



## MATERIAL SAFETY DATA SHEET In accordance with (EU) 2015/830

### SECTION 1. IDENTIFICATION

<b>Product name</b>	Control DNA GTQCD2
<b>Manufacturer or supplier's details</b>	GENETEK BIOPHARMA GmbH . Schwarzschildstraße 6. 12489 Berlin
<b>Telephone</b>	0049-3063927050
<b>Responsible Department</b>	GENETEK BIOPHARMA GmbH . Schwarzschildstraße 6. 12489 Berlin
<b>Responsible/issuing person</b>	Prof. Sirous Zeinali
<b>E-mail address</b>	zeinali@genetek.de
<b>Recommended use of the chemical and restrictions on use</b>	Laboratory chemicals

### SECTION 2. HAZARDS Classification according to regulation (EC) No 1272/2008 [CLP]

<b>GHS Classification</b>	Not a hazardous substance or mixture.
<b>GHS Label element</b>	Not a hazardous substance or mixture.
<b>Other hazards</b>	None known
<b>Additional information</b>	Not Applicable
<b>CAS#</b>	7732-18-5 (water is a dilutant)

### SECTION 3. Information on ingredients

<b>Substance/Mixture</b>	Substance
<b>Substance name</b>	Control DNA GTQCD2
<b>Hazardous ingredients</b>	No hazardous ingredients

### SECTION 4. FIRST AID MEASURES

<b>General advice</b>	Show this material safety data sheet to the doctor in attendance.
<b>If inhaled</b>	Move to fresh air. If symptoms persist, call a physician.
<b>In case of skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

<b>In case of eye contact</b>	<p>If symptoms persist, call a physician.</p> <hr/> <p>Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.</p> <hr/>
<b>If swallowed</b>	<p>If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.</p> <hr/>
<b>Most important symptoms and effects, both acute and delayed</b>	No information available.
<b>Notes to physician</b>	No information available.

## SECTION 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Specific hazards during fire fighting</b>	Exposure to decomposition products may be a hazard to health
<b>Hazardous combustion products</b>	No hazardous combustion products are known
<b>Specific extinguishing methods</b>	In the event of fire and/or explosion do not breathe fumes.
<b>Special protective equipment for fire-fighters</b>	Wear self-contained breathing apparatus for firefighting if necessary.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures</b>	Use personal protective equipment. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
<b>Methods and materials for containment and cleaning up</b>	Keep in suitable, closed containers for disposal.

## SECTION 7. HANDLING AND STORAGE

<b>Advice on protection against fire and explosion</b>	Normal measures for preventive fire protection.
<b>Advice on safe handling</b>	Smoking, eating and drinking should be prohibited in the application area.
<b>Recommended storage temperature</b>	-20 °C

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters contains no substances with occupational exposure limit values.

Personal protective equipment

**Hand protection Remarks**

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

**Eye protection**

Safety glasses

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Hygiene measures**

Footwear protecting against chemicals

Keep away from food and drink.

When using do not eat, drink or smoke.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	liquid
<b>Color</b>	colorless
<b>Odor</b>	colorless
<b>Odor Threshold</b>	No data available
<b>pH</b>	6-8
<b>Melting point/range</b>	0 °C
<b>Boiling point/boiling range</b>	100 °C (1,013 hPa)
<b>Flash point</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Burning rate</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Vapor pressure</b>	23 hPa (20 °C)
<b>Relative vapor density</b>	No data available
<b>Relative density</b>	1 (3.98 °C)
<b>Density</b>	1.00 g/cm <sup>3</sup>
<b>Solubility(ies) Water solubility</b>	Completely miscible
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition temperature</b>	Does not ignite
<b>Decomposition temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Viscosity, dynamic</b>	
<b>Viscosity, kinematic</b>	No data available
<b>Explosive properties</b>	Not applicable
<b>Oxidizing properties</b>	18.02 g/mol

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	No decomposition if stored and applied as directed.
Chemical stability	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions.
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No decomposition if stored and applied as directed.

## SECTION 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**  
Not classified based on available information.

**Product:**

Acute oral toxicity	No data available
Acute inhalation toxicity	No data available
Acute dermal toxicity	No data available

Skin corrosion/irritation	Not classified based on available information.
Product	No data available
Serious eye damage/eye irritation	Not classified based on available information.
Product	No data available

Respiratory or skin sensitization	
Skin sensitization	Not classified based on available information.
Respiratory sensitization	Not classified based on available information.

Germ cell mutagenicity	Not classified based on available information.
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Carcinogenicity	Not classified based on available information.
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**IARC**  
No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**  
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

**NTP**  
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

<b>Reproductive toxicity</b>	Not classified based on available information.
<b>STOT-single exposure</b>	Not classified based on available information.
<b>STOT-repeated exposure</b>	Not classified based on available information.
<b>Aspiration toxicity</b>	Not classified based on available information.
<b>Further information</b>	Not classified based on available information.

## SECTION 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	
<b>Toxicity to fish</b>	No data available
<b>Toxicity to algae</b>	No data available
<b>Toxicity to bacteria</b>	No data available
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	
<b>Product: Bioaccumulation</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	
<b>Product: Ozone-Depletion Potential</b>	Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
<b>Remarks:</b> This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).	
<b>Additional ecological information</b>	No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

<b>Disposal methods Waste from residues</b>	Dispose of contents/container in accordance with local regulation
<b>Waste from residues</b>	
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14. TRANSPORT INFORMATION

<b>UNRTDG</b>	Not regulated as a dangerous good
<b>IATA-DGR</b>	Not regulated as a dangerous good

IMDG-Code	Not regulated as a dangerous good
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No data available
Domestic regulation 49 CFR	Not regulated as a dangerous good

#### SECTION 15. REGULATORY INFORMATION

##### EPCRA - Emergency Planning and Community Right-to-Know - CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

##### SARA 311/312 Hazards

No SARA Hazards

##### SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

##### SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

##### TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

**SECTION 16. OTHER INFORMATION****Full text of other abbreviations**

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; EC<sub>x</sub> - Concentration associated with x% response; EL<sub>x</sub> - Loading rate associated with x% response; EmS - Emergency Schedule; ErC<sub>x</sub> - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC<sub>50</sub> - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC<sub>50</sub> - Lethal Concentration to 50 % of a test population; LD<sub>50</sub> - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

**Full texts for Regulations mentioned in this Safety Data Sheet**

**853/2015** COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

**1272/2008** REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

**89/391** COUNCIL DIRECTIVE (89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work

**1907/2006** REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC Annex I

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.