<table>
<thead>
<tr>
<th>Product code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G7015</strong></td>
<td><strong>ADCC Reporter Bioassay, Complete (Raji)</strong></td>
</tr>
</tbody>
</table>

Components:

<table>
<thead>
<tr>
<th>Product code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G721A</td>
<td>Control Ab, Anti-CD20</td>
</tr>
<tr>
<td>G720A</td>
<td>Bio-Glo™ Luciferase Assay Substrate</td>
</tr>
<tr>
<td>G719A</td>
<td>Bio-Glo™ Luciferase Assay Buffer</td>
</tr>
<tr>
<td>G711A</td>
<td>Low IgG Serum</td>
</tr>
<tr>
<td>G708A</td>
<td>RPMI 1640 Medium</td>
</tr>
<tr>
<td>G701</td>
<td>ADCC Bioassay Effector Cells, Jurkat V Variant</td>
</tr>
<tr>
<td>G870A</td>
<td>ADCC Bioassay Target Cells Raji</td>
</tr>
<tr>
<td>GA113A</td>
<td>Control Ab, Anti-CD20</td>
</tr>
</tbody>
</table>
1 Identification

Trade name: Control Ab, Anti-CD20

Article number: G721A

Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Information department:
SDS author: ChemicalRegulatory@promega.com
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Emergency telephone number:
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture
The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements
GHS label elements Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable
Classification system:
NFPA ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown
Trade name: Control Ab, Anti-CD20

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description:
The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components: Not applicable
Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures
General information: No special measures required.
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If the patient feels unwell or is concerned, obtain medical advice.
Information for doctor:
Most important symptoms and effects, both acute and delayed
None
No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture
None known
No further relevant information available.
Advice for firefighters No special advice
Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.
Environmental precautions: No special measures required.
Methods and material for containment and cleaning up: Pick up mechanically.
Reference to other sections
No dangerous substances are released.
See Section 7 for information on safe handling.
7 Handling and storage

Handling:
- Precautions for safe handling: No special measures required.
- Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.
  - Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

Control parameters
- Components with limit values that require monitoring at the workplace:
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
    - The usual precautionary measures for handling chemicals should be followed.
  - Breathing equipment: Not required.
  - Protection of hands: Not required.
  - Material of gloves:
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - Eye protection: Not required.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information
- Appearance:
  - Form: Solid
  - Color: Colorless
  - Odor: Not determined
  - Odor threshold: Not determined
- pH-value: Not applicable

Change in condition
- Melting point/Melting range: Undetermined.
- Boiling point/Boiling range: Undetermined.
- Flash point: Not applicable.
- Flammability (solid, gaseous): Not determined.

(Contd. on page 4)
Trade name: Control Ab, Anti-CD20

<table>
<thead>
<tr>
<th>Decomposition temperature:</th>
<th>Not determined.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto igniting:</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion:</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water:</td>
<td>Soluble.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>VOC content:</td>
<td>0.00 %</td>
</tr>
<tr>
<td>Solids content:</td>
<td>100.0 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

**10 Stability and reactivity**

Reactivity: No further relevant information available.

Chemical stability:

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

**11 Toxicological information**

Information on toxicological effects:

Acute toxicity:

LD/LC50 values that are relevant for classification: No data available

Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations.

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.
Safety Data Sheet
acc. to OSHA HCS

Trade name: Control Ab, Anti-CD20

12 Ecological information

Toxicity
Aquatic toxicity:
Not available
No further relevant information available.

Persistence and degradability
Not available
No further relevant information available.

Bioaccumulative potential
Not known
No further relevant information available.

Mobility in soil
Not available
No further relevant information available.

Ecotoxicological effects:
Remark: Not available

Additional ecological information:
General notes:
Not available.
Not known to be hazardous to water.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects
No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

UN-Number
Not hazardous for transportation

DOT, ADR, ADN, IMDG, IATA
Not applicable

UN proper shipping name
None

DOT, ADR, ADN, IMDG, IATA
Not applicable

Transport hazard class(es)
None
Trade name: Control Ab, Anti-CD20

DOT, ADR, ADN, IMDG, IATA

<table>
<thead>
<tr>
<th>Class</th>
<th>Not applicable</th>
</tr>
</thead>
</table>

Packing group

<table>
<thead>
<tr>
<th>DOT, ADR, IMDG, IATA</th>
<th>None</th>
</tr>
</thead>
</table>

Environmental hazards:

<table>
<thead>
<tr>
<th>Marine pollutant:</th>
<th>No</th>
</tr>
</thead>
</table>

