

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product Name : Silver Bullets Individual Reagents  
Product Number : HR2-996-\*\*  
Product type : Liquid  
REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : For research use only. Not for drug, household, or other use.

**1.3 Details of the supplier of the Safety Data Sheet**

Company : Hampton Research  
34 Journey  
Aliso Viejo, CA 92656-3317  
United States  
Telephone : 949 425 1321  
Telephone technical support is available 8:00 a.m. to 4:30 p.m. USA Pacific Standard Time.  
Fax : 949 425 1611  
Fax Technical Support is available 24 hours a day.  
e-mail : tech@hrmail.com  
e-mail Technical Support is available 24 hours a day.

**1.4 Emergency telephone number**

Emergency phone : 949 425 1321  
For **CHEMTREC** Assistance : 800 424 9300  
For **CHEMTREC** Assistance : 703 527 3887 (International)

This is a summary SDS for the individual reagents in a kit.

**SECTION 2: Hazards Identification****2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

see SECTION 16

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

see SECTION 16

**Additional information:**

Relevant R-phrases, S-phrases, GHS pictogram(s), Hazard statement(s), and Precautionary statement(s) please see SECTION 16

## (CONTINUED) - SECTION 2: Hazards Identification

### 2.2 Label elements

|                                |                  |
|--------------------------------|------------------|
| Hazard pictogram               | : Not applicable |
| Signal word                    | : Not applicable |
| Hazard statement(s)            | : Not applicable |
| Precautionary statement(s)     | : Not applicable |
| Supplemental Hazard Statements | : Not applicable |

2.3 Other hazards : none

## SECTION 3: Composition/information on ingredients

Not applicable

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

#### General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

### 4.3 Indication of any immediate medical attention and special treatment needed

#### Notes to physician

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

#### Specific treatments

No specific treatment.

## SECTION 5: Fire Fighting Measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Unsuitable extinguishing media

None known

### 5.2 Special hazards arising from the substance or mixture

No data available

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further Information

No data available

## SECTION 6: Accidental Release Measures

### 6.1 Personal Precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see SECTION 8 and 13.

## SECTION 7: Handling and Storage

### 7.1 Personal Precautions

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

See Section 8 for additional information on hygiene measures. For precautions see section 16.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end uses

A part from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Components with workplace control parameters

Consult a physician. Show this safety data sheet to the doctor in attendance.

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### Environmental Exposure Controls

See SECTION 6

## SECTION 9: Physical and Chemical Properties

No data available

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

No data available

### 10.3 Possibility of hazardous reactions

No data available

## (CONTINUED) - SECTION 10: Stability and Reactivity

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

## SECTION 11: Toxicological Information

Refer to Section 16

## SECTION 12: Ecological Information

Refer to Section 16

## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transportation Information

### 14.1 UN number

ADR/RID: 3316

IMDG: 3316

IATA: 3316

### 14.2 UN proper shipping name

ADR/RID: CHEMICAL KIT

IMDG: CHEMICAL KIT

IATA: Chemical kit

### 14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

### 14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

### 14.5 Environmental hazards

ADR/RID: No

IMDG Marine pollutant: No

IATA: No

## (CONTINUED) - SECTION 14: Transportation Information

### 14.6 Special precautions for user

No data available

## SECTION 15: Regulatory Information

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006.

