<p>The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties and protections which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material because it is a pharmaceutical/ diagnostic product. The above information is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information relevant to the foreseeable handling of the material. However, in the event of an adverse incident associated with this product, this Safety Data Sheet is not, and is not intended to be, a substitute for consultation with appropriately trained personnel.</p>

# SAFETY DATA SHEET

---

## SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

---

### Contact information

#### General



GenapSys, Inc.  
200 Cardinal Way, 3rd Floor  
Redwood City, CA 94063  
Phone: +1 (650) 330-1096  
E-mail: support@genapsys.com

**Emergency telephone number** Chemtrec (24-hour availability):  
+1 (800) 424-9300 (USA and Canada)  
+1 (703) 527-3887 (International; collect calls accepted)

---

<b>Product identifier</b>	G3 Sequencing Kit V3 - Dual Index (Box 1) - 1000258
<b>Synonyms</b>	Sequencing Kit Box 1 - Reducing Mix
<b>Trade names</b>	G3 Sequencing Kit V3 - Dual Index (Box 1)
<b>Chemical family</b>	Mixture
<b>Relevant identified uses of the substance or mixture and uses advised against</b>	For research use only (RUO).
<b>Note</b>	The physical, chemical, toxicological and ecological properties of this product/mixture have not been fully characterized. This SDS will be revisited as more data become available.

---

## SECTION 2 - HAZARDS IDENTIFICATION

---

### Classification of the substance or mixture

**Globally Harmonized System [GHS]** Irritant (skin) - Category 2. Irritant (eye) - Category 2.

**Other/Supplemental** Mixture not yet fully tested

### Label elements

---

**SECTION 2 - HAZARDS IDENTIFICATION ...continued**

---

**GHS hazard pictogram****GHS signal word** Warning**GHS hazard statements** H315 - Causes skin irritation. H319 - Causes serious eye irritation.**GHS precautionary statements** P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves/eye protection/face protection. P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice/attention. P362 - Take off contaminated clothing.**Other hazards** The potential health hazards associated with exposure/handling of this mixture are unknown; no data specific for the mixture were identified. The following data describe the hazards of individual ingredients, where applicable.**Note** This mixture is classified as hazardous under GHS as implemented by Regulation EC No 1272/2008 (EU CLP), WHMIS 2015 (Health Canada), and Hazard Communication Standard No. 1910.1200 (US OSHA).

---

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

---

<u>Ingredient</u>	<u>CAS #</u>	<u>EINECS/ELIN CS#</u>	<u>Amount</u>	<u>GHS Classification</u>
Dithiothreitol	3483-12-3	222-468-7	10-20%	ATO4:H302; SI2:H315; EI2:H319; STOT-S3:H335

**Note** The ingredient(s) listed above are considered hazardous. Amounts are listed as ranges; the exact percentage of composition is withheld as a trade secret. The remaining components are non-hazardous and/or present at amounts below reportable limits. See Section 16 for full text of GHS classifications.

---

**SECTION 4 - FIRST AID MEASURES**

---

**Description of first aid measures****Immediate Medical Attention Needed** Yes

---

**SECTION 4 - FIRST AID MEASURES ...continued**

---

<b>Eye Contact</b>	If easy to do, remove contact lenses, if worn. Immediately flush eyes with copious quantities of water for at least 15 minutes. If irritation occurs or persists, notify medical personnel and supervisor.
<b>Skin Contact</b>	Wash exposed area with soap and water and remove contaminated clothing/shoes. If irritation occurs or persists, notify medical personnel and supervisor.
<b>Inhalation</b>	Immediately move exposed subject to fresh air. If not breathing, give artificial respiration. If breathing is labored, administer oxygen. Immediately notify medical personnel and supervisor.
<b>Ingestion</b>	Do not induce vomiting unless directed by medical personnel. Do not give anything to drink unless directed by medical personnel. Never give anything by mouth to an unconscious person. Notify medical personnel and supervisor.
<b>Protection of first aid responders</b>	See Section 8 for Exposure Controls/Personal Protection recommendations.
<b>Most important symptoms and effects, both acute and delayed</b>	See Sections 2 and 11
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Medical conditions aggravated by exposure: None known or reported. Treat symptomatically and supportively.

---

**SECTION 5 - FIREFIGHTING MEASURES**

---

<b>Extinguishing media</b>	Use water spray (fog), foam, dry powder, or carbon dioxide, as appropriate for surrounding fire and materials.
<b>Specific hazards arising from the substance or mixture</b>	May emit carbon monoxide, carbon dioxide, and sulfur-containing compounds.
<b>Flammability/Explosivity</b>	No explosivity or flammability data identified. As product is an aqueous solution, it is not expected to be flammable or explosive.
<b>Advice for firefighters</b>	In case of fire in the surroundings: use the appropriate extinguishing agent. Wear full protective clothing and an approved, positive pressure, self-contained breathing apparatus. Decontaminate all equipment after use.

---

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

---

<b>Personal precautions, protective equipment and emergency procedures</b>	If product is released or spilled, take proper precautions to minimize exposure by using appropriate personal protective equipment (see Section 8). Area should be adequately ventilated. Do not breathe mist/vapors/spray.
--	---

---

**SECTION 6 - ACCIDENTAL RELEASE MEASURES ...continued**

---

**Environmental precautions** Avoid release to the environment.

**Methods and material for containment and cleaning up** DO NOT CAUSE MATERIAL TO BECOME AIRBORNE. For small spills, soak up material with absorbent, e.g., paper towels. For large spills, cordon off spill area and minimize the spreading of spilled material. Soak up material with absorbent. Collect spilled material, absorbent, and rinse water into suitable containers for proper disposal in accordance with applicable waste disposal regulations (see Section 13). Decontaminate the area twice.