Special precautions for user

<table>
<thead>
<tr>
<th>Not applicable.</th>
</tr>
</thead>
</table>

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

<table>
<thead>
<tr>
<th>Not applicable.</th>
</tr>
</thead>
</table>

UN "Model Regulation":

<table>
<thead>
<tr>
<th>Not applicable</th>
</tr>
</thead>
</table>

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

Section 355 (extremely hazardous substances):

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

Section 313 (Specific toxic chemical listings):

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

Hazardous Air Pollutants

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

Proposition 65

Chemicals known to cause cancer:

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

Chemicals known to cause reproductive toxicity for females:

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

Chemicals known to cause reproductive toxicity for males:

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

Chemicals known to cause developmental toxicity:

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

Cancerogenity categories

EPA (Environmental Protection Agency)

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

TLV (Threshold Limit Value established by ACGIH)

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

NIOSH-Ca (National Institute for Occupational Safety and Health)

<table>
<thead>
<tr>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

GHS label elements

<table>
<thead>
<tr>
<th>Not applicable</th>
</tr>
</thead>
</table>

Signal word

<table>
<thead>
<tr>
<th>Not applicable</th>
</tr>
</thead>
</table>

Hazard statements

<table>
<thead>
<tr>
<th>Not applicable</th>
</tr>
</thead>
</table>

Water hazard class:

<table>
<thead>
<tr>
<th>Generally not hazardous for water.</th>
</tr>
</thead>
</table>

(Contd. on page 7)
Trade name: Control Ab, Anti-CD20

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:
Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph: (608)274-4330
Date of preparation / last revision 07/21/2020 / 1.0

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: Internation Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

* Data compared to the previous version altered.
1 Identification

Product identifier
Trade name: Bio-Glo™ Luciferase Assay Substrate

Article number: G720A
Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Information department:
SDS author: ChemicalRegulatory@promega.com
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Emergency telephone number:
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) Identification

Classification of the substance or mixture
The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements
GHS label elements Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable
Classification system:
NFPA ratings (scale 0 - 4)
Health = 1
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)
Health = 1
Fire = 0
Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown

(Contd. on page 2)
51.1.1 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description:
The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:
3483-12-3 DL-Dithiothreitol 1-5%

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures
General information: No special measures required.
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:
Most important symptoms and effects, both acute and delayed
None
No further relevant information available.

Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
None known
No further relevant information available.
Advice for firefighters No special advice
Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.
Environmental precautions: Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections
No dangerous substances are released.
See Section 7 for information on safe handling.
7 Handling and storage

Handling:
Precautions for safe handling: No special measures required.
Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities:

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

Control parameters
Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at
the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands: Not required.
Material of gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and
varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance
of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Eye protection: Not required.

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information

Appearance:
Form: Solid
Color: Colorless
Odor: Not determined
Odor threshold: Not determined.

pH-value at 20 °C (68 °F): 6.7

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.
Flash point: Not applicable.

Flammability (solid, gaseous): Not determined.
Decomposition temperature: Not determined.
Auto igniting: Product is not selfigniting.
Danger of explosion: Product does not present an explosion hazard.
Explosion limits:
  Lower: Not determined.
  Upper: Not determined.
Vapor pressure: Not applicable.
Density: Not determined.
Relative density: Not determined.
Vapor density: Not applicable.
Evaporation rate: Not applicable.
Solubility in / Miscibility with:
  Water: Soluble.
Partition coefficient (n-octanol/water): Not determined.
Viscosity:
  Dynamic: Not applicable.
  Kinematic: Not applicable.
VOC content: 0.00 %
Solids content: 100.0 %
Other information: No further relevant information available.

10 Stability and reactivity
Reactivity: No further relevant information available.
Chemical stability
  Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
  Possibility of hazardous reactions: No dangerous reactions known.
  Conditions to avoid: No further relevant information available.
  Incompatible materials: No further relevant information available.
  Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information
Information on toxicological effects
Acute toxicity:
  LD/LC50 values that are relevant for classification: No data available
  Primary irritant effect:
    on the skin: No irritant effect.
    on the eye: No irritating effect.
  Sensitization: No sensitizing effects known.
Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations:
Carcinogenic categories
  IARC (International Agency for Research on Cancer)
    None of the ingredients are listed.
12 Ecological information

Toxicity
Aquatic toxicity:
Not available
No further relevant information available.

Persistence and degradability
Not available
No further relevant information available.

Bioaccumulative potential
Not known
No further relevant information available.

Mobility in soil
No further relevant information available.

Ecotoxicological effects:
Remark: Not available

Additional ecological information:
General notes: Not known to be hazardous to water.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects
No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

UN-Number
DOT, ADR, ADN, IMDG, IATA
Not hazardous for transportation
Not applicable

UN proper shipping name
DOT, ADR, ADN, IMDG, IATA
None
Not applicable

Transport hazard class(es)
DOT, ADR, ADN, IMDG, IATA
None

Class
Not applicable
Trade name: Bio-Glo™ Luciferase Assay Substrate

Packing group
DOT, ADR, IMDG, IATA
None

Environmental hazards:
Marine pollutant:
No

Special precautions for user
Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

UN "Model Regulation":
Not applicable

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.

TSCA (Toxic Substances Control Act) Inventory:
3483-12-3 DL-Dithiothreitol

Hazardous Air Pollutants
None of the ingredients are listed.

Proposition 65

Chemicals known to cause cancer:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

Cancerogenicity categories

EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

GHS label elements
Not applicable

Signal word
Not applicable

Hazard statements
Not applicable

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
Trade name: Bio-Glo™ Luciferase Assay Substrate

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:
Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph: (608)274-4330

Date of preparation / last revision 07/21/2020 / 1.0

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

* Data compared to the previous version altered.
* 1 Identification

**Product identifier**

*Trade name:* Bio-Glo™ Luciferase Assay Buffer

**Article number:** G719A

**Application of the substance / the mixture**

For Laboratory Use

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:**

Promega Corporation

2800 Woods Hollow Road

Madison, WI 53711

U.S.A.

1-800-356-9526 or (608)-274-4330

**Information department:**

SDS author: ChemicalRegulatory@promega.com

Promega Corporation

2800 Woods Hollow Road

Madison, WI 53711

U.S.A.

1-800-356-9526 or (608)-274-4330

**Emergency telephone number:**

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

---

* 2 Hazard(s) identification

**Classification of the substance or mixture**

![GHS08 Health hazard]

Carc. 2 H351 Suspected of causing cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

**Label elements**

*GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**

![GHS08]

**Signal word Warning**

**Hazard statements**

Suspected of causing cancer.

(Contd. on page 2)
Suspected of damaging fertility or the unborn child.

Precautionary statements
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
Health = 2
Fire = 0
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 2
Fire = 0
Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown
Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description:
The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:
62-56-6 thiourea <1%

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:
Most important symptoms and effects, both acute and delayed
None

Indication of any immediate medical attention and special treatment needed
No further relevant information available.

US
5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture
None known
No further relevant information available.

Advice for firefighters
No special advice

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Remove persons from danger area.
Wear protective clothing.

Environmental precautions: Dilute with plenty of water.

Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections
See Section 7 for information on safe handling.
See Section 13 for disposal information.

7 Handling and storage

Handling:
Precautions for safe handling No special precautions are necessary if used correctly.

Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters
Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures: Wash hands before breaks and at the end of work.
Breathing equipment: Not required.

Protection of hands:
Protective gloves
Select the glove material considering penetration time, rate of diffusion and degradation time.
It is recommended that the selected protective gloves be tested and approved under NIOSH or EU Directive 89/686/EEC and the standard EN 374 derived from it.
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Eye protection: Use equipment for eye protection tested and approved under government NIOSH standards.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:
Form: Fluid
Color: Colorless
Odor: Not determined
Odor threshold: Not determined.

pH-value at 20 °C (68 °F): 6.7

Change in condition
Melting point/Melting range: 0 °C (32 °F)
Boiling point/Boiling range: 100 °C (212 °F)
Flash point: Not applicable.

Flammability (solid, gaseous):
Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.

Danger of explosion:
Explosion limits:
Lower: Not determined.
Upper: Not determined.
Vapor pressure: Not determined.

Density at 20 °C (68 °F): 1.02 g/cm³ (8.5119 lbs/gal)
Relative density: Not determined.
Vapor density: Not determined.
Evaporation rate: Not determined.
Solubility in / Miscibility with
Water: Fully miscible.
Partition coefficient (n-octanol/water): Not determined.

Viscosity:
Dynamic: Not determined.
Kinematic: Not determined.

Organic solvents: 0.5 %
Water: 95.1 %
VOC content: 0.53 %
Other information No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available.
Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
**11 Toxicological information**

**Information on toxicological effects**

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:** No data available

**Primary irritant effect:**

**on the skin:** No data available.

**on the eye:** No data available.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

**Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**
  62-56-6 thiourea

- **NTP (National Toxicology Program)**
  62-56-6 thiourea

- **OSHA-Ca (Occupational Safety & Health Administration)**
  None of the ingredients are listed.

**12 Ecological information**

**Toxicity**

**Aquatic toxicity:**

Not available

No further relevant information available.

**Persistence and degradability**

Not available

No further relevant information available.

**Bioaccumulative potential**

Not known

No further relevant information available.

**Mobility in soil**

No further relevant information available.

**Ecotoxicological effects:**

**Remark:** Not available

**Additional ecological information:**

**General notes:** Not available.

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects**

No further relevant information available.
13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>Not hazardous for transportation</th>
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<tbody>
<tr>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN proper shipping name</td>
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<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Not applicable</td>
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<tr>
<td>Transport hazard class(es)</td>
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<tr>
<td>Class</td>
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<tr>
<td>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
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</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>Not applicable</td>
</tr>
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</table>

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
62-56-6 thiourea

TSCA (Toxic Substances Control Act) Inventory:
62-56-6 thiourea

Hazardous Air Pollutants
67-56-1 methanol
Trade name: Bio-Glo™ Luciferase Assay Buffer

Proposition 65

Chemicals known to cause cancer:
62-56-6 thiourea

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
67-56-1 methanol

Carcinogenity categories

EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Signal word Warning

Hazard statements
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.

Precautionary statements
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Water hazard class: Generally not hazardous for water.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:
Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph:(608)274-4330

Date of preparation / last revision 07/21/2020 / 2.0

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
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<tr>
<th><strong>Trade name:</strong> Bio-Glo™ Luciferase Assay Buffer</th>
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<tbody>
<tr>
<td>ELINCS: European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>CAS: Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>NFPA: National Fire Protection Association (USA)</td>
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<tr>
<td>HMIS: Hazardous Materials Identification System (USA)</td>
</tr>
<tr>
<td>VOC: Volatile Organic Compounds (USA, EU)</td>
</tr>
<tr>
<td>LC50: Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50: Lethal dose, 50 percent</td>
</tr>
<tr>
<td>PBT: Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>vPvB: very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>NIOSH: National Institute for Occupational Safety</td>
</tr>
<tr>
<td>OSHA: Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>TLV: Threshold Limit Value</td>
</tr>
<tr>
<td>PEL: Permissible Exposure Limit</td>
</tr>
<tr>
<td>REL: Recommended Exposure Limit</td>
</tr>
<tr>
<td>Carc. 2: Carcinogenicity – Category 2</td>
</tr>
<tr>
<td>Rep: 2: Reproductive toxicity – Category 2</td>
</tr>
</tbody>
</table>

* Data compared to the previous version altered.
1 Identification

Product identifier
Trade name: Low IgG Serum

Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Information department:
SDS author: ChemicalRegulatory@promega.com
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Emergency telephone number:
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture
The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements
GHS label elements Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable
Classification system:
NFPA ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0
OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown

(Contd. on page 2)
**Trade name:** Low IgG Serum

**Other hazards**

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

---

**3 Composition/information on ingredients**

Chemical characterization: Substances

CAS No. Description

Fetal bovine serum

---

**4 First-aid measures**

Description of first aid measures

General information: No special measures required.

After inhalation: If the patient feels unwell or is concerned, obtain medical advice.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed

None

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

---

**5 Fire-fighting measures**

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

None

No further relevant information available.

Advice for firefighters

No special advice

Protective equipment: No special measures required.

---

**6 Accidental release measures**

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.
Trade name: Low IgG Serum

* 7 Handling and storage

Handling:
Precautions for safe handling: No special measures required.
Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Specific end use(s) No further relevant information available.

* 8 Exposure controls/personal protection

Control parameters
Components with limit values that require monitoring at the workplace: Not required.
Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands: Not required.
Material of gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Eye protection: Not required.

* 9 Physical and chemical properties

Information on basic physical and chemical properties

General Information
Appearance:
Form: Fluid
Color: Colorless
Odor: Not determined
Odor threshold: Not determined.

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.
Flash point: Not applicable.

Flammability (solid, gaseous): Not applicable.
Decomposition temperature: Not determined.
Auto igniting: Not determined.
Danger of explosion: Product does not present an explosion hazard.
Safety Data Sheet
acc. to OSHA HCS

Trade name: Low IgG Serum

(Contd. of page 3)

Explosion limits:
- Lower: Not determined.
- Upper: Not determined.

Vapor pressure: Not determined.

Density: Not determined.
Relative density: Not determined.
Vapor density: Not determined.
Evaporation rate: Not determined.

Solubility in / Miscibility with Water: Fully miscible.
Partition coefficient (n-octanol/water): Not determined.
Viscosity:
- Dynamic: Not determined.
- Kinematic: Not determined.
- VOC content: 0.00 %

Other information No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions No dangerous reactions known.
Conditions to avoid No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects
Acute toxicity:
LD/LC50 values that are relevant for classification: No data available
Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information: The substance is not subject to classification.