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

No data available

### 15.2 Chemical Safety Assessment

No data available

## SECTION 16: Other Information

| Kit Components                               |             |                |                   |                     |                            |   |     |
|--|-------------|----------------|-------------------|---------------------|----------------------------|---|-----|
| Substance Name                               | [CAS]       | R-Phrase       | S-Phrase          | GHS Pictogram       | Hazard Statement           | Precautionary Statement                     | WKG |
| (±)-2-Methyl-2,4-pentanediol                 | 107-41-5    | 36/38          |                   | GHS07               | H315-H319                  | P305 + P351 + P338                          | 1   |
| 1,2,3-Heptanetriol                           | 103404-57-5 |                |                   |                     |                            |   | 3   |
| 1,2-Diaminocyclohexane sulfate               | 65433-80-9  |                |                   | GHS07               | H302, H315, H319, H335     | P261, P305 + P351 + P338                    |     |
| 1,3,5-Pentanetricarboxylic acid              | 6940-58-5   |                |                   | GHS07               | H319                       | P264, P280, P305 + P351 + P338, P337 + P313 |     |
| 1,3-Propanediol                              | 504-63-2    | 38             |                   | GHS07               | H315                       |   | 3   |
| 1,4-Cyclohexanedicarboxylic acid             | 1076-97-7   | 22-36          | 26-36             | GHS07               | H302-H319                  | P305 + P351 + P338                          | 3   |
| 1,4-Diaminobutane                            | 110-60-1    | 11-21/22-23-34 | 16-26-36/37/39-45 | GHS02, GHS05, GHS06 | H228-H302 + H312-H314-H331 | P210-P261-P280-P305 + P351 + P338-P310      | 3   |
| 1,5-Naphthalenedisulfonic acid disodium salt | 1655-29-4   |                |                   |                     |                            |   | 1   |
| 1,6-Hexanediol                               | 629-11-8    |                |                   |                     |                            |   |     |
| 1,8-Diaminooctane                            | 373-44-4    | 34             | 26-36/37/39-45    | GHS05               | H314                       | P280-P305 + P351 + P338-P310                | 2   |
| 2,2'-Thiodiglycolic acid                     | 123-93-3    | 34             | 26-36/37/39-45    | GHS05               | H314                       | P280-P305 + P351 + P338-P310                | 2   |
| 2,5-Pyridinedicarboxylic acid                | 100-26-5    | 36/37/38       | 26-36             | GHS07               | H315-H319-H335             | P261-P305 + P351 + P338                     | 3   |
| 2,6-Naphthalenedisulfonic acid disodium salt | 1655-45-4   |                |                   |                     |                            |   | 3   |
| 2,7-Naphthalenedisulfonic acid disodium salt | 1655-35-2   |                |                   |                     |                            |   | 3   |
| 2-Aminobenzenesulfonic acid                  | 88-21-1     | 34             | 26-36/37/39-45    | GHS05               | H314                       | P280-P305 + P351 + P338-P310                | 3   |