**Reference to other sections** See Sections 8 and 13 for more information.

---

**SECTION 7 - HANDLING AND STORAGE**

---

**Precautions for safe handling** Follow recommendations for handling pharmaceutical agents (i.e., use of engineering controls and/or other personal protective equipment if needed). Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing vapor/mist/spray.

**Conditions for safe storage including any incompatibilities** Store frozen at -20° C until ready for use.

**Specific end use(s)** No information identified.

---

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**Note** Dispose of broken vials/syringes in a sharps container.

**Control Parameters/Occupational Exposure Limit Values**

<u>Compound</u>	<u>Issuer</u>	<u>Type</u>	<u>OEL</u>
Dithiothreitol	--	--	--

**Exposure/Engineering controls** Selection and use of containment devices and personal protective equipment should be based on a risk assessment of exposure potential. Use local exhaust and/or enclosure at aerosol/mist-generating points. Emphasis is to be placed on closed material transfer systems and process containment, with limited open handling. High-energy operations should be done within an approved emission control or containment system.

**Respiratory protection** Choice of respiratory protection should be appropriate to the task and the level of existing engineering controls. For routine handling tasks, an approved and properly fitted air-purifying respirator with appropriate HEPA filters should provide ancillary protection based on the known or foreseeable limitations of existing engineering controls.

---

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION ...continued**

---

<b>Hand protection</b>	Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent.
<b>Skin protection</b>	Wear appropriate gloves, lab coat, or other protective overgarment if skin contact is likely. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use.
<b>Eye/face protection</b>	Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available.
<b>Environmental Exposure Controls</b>	Avoid release to the environment and operate within closed systems wherever practicable. Air and liquid emissions should be directed to appropriate pollution control devices. In case of spill, do not release to drains. Implement appropriate and effective emergency response procedures to prevent release or spread of contamination and to prevent inadvertent contact by personnel.
<b>Other protective measures</b>	Wash hands in the event of contact with this product/mixture, especially before eating, drinking or smoking. Protective equipment is not to be worn outside the work area (e.g., in common areas or out-of-doors). Decontaminate all protective equipment following use.

---

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

---

**Information on basic physical and chemical properties**

<b>Appearance</b>	Liquid
<b>Color</b>	Clear, colorless
<b>Odor</b>	No information identified.
<b>Odor threshold</b>	No information identified.
<b>pH</b>	No information identified.
<b>Melting point/freezing point</b>	No information identified.
<b>Initial boiling point and boiling range</b>	No information identified.
<b>Flash point</b>	No information identified.
<b>Evaporation rate</b>	No information identified.
<b>Flammability (solid, gas)</b>	No information identified.

---

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ...continued**

---

<b>Upper/lower flammability or explosive limits</b>	No information identified.
<b>Vapor pressure</b>	No information identified.
<b>Vapor density</b>	No information identified.
<b>Relative density</b>	No information identified.
<b>Water solubility</b>	Miscible in water.
<b>Solvent solubility</b>	No information identified.
<b>Partition coefficient (n-octanol/water)</b>	No information identified.
<b>Auto-ignition temperature</b>	No information identified.
<b>Decomposition temperature</b>	No information identified.
<b>Viscosity</b>	No information identified.
<b>Explosive properties</b>	No information identified.
<b>Oxidizing properties</b>	No information identified.
<b>Other information</b>	
<b>Molecular formula</b>	Not applicable (Mixture)
<b>Molecular weight</b>	Not applicable (Mixture)

---

**SECTION 10 - STABILITY AND REACTIVITY**

---

<b>Reactivity</b>	No information identified.
<b>Chemical stability</b>	Stable when stored and handled as recommended.
<b>Possibility of hazardous reactions</b>	Not expected to occur.
<b>Conditions to avoid</b>	No information identified.
<b>Incompatible materials</b>	No information identified.
<b>Hazardous decomposition products</b>	No information identified.



---

**SECTION 11 - TOXICOLOGICAL INFORMATION**

---

**Information on toxicological effects**

**Route of entry** May be absorbed by inhalation, skin contact, and eye contact.

**Acute toxicity**

<u>Compound</u>	<u>Type</u>	<u>Route</u>	<u>Species</u>	<u>Dose</u>
Dithiothreitol	LD <sub>50</sub>	Intraperitoneal (IP)	Mouse	154 mg/kg
	LD <sub>50</sub>	Intramuscular (IM)	Mouse	108 mg/kg
	LD <sub>50</sub>	Oral	Rat	400 mg/kg

**Irritation/Corrosion** Dithiothreitol is irritating to eyes, skin, and respiratory tract.

**Sensitization** No data on product formulation.

**STOT-single exposure** Dithiothreitol may cause respiratory irritation.

**STOT-repeated exposure/Repeat-dose toxicity** No data on product formulation.

**Reproductive toxicity** No data on product formulation.

**Developmental toxicity** No data on product formulation.

**Genotoxicity** No data on product formulation.

**Carcinogenicity** No data on product formulation. None of the components of the product/mixture present at levels greater than or equal to 0.1% are listed by NTP, IARC, ACGIH or OSHA as a carcinogen.

**Aspiration hazard** No data on product formulation.

**Human health data** See "Section 2 - Other Hazards"

**Additional information** The toxicological properties of this mixture have not been fully characterized.

---

**SECTION 12 - ECOLOGICAL INFORMATION**

---

**Toxicity**

<u>Compound</u>	<u>Type</u>	<u>Species</u>	<u>Concentration</u>
Dithiothreitol	LC <sub>50</sub> (48-h)	Daphnia magna (water flea)	24-30 mg/L

**Persistence and Degradability** No data available.

**Bioaccumulative potential** No data available.

---

**SECTION 12 - ECOLOGICAL INFORMATION ...continued**

---

<b>Mobility in soil</b>	No data available.
<b>Results of PBT and vPvB assessment</b>	Not performed.
<b>Other adverse effects</b>	No data available.
<b>Note</b>	The environmental characteristics of this product/mixture have not been fully investigated. Releases to the environment should be avoided.