Carcinogenic categories

IARC (International Agency for Research on Cancer)
Substance is not listed.

NTP (National Toxicology Program)
Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration)
Substance is not listed.

(Contd. on page 5)
12 Ecological information

Toxicity
Aquatic toxicity:
Not available
No further relevant information available.
Persistency and degradability
Not available
No further relevant information available.
Bioaccumulative potential
Not known
No further relevant information available.
Mobility in soil
No further relevant information available.
Ecotoxicological effects:
Remark: Not available
Additional ecological information:
General notes: Not known to be hazardous to water.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

| UN-Number | Not hazardous for transportation |
| DOT, ADR, ADN, IMDG, IATA | Not applicable |
| UN proper shipping name | None |
| DOT, ADR, ADN, IMDG, IATA | Not applicable |
| Transport hazard class(es) | None |
| DOT, ADR, ADN, IMDG, IATA | Not applicable |
| Class | Not applicable |
| Packing group | None |
| DOT, ADR, IMDG, IATA | Not applicable |
| Environmental hazards: Marine pollutant: | No |
**15 Regulatory information**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Sara**

- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act) Inventory:** Substance is not listed.
- **Hazardous Air Pollutants**
  - Substance is not listed.
- **Proposition 65**
  - **Chemicals known to cause cancer:** Substance is not listed.
  - **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
  - **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
  - **Chemicals known to cause developmental toxicity:** Substance is not listed.

**Cancerogenity categories**

- **EPA (Environmental Protection Agency)**
  - Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)**
  - Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - Substance is not listed.

- **GHS label elements** Not applicable
- **Signal word** Not applicable
- **Hazard statements** Not applicable
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Trade name: Low IgG Serum

Department issuing SDS:
Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph:(608)274-4330

Date of preparation / last revision 07/21/2020 / 1.0

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

* Data compared to the previous version altered.
1 Identification

Product identifier
Trade name: RPMI 1640 Medium

Article number: G708A
Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Information department:
SDS author: ChemicalRegulatory@promega.com
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Emergency telephone number:
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture
The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements
GHS label elements Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable
Classification system:
NFPA ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0
OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown

(Contd. on page 2)
Safety Data Sheet
acc. to OSHA HCS

Trade name: RPMI 1640 Medium

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description:
The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components: Not applicable
Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures
General information: No special measures required.
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If the patient feels unwell or is concerned, obtain medical advice.
Information for doctor:
Most important symptoms and effects, both acute and delayed
None
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
None known
Advice for firefighters
No special advice
Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.
Environmental precautions: Dilute with plenty of water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
No dangerous substances are released.
See Section 7 for information on safe handling.
**7 Handling and storage**

**Handling:**

- **Precautions for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** The product is not flammable.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

**Control parameters**

**Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** The lists that were valid during the creation were used as basis.

**Exposure controls**

**Personal protective equipment:**

- **General protective and hygienic measures:** The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves**

  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Eye protection:** Not required.

**9 Physical and chemical properties**

**Information on basic physical and chemical properties**

**General Information**

- **Appearance:** Fluid
- **Form:** Fluid
- **Color:** Light orange color
- **Odor:** Not determined
- **Odor threshold:** Not determined.

**Change in condition**

- **Melting point/Melting range:** 0 °C (32 °F)
- **Boiling point/Boiling range:** 100 °C (212 °F)
- **Flash point:** Not applicable.

**Flammability (solid, gaseous):** Not applicable.

**Decomposition temperature:** Not determined.
**10 Stability and reactivity**

*Reactivity* No further relevant information available.

*Chemical stability*

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions** No dangerous reactions known.

**Conditions to avoid** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

---

**11 Toxicological information**

*Information on toxicological effects*

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:** No data available

**Primary irritant effect:**

on the skin: No irritant effect.

on the eye: No irritating effect.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

**Carcinogenic categories**

**IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.
Safety Data Sheet
acc. to OSHA HCS

Trade name: RPMI 1640 Medium

(Contd. of page 4)

NTP (National Toxicology Program)
None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

* 12 Ecological information

Toxicity
Aquatic toxicity:
Not available
No further relevant information available.

Persistence and degradability
Not available
No further relevant information available.

Bioaccumulative potential
Not known
No further relevant information available.

Mobility in soil
No further relevant information available.

Ecotoxicological effects:
Remark: Not available

Additional ecological information:
General notes:
Not available.
Not known to be hazardous to water.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects
No further relevant information available.

