

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name TRIGent

Other means of identification

Product Code(s) K5161

Synonyms No information available

Product Use For Laboratory Research Use Only.

Supplier/Manufacturer

Biomatik Corporation
9-140 McGovern Dr.
Cambridge, Ontario N3H 4R7
Canada

Telephone Number 1-519-489-7195

E-mail Address info@biomatik.com

Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 3
Skin corrosion/irritation	Category 1 B
Serious eye damage/eye irritation	Category 1
Specific target organ systemic toxicity (single exposure)	Category 3
Specific target organ systemic toxicity (repeated exposure)	Category 2
Mutagenicity	Mutagenic category 2

Label elements



Emergency Overview

Hazard Statements

H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H331 - Toxic if inhaled
H314 - Causes severe skin burns and eye damage
H335 - May cause respiratory irritation
H341 - Suspected of causing genetic defects

H373 - May cause damage to organs through prolonged or repeated exposure
H412 - Harmful to aquatic life with long lasting effects

Appearance Liquid

Physical State Liquid

Odor No data available

Precautionary Statements

Prevention

P201 - Obtain special instructions before use
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P264 - Wash hands thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P273 - Avoid release to the environment

Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
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

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Chronic aquatic toxicity	Category 3
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Other Information

HMIS

Health	4 * Chronic Hazard
Flammability	0
Reactivity	0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %
Water	7732-18-5	231-791-2	30-50
Phenol	108-95-2	203-632-7	25-35
Guanidine thiocyanate	593-84-0	209-812-1	10-25

Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product. We recommend handling all chemicals with caution.

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Skin Contact	Rinse with plenty of water . Immediate medical attention is not required.
Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

Most important symptoms and effects, both acute and delayed

H301 - Toxic if swallowed H311 - Toxic in contact with skin H331 - Toxic if inhaled H314 - Causes severe skin burns and eye damage H335 - May cause respiratory irritation H341 - Suspected of causing genetic defects H373 - May cause damage to organs through prolonged or repeated exposure H412 - Harmful to aquatic life with long lasting effects

Indication of any immediate medical attention and special treatment needed

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable extinguishing media	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
Unsuitable Extinguishing Media	No information available.

Specific Hazards Arising from the Chemical Not known.

Explosion Data

Sensitivity to Mechanical Impact	Not known.
Sensitivity to Static Discharge	Not known.

Protective Equipment and Precautions for Firefighters

Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

Environmental Precautions

Not known.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Incompatible Products Not known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phenol	5 ppm	5 ppm 19 mg/m ³	-
Guanidine thiocyanate	None	None	-

Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tight sealing safety goggles.
Skin and Body Protection	Wear suitable protective clothing.
Respiratory Protection	In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Odor	No data available
Melting point / melting range	°C Mixture has not been tested
Boiling point / boiling range	°C Mixture has not been tested
Flash point	°C Mixture has not been tested
Autoignition Temperature	°C Mixture has not been tested
Decomposition temperature	°C Mixture has not been tested
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper explosion limit	Mixture has not been tested
Lower explosion limit	Mixture has not been tested
Vapor Pressure	Mixture has not been tested
Relative density	Mixture has not been tested
Specific gravity	No data available
Solubility	No data available
Partition coefficient n-octanol/water	No data available

Explosive properties	Mixture has not been tested
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Other Information No data available

10. STABILITY AND REACTIVITY

Reactivity None known.

Chemical Stability Stable under normal conditions.

Possibility of Hazardous Reactions Hazardous reaction has not been reported.

Conditions to Avoid Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.

Incompatible Materials No dangerous reaction known under conditions of normal use.

Hazardous Decomposition Products No data available.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Irritation Skin irritation, Serious Eye Damage / Eye Irritation.
Corrosivity Causes severe skin burns and eye damage.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phenol	= 340 mg/kg (Rat) = 317 mg/kg (Rat)	No data available	=316 mg/m ³ (Rat)
Guanidine thiocyanate	764 mg/kg	2000 mg/kg	5.319 mg/L (4H)

Information on toxicological effects

Symptoms No data available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Conclusive but not sufficient for classification.
Mutagenicity Product is or contains a chemical which may cause mutations in the germ cells of humans.

Carcinogenicity Conclusive but not sufficient for classification.

Chemical Name	ACGIH	IARC	NTP	OSHA
Phenol	-	-	-	-
Guanidine thiocyanate	-	-	-	-

Reproductive toxicity	Conclusive but not sufficient for classification.
STOT - Single Exposure	May cause respiratory irritation.
STOT - Repeated Exposure	Conclusive but not sufficient for classification.
Aspiration hazard	Conclusive but not sufficient for classification.

Numerical measures of toxicity - Product Information

No data available.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Phenol	<i>Desmodesmus subspicatus</i> EC50 187 - 279 mg/L (72 h) <i>Pseudokirchneriella subcapitata</i> EC50 46.42 mg/L (96 h)	<i>Daphnia magna</i> EC50 4.24 - 10.7 mg/L (48 h) <i>Daphnia magna</i> EC50 10.2 - 15.5 mg/L (48 h)	No data available	No data available	logPow1.5
Guanidine thiocyanate	No data available	No data available	No data available	No data available	No data available

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
Phenol	-
Guanidine thiocyanate	-

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Phenol	-	-	-	-
Guanidine thiocyanate	-	-	-	-

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Phenol	-	-	-	-
Guanidine thiocyanate	-	-	-	-

Chemical Name	California Hazardous Waste Status
Phenol	-
Guanidine thiocyanate	-

14. TRANSPORT INFORMATION

IATA / ADR / DOT-US / IMDG

Classified as dangerous in the meaning of transport regulations.

UN number	1760
UN proper shipping name	Corrosive liquid, n.o.s. (phenol - guanidine thiocyanate solution)
Transport hazard class(es)	8
Packing group	II
Environmental hazards	yes
Special precautions for user	Not Applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not Applicable.

15. REGULATORY INFORMATION

International Inventories

	Phenol	Guanidine thiocyanate
TSCA	Listed	Listed
DSL/NDSL	Listed	Not listed
EINECS/ELINCS	Listed	Listed
ENCS	Listed	Listed
IECSC	Listed	Listed
KECL	Listed	Not listed
PICCS	Listed	Listed
AICS	Listed	Listed

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following

chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Phenol	1.0

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

D1A - Very toxic materials

E - Corrosive material



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet