Section 1 – Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Material Name: Reagent D
Contains: 0.003% CMIT/MIT
Product Description: Kit Component
Chemical Family: Isothiazolinones
Substance Registration Number(s): This material is imported in amounts <1 ton/year. This product and the other components are not subject to REACH legislation.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Detection and quantification of Protein A
Uses advised against: R&D use only

1.3 Details of the supplier of the safety data sheet
Repligen Corporation.
41 Seyon Street, Building 1 Suite 100
Waltham, MA 02453
Phone: 1 (800) 622-2259
E-mail: sales@repligen.com
Fax: 1(781)-250-0115

1.4 Emergency telephone number: 1(800) 622-2259

Section 2 – Hazards Identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [CLP]
Skin Sensitization - Category 1

2.2 Label elements
Labeling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard Symbols:

Signal word: Warning
Hazard statements:  
GHS code H317 May cause allergic skin reaction.

Precautionary statements
Prevention:  
GHS code P280 Wear protective gloves/protective clothing/eye protection/face protection.  
GHS code P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Response:  
GHS code P305 +P351 +P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
GHS code P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
GHS code P333+P313 If skin irritation or rash occurs: Get medical attention.  
GHS code P362+P364 Take off contaminated clothing and wash before reuse.

Storage:  
None needed according to classification criteria.

Disposal:  
GHS code P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards  
None known.

Section 3 – Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS EC No Registration No</th>
<th>Component Name Synonyms</th>
<th>1272/2008 (CLP)</th>
<th>Percent</th>
</tr>
</thead>
</table>
| 55965-84-9 -- --          | 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone | Acute Tox. (Oral) 3 - H301  
Acute Tox. (Vapour) 3 - H331  
Acute Tox. (Gas) 3 - H331  
Acute Tox. (Dermal) 3 - H311  
Acute Tox. (Dust/Mist) 3 - H331  
Skin Corr. 1B - H314  
Skin Sens. 1 - H317  
Aquatic Acute 1 - H400  
Aquatic Chronic 1 - H410 | 0.003 |

Full text of H- and EUH-statements: see section 16.
Section 4 – First Aid Measures

4.1 Description of first aid measures

Inhalation: If adverse effects occur, remove to uncontaminated area. Get immediate medical attention.

Skin: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor.

Eyes: Flush eyes with plenty of water for at least 15 minutes. If eye irritation persists: Get medical attention.

Ingestion: If swallowed, get medical attention. Do NOT induce vomiting.

4.2 Most Important Symptoms/Effects

Acute: May cause an allergic skin reaction.

Delayed: No information on significant adverse effects.

4.3 Indication of Immediate Medical Attention and Special Treatment

Treat symptomatically and supportively.

Section 5 – Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media: Use foam, dry chemical, CO2, or water spray.

Unsuitable Extinguishing Media: None known.

5.2 Special hazards arising from the substance or mixture

Combustion: Decomposition products include oxides of carbon and low molecular weight hydrocarbons.

5.3 Advice for firefighters

Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

Fire Fighting Measures: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear personal protective clothing and equipment, see Section 8.
6.2 Environmental precautions: Avoid release to the environment. Do not allow to enter into ground-water, surface water or drains.

6.3 Methods and Materials for Containment and Cleaning Up: Contain the discharged material with an inert absorbent material. Isolate hazard area. Keep unnecessary personnel away.


Section 7 – Handling and Storage

7.1 Precautions for safe handling: Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wear eye/face protection. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Store at 2-8 °C.

Incompatible Materials: Strong oxidizing agents, peroxides, acid, alkali

7.3 Specific end use(s): R&D Use Only.

Section 8 – Exposure Controls/Personal Protection

8.1 Control parameters

Component Exposure Limits

<table>
<thead>
<tr>
<th>5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone</th>
<th>55965-84-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria:</td>
<td>0.05 mg/m³ TWA [TMW ]</td>
</tr>
<tr>
<td></td>
<td>skin notation</td>
</tr>
<tr>
<td></td>
<td>Skin sensitizer</td>
</tr>
</tbody>
</table>

Component Biological Exposure Limits: None of this product’s components are on the list.

Derived No Effect Levels (DNELs): No DNELs available.

Predicted No Effect Concentrations (PNECs): No PNECs available.
Section 8 – Personal Protection Information

8.2 Exposure Controls

Engineering controls: Provide adequate ventilation. Ensure compliance with applicable exposure limits.

Eye/face protection: Wear safety goggles with a faceshield (EN 166).

Skin Protection: Wear suitable protective clothing. Wash contaminated clothing before reuse (EN ISO 6529).

Respiratory Protection: If engineering controls do not maintain airborne concentrations to a negligible level, an approved respirator must be worn (EN 137).

Glove Recommendations: Wear suitable gloves (EN 374).

Section 9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Colorless liquid</th>
<th>Physical State</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Not available</td>
<td>Color</td>
<td>Colorless, clear to light yellow</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
<td>pH</td>
<td>7</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not available</td>
<td>Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point Range</td>
<td>Not available</td>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not available</td>
<td>Flash Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower Explosive Limit</td>
<td>Not available</td>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper Explosive Limit</td>
<td>Not available</td>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>Not available</td>
<td>Specific Gravity (water=1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>(soluble)</td>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
<td>Solubility (Other)</td>
<td>Not available</td>
</tr>
<tr>
<td>Density</td>
<td>Not available</td>
<td>Physical Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9.2 Other information
No additional information is available.

Section 10 – Stability and Reactivity

10.1 Reactivity: No reactivity hazard is expected.

10.2 Chemical stability: Stable at normal temperatures and pressure.

10.3 Possibility of hazardous reactions: Will not polymerize.

10.4 Conditions to avoid: Avoid contact with incompatible materials.

10.5 Incompatible materials: Strong oxidizing agents, peroxides, acids, alkalis

10.6 Hazardous decomposition Products: Decomposition products include oxides of carbon and low molecular weight hydrocarbons.

Section 11 – Toxicological Information

11.1 Information on toxicological effects
The components of this material have been reviewed in various sources and the following selected endpoints are published:

5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)
Oral LD50 Rat 53 mg/kg

Product Toxicity Data
Acute Toxicity Estimate

<table>
<thead>
<tr>
<th>Route</th>
<th>Toxicity Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

Irritation/Corrosivity Data: May cause an allergic skin reaction.
Respiratory Sensitization: No data available.
Dermal Sensitization: May cause an allergic skin reaction.
Germ Cell Mutagenicity: No data available.
Component Carcinogenicity: None of this product's components are listed by IARC or DFG.
Reproductive toxicity: No data available.
Specific Target Organ Toxicity – Single Exposure: No target organs identified.
Specific Target Organ Toxicity – Repeated Exposure: No target organs identified.
Aspiration hazard: No data available.
Section 12 – Ecological Information

12.1 Toxicity:
Component Analysis – Aquatic Toxicity:
No LOLI ecotoxicity data are available for this product’s components.

12.2 Persistence and degradability: No information available for the product.

12.3 Bioaccumulative potential:
No information available for the product.

12.4 Mobility in soil:
No information available for the product.

12.5 Results of PBT and vPvB assessment:
No information available for the product.

Section 13 – Disposal Considerations

13.1 Waste treatment methods:
Dispose of contents/container in accordance with local/regional/national/international regulations.
Recycle if possible. EWC-code: 18 02 05*.
No data available.
Release to the environment or sewage system is prohibited.
Dispose in accordance with all applicable regulations.
Reagent D – Component of rPZata Kit 9333-1
Safety Data Sheet

Section 14 – Transport Information

<table>
<thead>
<tr>
<th></th>
<th>ADR</th>
<th>RID</th>
<th>ICAO</th>
<th>IATA</th>
<th>ADN</th>
<th>IMDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN Number</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
<tr>
<td>14.2 UN Proper Shipping Name</td>
<td>--</td>
<td>--</td>
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<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>14.3 Transport Hazard Class(es)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>14.4 Packing Group</td>
<td>--</td>
<td>--</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>14.5 Environmental Hazards</td>
<td>--</td>
<td>--</td>
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<td>--</td>
</tr>
<tr>
<td>14.6 Special Precautions For User</td>
<td>--</td>
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</tr>
<tr>
<td>14.7 Transport in Bulk According to Annex II of MARPOL and the IBC Code</td>
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<tr>
<td>14.8 Additional information</td>
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</table>

Component Marine Pollutants (IMDG): Not a marine pollutant.
International Bulk Chemical Code: This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU - REACH (1907/2006) - Annex XIV List of Substances Subject to Authorization
No components of this material are listed.
EU - REACH (1907/2006) - Article 59(1) Candidate List of Substances Subject to Authorization
No components of this material are listed.
EU - REACH (1907/2006) - Annex XVII Restrictions of Certain Dangerous Substances, Mixtures and Articles
No components of this material are listed.
EU - Substances Depleting the Ozone layer (1005/2009)
No components of this material are listed
EU - Persistent Organic Pollutants (850/2004)
No components of this material are listed
EU - Export and Import Restrictions (689/2008) - Chemicals and Articles Subject to Export Ban
No components of this material are listed
EU - Seveso III Directive (2012/18/EU) - Qualifying Quantities of Dangerous Substances  
No components of this material are listed  

EU - Plant Protection Products (1107/2009/EC)  
No components of this material are listed  

EU - Biocides (528/2012/EU)  
No components of this material are listed  

No components of this material are listed  

EU - Limitation of Emissions of Volatile Organic Compounds Due to the Use of Organic Solvents in  
Certain Activities and Installations (1999/13/EC)  
No components of this material are listed  

Germany Regulations  
Germany Water Classification - Product  
non-hazardous to water (nwg)  

Germany Water Classification - Component  
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)  
ID Number 2959, hazard class 3 - severe hazard to waters  

Denmark Regulations  
No components of this material are listed.

Component Analysis - Inventory  
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)  

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>DSL</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

15.2 Chemical Safety Assessment  
No chemical safety assessment has been carried out for the substance/mixture.

Section 16 – Other Information

16.1 Indication of changes  
New SDS: 12 June 2017

16.2 Key / Legend:  
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing
16.3 Key literature references and sources for data:
Available upon request.

16.4 Methods Used for Classification of Mixture According to Regulation (EC) No 1272/2008
Available upon request.

16.5 Relevant H- and EUH-phrases (Number and full text) and Notes:

- **H301** Toxic if swallowed
- **H311** Toxic in contact with skin
- **H314** Causes severe skin burns and eye damage
- **H317** May cause allergic skin reaction
- **H331** Toxic if inhaled
Reagent D – Component of rPZata Kit 9333-1
Safety Data Sheet

 H400 Very toxic to aquatic life
 H410 Very toxic to aquatic life with long lasting effects

16.6 Training advice:
Read the Safety Data Sheet before handling product.

16.7 Further Information Disclaimer:
Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.