* 13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

* 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, ADN, IMDG, IATA</th>
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<tbody>
<tr>
<td>Not hazardous for transportation</td>
<td>Not applicable</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>UN proper shipping name</th>
<th>DOT, ADR, ADN, IMDG, IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
</tbody>
</table>
Trade name: RPMI 1640 Medium

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.

TSCA (Toxic Substances Control Act) Inventory:
All ingredients are listed.

Hazardous Air Pollutants
None of the ingredients are listed.

Proposition 65

Chemicals known to cause cancer:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

Cancerogenity categories

EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

GHS label elements
Not applicable

Signal word
Not applicable

Hazard statements
Not applicable
Safety Data Sheet
acc. to OSHA HCS

Printing date 07/21/2020
Reviewed on 07/21/2020

Trade name: RPMI 1640 Medium

Water hazard class: Generally not hazardous for water.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:
Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph:(608)274-4330

Date of preparation / last revision 07/21/2020 / 1.0

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: Internation Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

* Data compared to the previous version altered.
1 Identification

Product identifier

Trade name: ADCC Bioassay Effector Cells, Jurkat V Variant

Article number: G701

Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Information department:

SDS author: ChemicalRegulatory@promega.com
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Emergency telephone number:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements

GHS label elements Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable

Classification system:

NFPA ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Combustible
Target Organ(s): Not applicable or unknown

(Contd. on page 2)
3 Composition/information on ingredients

Chemical characterization: Mixtures
Description:
The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:
67-68-5 dimethyl sulfoxide 1-5%

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures
General information: No special measures required.
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If the patient feels unwell or is concerned, obtain medical advice.
Information for doctor:
Most important symptoms and effects, both acute and delayed
None
No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents: Use fire fighting measures that suit the environment.
Special hazards arising from the substance or mixture
None known
No further relevant information available.
Advice for firefighters No special advice
Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.
Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
No dangerous substances are released.
7 Handling and storage

Handling:
Precautions for safe handling: No special measures required.
Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:
67-68-5 dimethyl sulfoxide
WEEL Long-term value: 250 ppm

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands: Not required.
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Eye protection: Not required.

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:
Form: Fluid
Color: Variable
Odor: Not determined
Odor threshold: Not determined.

pH-value at 20 °C (68 °F): 3-10

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100 °C (212 °F)
**Safety Data Sheet**

**acc. to OSHA HCS**

**Trade name:** ADCC Bioassay Effector Cells, Jurkat V Variant

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point:</td>
<td>&gt; 60 °C (&gt; 140 °F)</td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>270 °C (518 °F)</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto igniting:</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion:</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Density at 20 °C (68 °F):</td>
<td>1.013 g/cm³ (8.45349 lbs/gal)</td>
</tr>
<tr>
<td>Relative density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water:</td>
<td>Fully miscible.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>5.0 %</td>
</tr>
<tr>
<td>Water:</td>
<td>82.6 %</td>
</tr>
<tr>
<td>VOC content:</td>
<td>5.00 %</td>
</tr>
<tr>
<td>Solids content:</td>
<td>1.0 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

**10 Stability and reactivity**

- **Reactivity**: No further relevant information available.
- **Chemical stability**
  - **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
  - **Possibility of hazardous reactions**: No dangerous reactions known.
  - **Conditions to avoid**: No further relevant information available.
  - **Incompatible materials**: No further relevant information available.
  - **Hazardous decomposition products**: No dangerous decomposition products known.

**11 Toxicological information**

- **Information on toxicological effects**
  - **Acute toxicity**: No data available
  - **LD/LC50 values that are relevant for classification**: No data available
  - **Primary irritant effect**: No further information available.
  - **on the skin**: No irritant effect.
  - **on the eye**: No irritating effect.
  - **Sensitization**: No sensitizing effects known.

(Contd. on page 5)
51.1.1 Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations:

**Carcinogenic categories**

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients are listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients are listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients are listed.</td>
</tr>
</tbody>
</table>

* * * * * 12 Ecological information

**Toxicity**

* **Aquatic toxicity:**
  Not available
  No further relevant information available.

* **Persistence and degradability**
  Not available
  No further relevant information available.

* **Bioaccumulative potential**
  Not known
  No further relevant information available.

* **Mobility in soil**
  No further relevant information available.

**Ecotoxicological effects:**

* **Remark:**
  Not available

**Additional ecological information:**

* **General notes:**
  Not known to be hazardous to water.

**Results of PBT and vPvB assessment**

* **PBT:**
  Not applicable.

* **vPvB:**
  Not applicable.

* **Other adverse effects**
  No further relevant information available.