---

**SECTION 13 - DISPOSAL CONSIDERATIONS**

---

<b>Waste treatment methods</b>	Used product should be disposed of according to local, state, and federal regulations. Dispose of wastes in accordance to prescribed federal, state, and local guidelines, e.g., appropriately permitted chemical waste incinerator. Do not send down the drain or flush down the toilet. All wastes containing the material should be properly labeled. Rinse waters resulting from spill cleanups should be discharged in an environmentally safe manner, e.g., appropriately permitted municipal or on-site wastewater treatment facility.
--------------------------------	---

---

**SECTION 14 - TRANSPORT INFORMATION**

---

<b>Transport</b>	Based on the available data, this product/mixture is not regulated as a hazardous material/dangerous good under EU ADR/RID, US DOT, Canada TDG, IATA, or IMDG.
<b>UN number</b>	None assigned.
<b>UN proper shipping name</b>	None assigned.
<b>Transport hazard classes and packing group</b>	None assigned.
<b>Environmental hazards</b>	Based on the available data, this product/mixture is not regulated as an environmental hazard or a marine pollutant.
<b>Special precautions for users</b>	Due to lack of data, avoid release to the environment.
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.

---

**SECTION 15 - REGULATORY INFORMATION**

---

<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	This SDS generally complies with the requirements listed under current guidelines in the US, EU and Canada. Consult your local or regional authorities for more information.
<b>Chemical safety assessment</b>	Not conducted.
<b>TSCA status</b>	Not listed.
<b>SARA section 313</b>	Not listed.
<b>California proposition 65</b>	Not listed.
<b>Additional information</b>	No other information identified.

---

**SECTION 16 - OTHER INFORMATION**

---

<b>Full text of H phrases and GHS classifications</b>	ATO4 - Acute Toxicity (Oral) Category 4. H302 - Harmful if swallowed. SI2 - Skin irritant Category 2. H315 - Causes skin irritation. EI2 - Eye irritant Category 2. H319 - Causes serious eye irritation. STOT-S3 - Specific Target Organ Toxicity Following Single Exposure Category 3. H335 - May cause respiratory irritation.
<b>Sources of data</b>	Information from published literature and internal company data.
<b>Abbreviations</b>	ACGIH - American Conference of Governmental Industrial Hygienists; ADR/RID - European Agreement Concerning the International Carriage of Dangerous Goods by Road/Rail; AIHA - American Industrial Hygiene Association; CAS# - Chemical Abstract Services Number; CLP - Classification, Labelling, and Packaging of Substances and Mixtures; DNEL - Derived No Effect Level; DOT - Department of Transportation; EINECS - European Inventory of New and Existing Chemical Substances; ELINCS - European List of Notified Chemical Substances; EU - European Union; GHS - Globally Harmonized System of Classification and Labeling of Chemicals; IARC - International Agency for Research on Cancer; IDLH - Immediately Dangerous to Life or Health; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; LOEL - Lowest Observed Effect Level; LOAEL - Lowest Observed Adverse Effect Level; NIOSH - The National Institute for Occupational Safety and Health; NOEL - No Observed Effect Level; NOAEL - No Observed Adverse Effect Level; NTP - National Toxicology Program; OEL - Occupational Exposure Limit; OSHA - Occupational Safety and Health Administration; PBT - Persistent, Bioaccumulative, and Toxic; PNEC - Predicted No Effect Concentration; SARA - Superfund Amendments and Reauthorization Act; STOT - Specific Target Organ Toxicity; STEL - Short Term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System
<b>Issue Date</b>	11 June 2020

---

**SECTION 16 - OTHER INFORMATION ...continued**

---

**Revisions**

This is the first version of this SDS.

**Disclaimer**

The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties and protections which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material because it is a pharmaceutical/diagnostic product. The above information is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information relevant to the foreseeable handling of the material. However, in the event of an adverse incident associated with this product, this Safety Data Sheet is not, and is not intended to be, a substitute for consultation with appropriately trained personnel.

# SAFETY DATA SHEET

---

## SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

---

### Contact information

#### General



Genapsys, Inc.  
200 Cardinal Way, 3rd Floor  
Redwood City, CA 94063  
Phone: +1 (650) 330-1096  
E-mail: support@genapsys.com

#### Emergency telephone number

Chemtrec (24-hour availability):  
+1 (800) 424-9300 (USA and Canada)  
+1 (703) 527-3887 (International; collect calls accepted)

---

#### Product identifier

G3 Sequencing Kit V3 - Dual Index (Box 1) - 1002265, 1002245, 1002246, 1002247, 1002248, 1002174, 1002175, 1002176, 1002177.

#### Synonyms

Sequencing Kit Box 1 - Polymerase Mix, Index Primers, Incorporation Buffer v3.1

#### Trade names

G3 Sequencing Kit V3 - Dual Index (Box 1)

#### Chemical family

Mixture

#### Relevant identified uses of the substance or mixture and uses advised against

For research use only (RUO).

#### Note

The toxicological and ecological properties of this mixture and/or its ingredients have not been fully characterized. This SDS will be revisited as more data become available.

---

## SECTION 2 - HAZARDS IDENTIFICATION

---

### Classification of the substance or mixture

#### Globally Harmonized System [GHS]

Aquatic toxicity (acute) - Category 3.

#### Other/Supplemental

Mixture not yet fully tested.

### Label elements

---

**SECTION 2 - HAZARDS IDENTIFICATION ...continued**

---

<b>GHS hazard pictogram</b>	None required
<b>GHS signal word</b>	None required
<b>GHS hazard statements</b>	H402 - Harmful to aquatic life.
<b>GHS precautionary statements</b>	P273 - Avoid release to the environment. P501 - Dispose of contents/container to location in accordance with local/regional/national/international regulations.

**Other hazards** The potential health hazards associated with exposure/handling of this mixture are unknown; no data specific for the mixture were identified. The following data describe the hazards of individual ingredients, where applicable.

**Note** This mixture does not meet criteria for classification under GHS as implemented by Regulation EC No 1272/2008 (EU CLP), WHMIS 2015 (Health Canada), and Hazard Communication Standard No. 1910.1200 (US OSHA). Nevertheless, it should be handled with caution as it has not yet been fully tested.

---

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

---

<u>Ingredient</u>	<u>CAS #</u>	<u>EINECS/ELIN CS#</u>	<u>Amount</u>	<u>GHS Classification</u>
Glycerol	56-81-5	200-289-5	45-55%	Not classified
Triton X-100	9002-93-1	618-344-0	≤1.1%	ATO4:H302; SI2:H315; EI2:H319; AA1:H400

**Note** The ingredients listed above are considered hazardous. Glycerol is not classified but is listed because it has OELs. Amounts are listed as ranges; the exact percentage of composition is withheld as a trade secret. The remaining components are non-hazardous and/or present at amounts below reportable limits. See Section 16 for full text of GHS classifications.

---

**SECTION 4 - FIRST AID MEASURES**

---

**Description of first aid measures**

<b>Immediate Medical Attention Needed</b>	No. If exposed or concerned: Get medical advice/attention.
<b>Eye Contact</b>	If easy to do, remove contact lenses, if worn. Immediately flush eyes with copious quantities of water for at least 15 minutes. If irritation occurs or persists, notify medical personnel and supervisor.
<b>Skin Contact</b>	Wash exposed area with soap and water and remove contaminated clothing/shoes. If irritation occurs or persists, notify medical personnel and supervisor.

---

**SECTION 4 - FIRST AID MEASURES ...continued**

---

<b>Inhalation</b>	Immediately move exposed subject to fresh air. If not breathing, give artificial respiration. If breathing is labored, administer oxygen. Immediately notify medical personnel and supervisor.
<b>Ingestion</b>	If swallowed, call a physician immediately. Do not induce vomiting unless directed by medical personnel. Do not give anything to drink unless directed by medical personnel. Never give anything by mouth to an unconscious person. Notify medical personnel and supervisor.
<b>Protection of first aid responders</b>	See Section 8 for Exposure Controls/Personal Protection recommendations.
<b>Most important symptoms and effects, both acute and delayed</b>	See Sections 2 and 11
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Medical conditions aggravated by exposure: None known or reported. Treat symptomatically and supportively.

---

**SECTION 5 - FIREFIGHTING MEASURES**

---

<b>Extinguishing media</b>	Use water spray (fog), foam, dry powder, or carbon dioxide, as appropriate for surrounding fire and materials.
<b>Specific hazards arising from the substance or mixture</b>	No information identified. May emit carbon monoxide, carbon dioxide, oxides of nitrogen, sulfur-containing compounds, and chlorine-containing compounds.
<b>Flammability/Explosivity</b>	No explosivity or flammability data identified. As product is an aqueous solution, it is not expected to be flammable or explosive.
<b>Advice for firefighters</b>	In case of fire in the surroundings: use the appropriate extinguishing agent. Wear full protective clothing and an approved, positive pressure, self-contained breathing apparatus. Decontaminate all equipment after use.

---

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

---

<b>Personal precautions, protective equipment and emergency procedures</b>	If product is released or spilled, take proper precautions to minimize exposure by using appropriate personal protective equipment (see Section 8). Area should be adequately ventilated.
<b>Environmental precautions</b>	No information identified.

---

**SECTION 6 - ACCIDENTAL RELEASE MEASURES ...continued**

---

**Methods and material for containment and cleaning up** For small spills, soak up material with absorbent, e.g., paper towels. For large spills, cordon off spill area and minimize the spreading of spilled material. Soak up material with absorbent. Wash spill area thoroughly with water. Collect spilled material, absorbent, and rinse water into suitable containers for proper disposal in accordance with applicable waste disposal regulations (see Section 13).

**Reference to other sections** See Sections 8 and 13 for more information.

---

**SECTION 7 - HANDLING AND STORAGE**

---

**Precautions for safe handling** Follow recommendations for handling formulated/packaged pharmaceutical agents (i.e., use of engineering controls and/or other personal protective equipment if needed). Avoid contact with eyes, skin and other mucous membranes. Wash thoroughly after handling. Avoid breathing mist/spray.

**Conditions for safe storage including any incompatibilities** Store frozen at -20° C until ready for use.

**Specific end use(s)** No information identified.

---

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**Control Parameters/Occupational Exposure Limit Values**

<u>Compound</u>	<u>Issuer</u>	<u>Type</u>	<u>OEL</u>
Glycerol	ACGIH, Belgium, Netherlands, Portugal, United Kingdom, Mexico, Singapore	TWA-8 HR	10 mg/m <sup>3</sup> (listed as glycerin mist)
	Estonia, France, Greece, Ireland, Poland, Spain	TWA-8 HR	10 mg/m <sup>3</sup>
	Finland	TWA-8 HR	20 mg/m <sup>3</sup>
	Switzerland	TWA-8 HR	50 mg/m <sup>3</sup>
	Switzerland	STEL	100 mg/m <sup>3</sup> (inhalable)
	United Kingdom	STEL	30 mg/m <sup>3</sup> (mist)
Triton X-100	--	--	--



---

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION ...continued**

---

<b>Exposure/Engineering controls</b>	Selection and use of containment devices and personal protective equipment should be based on a risk assessment of exposure potential. Use local exhaust and/or enclosure at aerosol/mist-generating points. Emphasis is to be placed on closed material transfer systems and process containment, with limited open handling. High-energy operations should be done within an approved emission control or containment system.
<b>Respiratory protection</b>	Choice of respiratory protection should be appropriate to the task and the level of existing engineering controls. For routine handling tasks, an approved and properly fitted air-purifying respirator with appropriate HEPA filters should provide ancillary protection based on the known or foreseeable limitations of existing engineering controls.
<b>Hand protection</b>	Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent.
<b>Skin protection</b>	Wear appropriate gloves, lab coat, or other protective overgarment if skin contact is likely. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use.
<b>Eye/face protection</b>	Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available.
<b>Environmental Exposure Controls</b>	Avoid release to the environment and operate within closed systems wherever practicable. Liquid emissions should be directed to appropriate pollution control devices. In case of spill, do not release to drains. Implement appropriate and effective emergency response procedures to prevent release or spread of contamination and to prevent inadvertent contact by personnel.
<b>Other protective measures</b>	Wash hands in the event of contact with this product/mixture, especially before eating, drinking or smoking. Protective equipment is not to be worn outside the work area (e.g., in common areas or out-of-doors). Decontaminate all protective equipment following use.

---

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

---

**Information on basic physical and chemical properties**

<b>Appearance</b>	Liquid
<b>Color</b>	Clear, colorless
<b>Odor</b>	No information identified.
<b>Odor threshold</b>	No information identified.
<b>pH</b>	No information identified.

---

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ...continued**

---

**Melting point/freezing point** No information identified.

**Initial boiling point and boiling range** No information identified.

**Flash point** No information identified.

**Evaporation rate** No information identified.

**Flammability (solid, gas)** No information identified.

**Upper/lower flammability or explosive limits** No information identified.

**Vapor pressure** No information identified

**Vapor density** No information identified.

**Relative density** No information identified.

**Water solubility** Miscible in water

**Solvent solubility** No information identified.

**Partition coefficient (*n*-octanol/water)** No information identified.

**Auto-ignition temperature** No information identified.

**Decomposition temperature** No information identified.

**Viscosity** No information identified.

**Explosive properties** No information identified.

**Oxidizing properties** No information identified.

**Other information**

**Molecular formula** Not applicable (Mixture)

**Molecular weight** Not applicable (Mixture)

---

**SECTION 10 - STABILITY AND REACTIVITY**

---

**Reactivity** No information identified.

**Chemical stability** Stable when stored and handled as recommended.

---

**SECTION 10 - STABILITY AND REACTIVITY ...continued**

---

<b>Possibility of hazardous reactions</b>	Not expected to occur.
<b>Conditions to avoid</b>	No information identified.
<b>Incompatible materials</b>	No information identified.
<b>Hazardous decomposition products</b>	No information identified.

---

**SECTION 11 - TOXICOLOGICAL INFORMATION**

---

**Information on toxicological effects**

**Route of entry** No data for this product/mixture were identified. The following data describe the individual ingredients where applicable.

**Acute toxicity**

<u>Compound</u>	<u>Type</u>	<u>Route</u>	<u>Species</u>	<u>Dose</u>
Glycerol	LD <sub>50</sub>	Oral	Rat	>10000 mg/kg
	LD <sub>50</sub>	Oral	Mouse	>= 4090 mg/kg
	LD <sub>50</sub>	Dermal	Rat	>21900 mg/kg
	LC <sub>50</sub>	Inhalation	Rat	>570 mg/m <sup>3</sup> /1 hour
	LD <sub>50</sub>	Dermal	Mouse	>18700 mg/kg
	LD <sub>50</sub>	Dermal	Rabbit	>10000 mg/kg
Triton X-100	LD <sub>50</sub>	Oral	Rat	1800 mg/kg
	LD <sub>50</sub>	Intravenous (IV)	Mouse	1200 mg/kg

**Irritation/Corrosion** Triton X-100 is considered irritating to eyes and skin.

**Sensitization** No data on product formulation.

**STOT-single exposure** No data on product formulation.

**STOT-repeated exposure/Repeat-dose toxicity** No data on product formulation.

**Reproductive toxicity** No data on product formulation.

**Developmental toxicity** No data on product formulation.

**Genotoxicity** No data on product formulation.

**Carcinogenicity** No data on product formulation. None of the components of the product/mixture present at levels greater than or equal to 0.1% are listed by NTP, IARC, ACGIH or OSHA as a carcinogen.

**Aspiration hazard** No data on product formulation.

---

**SECTION 11 - TOXICOLOGICAL INFORMATION ...continued**

---

**Human health data** See "Section 2 - Other Hazards"

**Additional information** The toxicological properties of this mixture have not been fully characterized.

---

**SECTION 12 - ECOLOGICAL INFORMATION**

---

**Toxicity**

<u>Compound</u>	<u>Type</u>	<u>Species</u>	<u>Concentration</u>
Glycerol	--	--	--
Triton X-100	EC <sub>50</sub> (96 h)	Green Algae	0.21 mg/L
	LC <sub>50</sub> (96 h)	Fathead minnow	4.5 mg/L

**Persistence and Degradability** No data available.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Results of PBT and vPvB assessment** Not performed.

**Other adverse effects** No data available.

**Note** The environmental characteristics of this product/mixture have not been fully investigated. Releases to the environment should be avoided.

---

**SECTION 13 - DISPOSAL CONSIDERATIONS**

---

**Waste treatment methods** Used product should be disposed of according to local, state, and federal regulations. Do not send down the drain or flush down the toilet. All wastes containing the material should be properly labeled. Dispose of wastes in accordance to prescribed federal, state, and local guidelines, e.g., appropriately permitted chemical waste incinerator. Rinse waters resulting from spill cleanups should be discharged in an environmentally safe manner, e.g., appropriately permitted municipal or on-site wastewater treatment facility.

---

**SECTION 14 - TRANSPORT INFORMATION**

---

**Transport** Based on the available data, this product/mixture is not regulated as a hazardous material/dangerous good under EU ADR/RID, US DOT, Canada TDG, IATA, or IMDG.

**UN number** None assigned.

---

**SECTION 14 - TRANSPORT INFORMATION ...continued**

---

<b>UN proper shipping name</b>	None assigned.
<b>Transport hazard classes and packing group</b>	None assigned.
<b>Environmental hazards</b>	Based on the available data, this product/mixture is not regulated as an environmental hazard or a marine pollutant.
<b>Special precautions for users</b>	Due to lack of data, avoid release to the environment.
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.

---

**SECTION 15 - REGULATORY INFORMATION**

---

<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	This SDS complies with the requirements under US, EU and GHS (EU CLP - Regulation EC No 1272/2008) guidelines. Consult your local or regional authorities for more information.
<b>Chemical safety assessment</b>	Not conducted.
<b>TSCA status</b>	Triton X-100 is listed.
<b>SARA section 313</b>	Not listed.
<b>California proposition 65</b>	Not listed.
<b>Additional information</b>	No other information identified.

---

**SECTION 16 - OTHER INFORMATION**

---

<b>Full text of H phrases and GHS classifications</b>	AA3- Acute aquatic toxicity Category 3. H402 - Harmful to aquatic life.
<b>Sources of data</b>	Information from published literature and internal company data.
<b>Abbreviations</b>	ACGIH - American Conference of Governmental Industrial Hygienists; ADR/RID - European Agreement Concerning the International Carriage of Dangerous Goods by Road/Rail; AIHA - American Industrial Hygiene Association; CAS# - Chemical Abstract Services Number; CLP - Classification, Labelling, and Packaging of Substances and Mixtures; DNEL - Derived No Effect Level; DOT - Department of Transportation; EINECS - European Inventory of New and Existing Chemical Substances; ELINCS - European List of Notified Chemical Substances; EU - European Union; GHS - Globally Harmonized System of Classification and Labeling of Chemicals; IARC - International Agency for Research on Cancer; IDLH - Immediately Dangerous to Life or Health; IATA - International Air Transport Association; IMDG - International Maritime

---

**SECTION 16 - OTHER INFORMATION ...continued**

---

**Abbreviations ...continued** Dangerous Goods; LOEL - Lowest Observed Effect Level; LOAEL - Lowest Observed Adverse Effect Level; NIOSH - The National Institute for Occupational Safety and Health; NOEL - No Observed Effect Level; NOAEL - No Observed Adverse Effect Level; NTP - National Toxicology Program; OEL - Occupational Exposure Limit; OSHA - Occupational Safety and Health Administration; PBT - Persistent, Bioaccumulative, and Toxic; PNEC - Predicted No Effect Concentration; SARA - Superfund Amendments and Reauthorization Act; STOT - Specific Target Organ Toxicity; STEL - Short Term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

**Issue Date** 11 June 2020

**Revisions** This is the first version of this SDS.

**Disclaimer** The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties and protections which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material because it is a pharmaceutical/diagnostic product. The above information is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information relevant to the foreseeable handling of the material. However, in the event of an adverse incident associated with this product, this Safety Data Sheet is not, and is not intended to be, a substitute for consultation with appropriately trained personnel.

# SAFETY DATA SHEET

---

## SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

---

### Contact information

#### General



Genapsys, Inc.  
200 Cardinal Way, 3rd Floor  
Redwood City, CA 94063  
Phone: +1 (650) 330-1096  
E-mail: support@genapsys.com

**Emergency telephone number** Chemtrec (24-hour availability):  
+1 (800) 424-9300 (USA and Canada)  
+1 (703) 527-3887 (International; collect calls accepted)

---

**Product identifier** G3 Sequencing Kit V3 - Dual Index (Box 1) - 1000223, 1001615, 1001618, 1001621, 1001624, 1001627, 1001630, 1001876, 1001877

**Synonyms** Sequencing Kit - Box 1 - Polymerase Buffer; dNTP Solutions

**Trade names** G3 Sequencing Kit V3 - Dual Index (Box 1)

**Chemical family** Mixture

**Relevant identified uses of the substance or mixture and uses advised against** For research use only (RUO).

**Note** The physical, chemical, toxicological and ecological properties of this product/mixture have not been fully characterized. This SDS will be revisited as more data become available.

---

## SECTION 2 - HAZARDS IDENTIFICATION

---

### Classification of the substance or mixture

**Globally Harmonized System [GHS]** Not classified.

**Other/Supplemental** Mixture not yet fully tested.

### Label elements

---

**SECTION 2 - HAZARDS IDENTIFICATION ...continued**

---

**GHS hazard pictogram** None required

**GHS signal word** None required

**GHS hazard statements** None required

**GHS precautionary statements** None required

**Other hazards** The hazardous properties of this mixture have not been fully investigated. Potential health hazards associated with exposure/handling may be similar to the ingredients, all of which are considered non-hazardous (See note in Section 3).

**Note** This product/mixture does not meet criteria for classification under GHS as implemented by Regulation EC No 1272/2008 (EU CLP), WHMIS 2015 (Health Canada), and Hazard Communication Standard No. 1910.1200 (US OSHA). Nevertheless, it should be handled with caution as it has not yet been fully tested.

---

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

---

<u>Ingredient</u>	<u>CAS #</u>	<u>EINECS/ELIN CS#</u>	<u>Amount</u>	<u>GHS Classification</u>
Non-Hazardous Reagent(s)	N/A	N/A	~100%	Not classified

**Note** The principal ingredients in this product/mixture are all considered to be non-hazardous and/or are present at amounts below reportable limits.

---

**SECTION 4 - FIRST AID MEASURES**

---

**Description of first aid measures**

**Immediate Medical Attention Needed** No. If exposed or concerned: Get medical advice/attention.

**Eye Contact** If easy to do, remove contact lenses, if worn. Immediately flush eyes with copious quantities of water for at least 15 minutes. If irritation occurs or persists, notify medical personnel and supervisor.

