

Product Name: Control Concentrate Human Granzyme B

Reviewed on: 20 March 2019

1. Identification of Substance:

- **Other means of identification: Catalog Number:** 898137
- **GHS product identifier:** Control Concentrate Human Granzyme B
- **Application of the substance / the preparation:** For Research Use Only
- **Manufacturer/Supplier:**
Bio-Techne – R&D Systems Inc.
614 McKinley Place N.E.
Minneapolis, MN 55413
USA
1-800-343-7475
- **For product related questions call:** In the United States and Canada, call (408) 510-5500.
In Europe, call +44(0)1235-529449.
- **Emergency information:** In case of a chemical emergency, spill, leak, fire, or accident call **CHEMTREC** at 1-800-424-9300 (US or Canada). Outside USA and Canada: +1 703-527-3887 (collect calls accepted).

2. Hazard Identification:

Classification: This substance is classified as a skin sensitizer according to the **Regulation (EC) No. 1272/2008 (CLP/EU-GHS)**, **29 CFR 1910.1200 (OSHA)**: Contains ProClin 300: Skin Sens. 1

- **Pictogram:**
- **Signal Word:** WARNING
- **Hazard statements:**
H317: May cause an allergic skin reaction.
- **Precautionary statements:**
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves.
- **Response:** IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: get medical attention. Wash contaminated clothing before reuse.
- **Label Elements:** Not applicable.
- **Other hazards:** Not applicable.



3. Information on Ingredients:

Description: ProClin 300

Contains	CAS No.	EC-No.	Index-No.	Content
Modified Alkyl Carboxylate	-	-	-	<0.01%
Mixture of 5-Chloro-2-Methyl-4-Isothiazolin-3-One (26172-55-4) and 2-Methyl-4-Isothiazolin-3-One (2682-20-4)	55965-84-9	-	613-167-00-5	<0.01%
Modified Glycol	-	-	-	≤1.6%

4. First Aid Measures:

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly. Generally, the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Consult a doctor.
- **After swallowing:** Rinse mouth with water. Seek medical attention and appropriate follow-up.

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5. Fire Fighting Measures:

- **Suitable extinguishing agents:** Use water spray or extinguishing measure that is appropriate to local circumstances and the surrounding environment.
- **Hazards from the substance or mixture:** Sodium oxides.
- **Special precautions for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
- **Other information:** This product does not burn.

6. Accidental Release Measures:

- **Person-related safety precautions:** Use standard laboratory practices and appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
- **Measures for environmental protection:** Keep away from drains.
- **Measures for containment and cleaning:** Soak up with inert absorbent material and dispose of as per section 13. Keep in suitable, closed containers for disposal.
- **Additional information:** Not available.

7. Handling and Storage:

- **Precautions for safe handling:** Avoid inhalation of vapor or mist. Avoid contact with eyes and skin. No special precautions are necessary if used properly.
- **Conditions for safe storage:** Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not store in incompatible containers.

8. Exposure Controls and Personal Protection:

- **Control parameters:** Not available.
- **Appropriate engineering controls:** Use with adequate ventilation including local extraction. Ensure that eyewash stations and safety showers are close to the workstation location. Follow standard laboratory practices.
- **Individual protection measures:** Wash hands thoroughly after handling chemical products and before eating, smoking or using the restroom. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Eyeface protection: Wear approved safety goggles.

Skin/hand protection: Handle with protective gloves, plastic or rubber. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection: Wear suitable protective clothing as protection against splashing or contamination.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

Respiratory protection: In case of inadequate ventilation, use a suitable respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. Physical and Chemical Properties:

▪ Appearance: Clear Liquid or solid	▪ Upper/lower flammability or explosive limits: Not available
▪ Odor: Not available	▪ Vapor density : Not available
▪ Odor threshold: Not available	▪ Vapor pressure: Not available
▪ pH: Not available	▪ Relative density: 1.03 g/cm ³