* * * * * 13 Disposal considerations

**Waste treatment methods**

**Recommendation:**
Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

* * * * * 14 Transport information

**UN-Number**

Not hazardous for transportation
Trade name: ADCC Bioassay Effector Cells, Jurkat V Variant

DOT, ADR, IMDG, IATA
Not applicable

UN proper shipping name
None

DOT, ADR, ADN, IMDG, IATA
Not applicable

Transport hazard class(es)
None

DOT, ADR, ADN, IMDG, IATA
Class
Not applicable

Packing group
None

DOT, ADR, IMDG, IATA
Not applicable

Environmental hazards:
Marine pollutant:
No

Special precautions for user
Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

UN "Model Regulation":
Not applicable

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.

TSCA (Toxic Substances Control Act) Inventory:
67-68-5 dimethyl sulfoxide

Hazardous Air Pollutants
None of the ingredients are listed.

Proposition 65

Chemicals known to cause cancer:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

Cancerogenity categories

EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.
Trade name: ADCC Bioassay Effector Cells, Jurkat V Variant

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:
Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph:(608)274-4330

Date of preparation / last revision 07/21/2020 / 2.0

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: Internation Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

* Data compared to the previous version altered.
Safety Data Sheet  
acc. to OSHA HCS

Printing date 07/21/2020  Reviewed on 07/21/2020

1 Identification

*Product identifier*

*Trade name: ADCC Bioassay Target Cells Raji*

*Article number: G870A*

*Application of the substance / the mixture: For Laboratory Use*

*Details of the supplier of the safety data sheet*

*Manufacturer/Supplier:*

Promega Corporation  
2800 Woods Hollow Road  
Madison, WI 53711  
U.S.A.  
1-800-356-9526 or (608)-274-4330

*Information department:*

SDS author: ChemicalRegulatory@promega.com  
Promega Corporation  
2800 Woods Hollow Road  
Madison, WI 53711  
U.S.A.  
1-800-356-9526 or (608)-274-4330

*Emergency telephone number:*

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

*Classification of the substance or mixture*

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

*Label elements*

GHS label elements: Not applicable  
Hazard pictograms: Not applicable  
Signal word: Not applicable  
Hazard statements: Not applicable  
Classification system:  
NFPA ratings (scale 0 - 4)  
Health = 0  
Fire = 0  
Reactivity = 0  
HMIS-ratings (scale 0 - 4)  
Health = 0  
Fire = 0  
Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Combustible  
Target Organ(s): Not applicable or unknown

(Contd. on page 2)
Trade name: ADCC Bioassay Target Cells Raji

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description:
The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:
67-68-5 dimethyl sulfoxide 5-10%

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures
General information: No special measures required.
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If the patient feels unwell or is concerned, obtain medical advice.
Information for doctor:
Most important symptoms and effects, both acute and delayed
None
No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents: Use fire fighting measures that suit the environment.
Special hazards arising from the substance or mixture
None known
No further relevant information available.
Advice for firefighters No special advice
Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.
Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
See Section 7 for information on safe handling.
Trade name: ADCC Bioassay Target Cells Raji

See Section 13 for disposal information.

7 Handling and storage

**Handling:**
**Precautions for safe handling** No special measures required.
**Information about protection against explosions and fires:** The product is not flammable.

**Conditions for safe storage, including any incompatibilities**
**Storage:**
**Requirements to be met by storerooms and receptacles:** No special requirements.
**Information about storage in one common storage facility:** Not required.
**Further information about storage conditions:** None.
**Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

**Control parameters**

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-68-5 dimethyl sulfoxide</td>
</tr>
<tr>
<td>WEEL Long-term value: 250 ppm</td>
</tr>
</tbody>
</table>

**Additional information:** The lists that were valid during the creation were used as basis.

**Exposure controls**
**Personal protective equipment:**
**General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
**Breathing equipment:** Not required.
**Protection of hands:** Not required.
**Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
**Eye protection:** Not required.

9 Physical and chemical properties

**Information on basic physical and chemical properties**
**General Information**
**Appearance:**
<table>
<thead>
<tr>
<th>Form:</th>
<th>Fluid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Change in condition**
| Melting point/Melting range: | Undetermined.                      |
| Boiling point/Boiling range: | 100 °C (212 °F)                    |
| Flash point:                | > 60 °C (> 140 °F)                 |

**Flammability (solid, gaseous):** Not applicable.
### 10 Stability and reactivity

**Reactivity** No further relevant information available.

**Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials** No further relevant information available.
- **Hazardous decomposition products** No dangerous decomposition products known.