**Skin Contact** Wash exposed area with soap and water and remove contaminated clothing/shoes. If irritation occurs or persists, notify medical personnel and supervisor.

**Inhalation** Immediately move exposed subject to fresh air. If not breathing, give artificial respiration. If breathing is labored, administer oxygen. Immediately notify medical personnel and supervisor.



---

**SECTION 4 - FIRST AID MEASURES ...continued**

---

<b>Ingestion</b>	Do not induce vomiting unless directed by medical personnel. Do not give anything to drink unless directed by medical personnel. Never give anything by mouth to an unconscious person. Notify medical personnel and supervisor.
<b>Protection of first aid responders</b>	See Section 8 for Exposure Controls/Personal Protection recommendations.
<b>Most important symptoms and effects, both acute and delayed</b>	See Sections 2 and 11.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Medical conditions aggravated by exposure: None known or reported. Treat symptomatically and supportively.

---

**SECTION 5 - FIREFIGHTING MEASURES**

---

<b>Extinguishing media</b>	In case of fire in the surroundings: Use water spray (fog), foam, dry powder, or carbon dioxide, as appropriate.
<b>Specific hazards arising from the substance or mixture</b>	May emit carbon monoxide, carbon dioxide, and oxides of nitrogen.
<b>Flammability/Explosivity</b>	No explosivity or flammability data identified. As product is primarily an aqueous solution, it is not expected to be flammable or explosive.
<b>Advice for firefighters</b>	In case of fire in the surroundings: use the appropriate extinguishing agent. Wear full protective clothing and an approved, positive pressure, self-contained breathing apparatus. Decontaminate all equipment after use.

---

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

---

<b>Personal precautions, protective equipment and emergency procedures</b>	If product is released or spilled, take proper precautions to minimize exposure by using appropriate personal protective equipment (see Section 8). Area should be adequately ventilated. Do not breathe mist/vapors/spray.
<b>Environmental precautions</b>	Avoid release to the environment.
<b>Methods and material for containment and cleaning up</b>	For small spills, soak up material with absorbent, e.g., paper towels. For large spills, cordon off spill area and minimize the spreading of spilled material. Soak up material with absorbent. Wash spill area thoroughly with water. Collect spilled material, absorbent, and rinse water into suitable containers for proper disposal in accordance with applicable waste disposal regulations (see Section 13).

---

**SECTION 6 - ACCIDENTAL RELEASE MEASURES ...continued**

---

**Reference to other sections** See Sections 8 and 13 for more information.

---

**SECTION 7 - HANDLING AND STORAGE**

---

**Precautions for safe handling** Follow recommendations for handling pharmaceutical agents (i.e., use of engineering controls and/or other personal protective equipment if needed). Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing vapor/mist/spray.

**Conditions for safe storage including any incompatibilities** Store frozen at -20° C until ready for use.

**Specific end use(s)** No information identified.

---

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**Note** Dispose of broken vials/syringes in a sharps container.

**Control Parameters/Occupational Exposure Limit Values**

<u>Compound</u>	<u>Issuer</u>	<u>Type</u>	<u>OEL</u>
Non-Hazardous Reagent(s)	--	--	--

**Exposure/Engineering controls** Selection and use of containment devices and personal protective equipment should be based on a risk assessment of exposure potential. Use local exhaust and/or enclosure at aerosol/mist-generating points. Emphasis is to be placed on closed material transfer systems and process containment, with limited open handling. High-energy operations should be done within an approved emission control or containment system.

**Respiratory protection** Choice of respiratory protection should be appropriate to the task and the level of existing engineering controls. An approved and properly fitted air-purifying respirator with HEPA filters may be considered to provide ancillary protection based on the known or foreseeable limitations of existing engineering controls.

**Hand protection** Wear nitrile or other impervious gloves if skin contact is possible.

**Skin protection** Wear appropriate gloves, lab coat, or other protective overgarment if skin contact is likely. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use.

**Eye/face protection** Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available.

---

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION ...continued**

---

<b>Environmental Exposure Controls</b>	Avoid release to the environment and operate within closed systems wherever practicable. Air and liquid emissions should be directed to appropriate pollution control devices. In case of spill, do not release to drains. Implement appropriate and effective emergency response procedures to prevent release or spread of contamination and to prevent inadvertent contact by personnel.
<b>Other protective measures</b>	Wash hands in the event of contact with this product/mixture, especially before eating, drinking or smoking. Protective equipment is not to be worn outside the work area (e.g., in common areas or out-of-doors).

---

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

---

**Information on basic physical and chemical properties**

<b>Appearance</b>	Liquid
<b>Color</b>	Clear, colorless
<b>Odor</b>	No information identified.
<b>Odor threshold</b>	No information identified.
<b>pH</b>	No information identified.
<b>Melting point/freezing point</b>	No information identified.
<b>Initial boiling point and boiling range</b>	No information identified.
<b>Flash point</b>	No information identified.
<b>Evaporation rate</b>	No information identified.
<b>Flammability (solid, gas)</b>	No information identified.
<b>Upper/lower flammability or explosive limits</b>	No information identified.
<b>Vapor pressure</b>	No information identified.
<b>Vapor density</b>	No information identified.
<b>Relative density</b>	No information identified.
<b>Water solubility</b>	Miscible in water
<b>Solvent solubility</b>	No information identified.