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▪ Melting point/freezing point: -40° C	▪ Solubility in/Miscibility with Water: Soluble
▪ Boiling point/Boiling range: 189° C	▪ Partition coefficient: octanol/water: Not available
▪ Flash point: 118° C – closed cup	▪ Auto igniting: Not available
▪ Evaporation rate: Not available	▪ Decomposition temperature: Not available
▪ Flammability (solid, gas): Not available	▪ Viscosity: Not available

10. Stability and Reactivity:

- **Reactivity:** Non-reactive under normal ambient and storage and handling temperatures.
- **Chemical Stability:** Stable under normal ambient and storage and handling temperatures.
- **Conditions to avoid:** Strong oxidizing agents, reducing agents, Amines, Mercaptans.
- **Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions – Carbon oxides, nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride gas.

11. Toxicological Information:

- **Acute toxicity:** LD50 Oral – rat – 862 mg/kg
LD50 Dermal – rabbit- 2800 mg/kg
- **Skin corrosion/irritation:** Can cause severe burns Skin – rabbit – Corrosive
- **Serious eye damage/irritation:** Rabbit – Corrosive to eyes.
- **Respiratory or skin sensitization:** May cause allergic skin reaction.
- **Germ cell mutagenicity:** Not available.
- **Carcinogenicity:** Not available.
- **Reproductive toxicity:** Not available.
- **Specific target organ toxicity (STOT) -single exposure:** Not available.
- **Specific target organ toxicity (STOT) -repeated exposure:** Not available.
- **Aspiration hazard:** Can cause severe burns.
- **Information on likely routes of exposure:** Routes of entry anticipated; oral, dermal, inhalation.
- **Symptoms related to the physical, chemical and toxicological characteristics:**
 - Inhalation:** Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
 - Ingestion:** Harmful if swallowed. Causes burns.
 - Skin contact:** Harmful if absorbed through skin. Causes burns.
 - Eye contact:** Causes eye burns.
- **Delayed and immediate effects and also chronic effects from short and long term exposure:**
 - Short term exposure: Potential immediate effects:** Not available. **Potential delayed effects:** Not available.
 - Long term exposure: Potential immediate effects:** Not available. **Potential delayed effects:** Allergic contact dermatitis.
- **Effects of chronic exposure:** ProClin 300 at levels greater than or equal to 0.1% is not identified as probable, possible or a confirmed human carcinogen by IARC.
- **Numerical measures of toxicity:** Not available
- **Other Information:** Not available.

12. Ecological Information:

- **Ecotoxicity:** No data available
- **Biodegradability:** No data available.
- **Bioaccumulative potential:** No data available.
- **Mobility in soil:** No data available.
- **Other adverse effects:** Toxic to aquatic organisms.

13. Disposal Considerations:

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- **Disposal methods:** Dispose of waste in accordance to applicable national, regional, or local regulations.
- **Contaminated packaging:** Dispose in the same manner as unused product.
- **Special precautions:** Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by qualified disposal personnel. Avoid dispersal of spilt material to soil, waterways, drains and sewers.

14. Transportation Information:

- **TRANSPORT INFORMATION:** Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.
- **UN-Number:** Does not meet the criteria for classification as hazardous for transport.
- **UN proper shipping name:** Does not meet the criteria for classification as hazardous for transport.
- **Transport hazard class(es):** Does not meet the criteria for classification as hazardous for transport.
- **Packaging group:** Does not meet the criteria for classification as hazardous for transport.
- **Environmental hazards:** Does not meet the criteria for classification as hazardous for transport.
- **Special precautions for users:** Does not meet the criteria for classification as hazardous for transport.
- **Additional Transport Information:** Does not meet the criteria for classification as hazardous for transport.

15. Regulations:

- **European Union:** This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.
- **US Federal and State Regulations**
 - Toxic Substances Control Act:** Not listed
 - SARA 313 Components:** Not listed
 - SARA 311/312 Hazards:** Not listed
 - CERCLA Reportable Quantity:** Not listed
 - California Proposition 65:** Not listed.

16. Other Information:

Further Information

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This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

End of safety data sheet