### 11 Toxicological information

**Information on toxicological effects**

- **Acute toxicity:**
  - **LD/LC₅₀ values that are relevant for classification:** No data available
  - **Primary irritant effect:**
    - **on the skin:** No irritant effect.
    - **on the eye:** No irritating effect.
  - **Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations.
**Trade name: ADCC Bioassay Target Cells Raji**

### 12 Ecological information

**Toxicity**
- **Aquatic toxicity:** Not available
- **Persistence and degradability:** Not available

**Bioaccumulative potential**
- Not known

**Mobility in soil**
- Not further relevant information available.

**Ecotoxicological effects:**
- **Remark:** Not available

**Additional ecological information:**
- **General notes:** Not known to be hazardous to water.

**Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**Other adverse effects**
- No further relevant information available.

### 13 Disposal considerations

**Waste treatment methods**
**Recommendation:**
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

**Uncleaned packagings:**
**Recommendation:** Disposal must be made according to official regulations.
**Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, ADN, IMDG, IATA</th>
<th>UN proper shipping name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not hazardous for transportation</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
Trade name: ADCC Bioassay Target Cells Raji

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.

TSCA (Toxic Substances Control Act) Inventory:
67-68-5 dimethyl sulfoxide

Hazardous Air Pollutants
None of the ingredients are listed.

Proposition 65

Chemicals known to cause cancer:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

Cancerogenity categories

EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

GHS label elements Not applicable
Signal word Not applicable
Hazard statements Not applicable

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:
Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph: (608) 274-4330

Date of preparation / last revision 07/21/2020 / 1.0

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
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NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

* Data compared to the previous version altered.
1 Identification

Product identifier
Trade name: Control Ab, Anti-CD20

Article number: GA113A
Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Information department:
SDS author: ChemicalRegulatory@promega.com
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Emergency telephone number:
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture
The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements
GHS label elements Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable
Classification system:
NFPA ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown

(Contd. on page 2)
Trade name: Control Ab, Anti-CD20

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description:
The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components: Not applicable
Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures
General information: No special measures required.
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If the patient feels unwell or is concerned, obtain medical advice.
Information for doctor:
Most important symptoms and effects, both acute and delayed
None
No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
None known
No further relevant information available.
Advice for firefighters: No special advice
Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures: Not required.
Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
See Section 7 for information on safe handling.
7 Handling and storage

Handling:
Precautions for safe handling: No special measures required.
Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters
Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands: Not required.
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Eye protection: Not required.

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:
Form: Liquid
Color: Colorless
Odor: Not determined
Odor threshold: Not determined.

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.
Flash point: Not applicable.

Flammability (solid, gaseous): Not applicable.
Decomposition temperature: Not determined.
10 Stability and reactivity

Reactivity
No further relevant information available.
Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects
Acute toxicity:
LD/LC50 values that are relevant for classification: No data available
Primary irritant effect:
on the skin: No irritant effect.
on the eye: No irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations:

Carcinogenic categories

IARC (International Agency for Research on Cancer)
7647-01-0 hydrogen chloride

NTP (National Toxicology Program)
None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

12 Ecological information

Toxicity
Aquatic toxicity:
Not available
No further relevant information available.

Persistence and degradability
Not available
No further relevant information available.

Bioaccumulative potential
Not known
No further relevant information available.

Mobility in soil
No further relevant information available.

Ecotoxicological effects:
Remark: Not available

Additional ecological information:
General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

| UN-Number | Not hazardous for transportation |
| DOT, ADR, ADN, IMDG, IATA | Not applicable |
| UN proper shipping name | None |
| DOT, ADR, ADN, IMDG, IATA | Not applicable |
| Transport hazard class(es) | None |
| DOT, ADR, ADN, IMDG, IATA | Not applicable |
| Class | Not applicable |
| Packing group | None |
| DOT, ADR, IMDG, IATA | Not applicable |
### 15 Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Sara**

**Section 355 (extremely hazardous substances):**
- 7647-01-0 hydrogen chloride

**Section 313 (Specific toxic chemical listings):**
- 7647-01-0 hydrogen chloride

**Hazardous Air Pollutants**
- 7647-01-0 hydrogen chloride

**Proposition 65**

**Chemicals known to cause cancer:**
- None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**
- None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**
- None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**
- None of the ingredients are listed.

**Cancerogenity categories**

**EPA (Environmental Protection Agency)**
- None of the ingredients are listed.

**TLV (Threshold Limit Value established by ACGIH)**
- 57-50-1 sucrose, pure
- 7647-01-0 hydrogen chloride

**NIOSH-Ca (National Institute for Occupational Safety and Health)**
- None of the ingredients are listed.

**GHS label elements** Not applicable
**Signal word** Not applicable
**Hazard statements** Not applicable

**Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.
16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:
Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph:(608)274-4330

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Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

* Data compared to the previous version altered.