---

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ...continued**

---

**Partition coefficient  
(*n*-octanol/water)** No information identified.

**Auto-ignition  
temperature** No information identified.

**Decomposition  
temperature** No information identified.

**Viscosity** No information identified.

**Explosive properties** No information identified.

**Oxidizing properties** No information identified.

**Other information**

**Molecular formula** Not applicable (Mixture)

**Molecular weight** Not applicable (Mixture)

---

**SECTION 10 - STABILITY AND REACTIVITY**

---

**Reactivity** No information identified.

**Chemical stability** Stable under recommended handling and storage conditions.

**Possibility of hazardous  
reactions** No information identified.

**Conditions to avoid** No information identified.

**Incompatible materials** No information identified.

**Hazardous decomposition  
products** No information identified.

---

**SECTION 11 - TOXICOLOGICAL INFORMATION**

---

**Note** No data were available for this mixture. The hazards may be similar to the hazards of the ingredient(s), all of which are considered non-hazardous.

**Information on toxicological  
effects**

**Route of entry** May be absorbed by inhalation, skin contact and ingestion.

**Acute toxicity**

<u>Compound</u>	<u>Type</u>	<u>Route</u>	<u>Species</u>	<u>Dose</u>
Non-Hazardous Reagent(s)	--	--	--	--

**Irritation/Corrosion** No data on product formulation.

---

**SECTION 11 - TOXICOLOGICAL INFORMATION ...continued**

---

<b>Sensitization</b>	No data on product formulation.
<b>STOT-single exposure</b>	No data on product formulation.
<b>STOT-repeated exposure/Repeat-dose toxicity</b>	No data on product formulation.
<b>Reproductive toxicity</b>	No data on product formulation.
<b>Developmental toxicity</b>	No data on product formulation.
<b>Genotoxicity</b>	No data on product formulation.
<b>Carcinogenicity</b>	No data on product formulation. None of the components of the product present at levels greater than or equal to 0.1% are listed by NTP, IARC, ACGIH or OSHA as a carcinogen.
<b>Aspiration hazard</b>	No data on product formulation.
<b>Human health data</b>	See "Section 2 - Other Hazards"

---

**SECTION 12 - ECOLOGICAL INFORMATION**

---

**Toxicity**

<u>Compound</u>	<u>Type</u>	<u>Species</u>	<u>Concentration</u>
Non-Hazardous Reagent(s)	--	--	--

**Persistence and Degradability** No data available.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Results of PBT and vPvB assessment** Not performed.

**Other adverse effects** No data available.

**Note** The environmental characteristics of this product/mixture have not been fully investigated. Releases to the environment should be avoided.

---

**SECTION 13 - DISPOSAL CONSIDERATIONS**

---

**Waste treatment methods** Used product should be disposed of according to local, state, and federal regulations. Dispose of wastes in accordance to prescribed federal, state, and local guidelines, e.g., appropriately permitted chemical waste incinerator. Do not send down the drain or flush down the toilet. All wastes containing the material should be properly labeled. Rinse waters resulting from spill cleanups should be discharged in an environmentally safe manner, e.g., appropriately permitted municipal or on-site wastewater treatment facility.

---

**SECTION 14 - TRANSPORT INFORMATION**

---

**Transport** Based on the available data, this product/mixture is not regulated as a hazardous material/dangerous good under EU ADR/RID, US DOT, Canada TDG, IATA, or IMDG.

**UN number** None assigned.

**UN proper shipping name** None assigned.

**Transport hazard classes and packing group** None assigned.

**Environmental hazards** Based on the available data, this product/mixture is not regulated as an environmental hazard or a marine pollutant.

**Special precautions for users** Due to lack of data, avoid release to the environment.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

---

**SECTION 15 - REGULATORY INFORMATION**

---

**Safety, health and environmental regulations/legislation specific for the substance or mixture** This SDS generally complies with the requirements listed under current guidelines in the US, EU and Canada. Consult your local or regional authorities for more information.

**Chemical safety assessment** Not conducted.

**TSCA status** Not listed.

**SARA section 313** Not listed.

**California proposition 65** Not listed.

---

**SECTION 15 - REGULATORY INFORMATION ...continued**

---

**Additional information** No other information identified.

---

**SECTION 16 - OTHER INFORMATION**

---

**Full text of H phrases and GHS classifications** Not applicable.

**Sources of data** Information from published literature and internal company data.

**Abbreviations** ACGIH - American Conference of Governmental Industrial Hygienists; ADR/RID - European Agreement Concerning the International Carriage of Dangerous Goods by Road/Rail; AIHA - American Industrial Hygiene Association; CAS# - Chemical Abstract Services Number; CLP - Classification, Labelling, and Packaging of Substances and Mixtures; DNEL - Derived No Effect Level; DOT - Department of Transportation; EINECS - European Inventory of New and Existing Chemical Substances; ELINCS - European List of Notified Chemical Substances; EU - European Union; GHS - Globally Harmonized System of Classification and Labeling of Chemicals; IARC - International Agency for Research on Cancer; IDLH - Immediately Dangerous to Life or Health; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; LOEL - Lowest Observed Effect Level; LOAEL - Lowest Observed Adverse Effect Level; NIOSH - The National Institute for Occupational Safety and Health; NOEL - No Observed Effect Level; NOAEL - No Observed Adverse Effect Level; NTP - National Toxicology Program; OEL - Occupational Exposure Limit; OSHA - Occupational Safety and Health Administration; PBT - Persistent, Bioaccumulative, and Toxic; PNEC - Predicted No Effect Concentration; SARA - Superfund Amendments and Reauthorization Act; STOT - Specific Target Organ Toxicity; STEL - Short Term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

**Issue Date** 11 June 2020

**Revisions** This is the first version of this SDS.

**Disclaimer** The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties and protections which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material because it is a pharmaceutical/ diagnostic product. The above information is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information relevant to the foreseeable handling of the material. However,

---

**SECTION 16 - OTHER INFORMATION ...continued**

---

**Disclaimer** ...continued      in the event of an adverse incident associated with this product, this Safety Data Sheet is not, and is not intended to be, a substitute for consultation with appropriately trained personnel.