**(CONTINUED) - SECTION 16: Other Information**

| <b>Kit Components</b>                           |              |                 |                 |                      |                         |                                     |            |
|---|--------------|-----------------|-----------------|----------------------|-------------------------|-------------------------------------|------------|
| <b>Substance Name</b>                           | <b>[CAS]</b> | <b>R-Phrase</b> | <b>S-Phrase</b> | <b>GHS Pictogram</b> | <b>Hazard Statement</b> | <b>Precautionary Statement</b>      | <b>WKG</b> |
| 3,5-Dinitrosalicylic acid                       | 609-99-4     | 22-37/38        | 22-24/25        | GHS07                | H302-H315-H335          | P261                                | 3          |
| 3-Aminobenzenesulfonic acid                     | 121-47-1     | 20/21/22        | 25-28           | GHS07                | H302-H312-H332          | P280                                | 3          |
| 3-Aminobenzoic acid                             | 99-05-8      | 22-36/37/38     | 26              | GHS07                | H302-H315-H319-H335     | P261-P305 + P351 + P338             | 2          |
| 3-Aminosalicylic acid                           | 570-23-0     | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 3          |
| 3-Indolebutyric acid                            | 133-32-4     | 25-36/37/38     | 26-36-45        | GHS06                | H301-H315-H319-H335     | P261-P301 + P310-P305 + P351 + P338 | 3          |
| 4-Aminobenzoic acid                             | 150-13-0     | 36/37/38-43     | 26-36           | GHS07                | H315-H317-H319-H335     | P261-P280-P305 + P351 + P338        | 2          |
| 4-Aminobutyric acid                             | 56-12-2      | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 2          |
| 4-Hydroxyphenylacetic acid                      | 156-38-7     | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 3          |
| 4-Nitrobenzoic acid                             | 62-23-7      | 22-36           | 26              | GHS07                | H302-H319               | P305 + P351 + P338                  | 1          |
| 5-Sulfoisophthalic acid monosodium salt         | 6362-79-4    | 36/37/38        | 26-37/39        | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 2          |
| 5-Sulfosalicylic acid dihydrate                 | 5965-83-3    | 22-36/37/38     | 26-36/37/39-45  | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 3          |
| 6-Aminohexanoic acid                            | 60-32-2      | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 2          |
| Adipic acid                                     | 124-04-9     | 41              | 26-39           | GHS05                | H318                    | P280-P305 + P351 + P338             | 1          |
| Ala-ala   | 1948-31-8    |                 |                 |                      |                         |                                     | 3          |
| Ala-gly   | 687-69-4     |                 |                 |                      |                         |                                     | 3          |
| Anthraquinone-2,6-disulfonic acid disodium salt | 853-68-9     | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 3          |
| Anthrone  | 90-44-8      | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 3          |
| Aspartame                                       | 22839-47-0   |                 |                 |                      |                         |                                     | 2          |
| Azelaic acid                                    | 123-99-9     |                 |                 | GHS07                | H319                    | P305 + P351 + P338                  | 1          |
| Barbituric acid                                 | 67-52-7      |                 |                 |                      |                         |                                     | 1          |
| Benzamidine hydrochloride                       | 1670-14-0    | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 3          |
| Benzenephosphonic acid                          | 1571-33-1    | 22-34           | 26-36/37/39-45  | GHS05, GHS07         | H302-H314               | P280-P305 + P351 + P338-P310        | 3          |
| Benzidine                                       | 92-87-5      | 45-22-50/53     | 53-45-60-61     | GHS07, GHS08, GHS09  | H302-H350-H410          | P201-P273-P308 + P313-P501          | 3          |
| Benzoic acid                                    | 65-85-0      | 37-41           | 26-39           | GHS05, GHS07         | H318-H335               | P261-P280-P305 + P351 + P338        | 1          |
| Betaine anhydrous                               | 107-43-7     |                 |                 |                      |                         |                                     | 3          |
| Cadaverine                                      | 462-94-2     | 34              | 26-36/37/39-45  | GHS05                | H314                    | P280-P305 + P351 + P338-P310        | 3          |

**(CONTINUED) - SECTION 16: Other Information**

| <b>Kit Components</b>                                  |              |                                  |                   |                      |                                      |  |            |
|--|--------------|----------------------------------|-------------------|----------------------|--------------------------------------|--|------------|
| <b>Substance Name</b>                                  | <b>[CAS]</b> | <b>R-Phrase</b>                  | <b>S-Phrase</b>   | <b>GHS Pictogram</b> | <b>Hazard Statement</b>              | <b>Precautionary Statement</b>           | <b>WKG</b> |
| Cadmium chloride hydrate                               | 654054-66-7  | 45-46-60-61-25-26-48/23/25-50/53 | 53-45-60-61       | GHS06, GHS08, GHS09  | H301-H330-H340-H350-H360FD-H372-H410 | P201-P260-P273-P284-P301 + P310-P310     | 3          |
| Caffeine   | 58-08-2      | 22                               |                   | GHS07                | H302                                 |  | 1          |
| Calcium chloride dihydrate                             | 10035-04-8   | 36                               | 22-24             | GHS07                | H319                                 | P305 + P351 + P338                       | 1          |
| Casein   | 9000-71-9    |                                  |                   |                      |                                      |  | 3          |
| CHAPS  | 75621-03-3   | 61-36/37/38                      | 53-26-45          | GHS07, GHS08         | H315-H319-H335-H360D                 | P201-P261-P305 + P351 + P338-P308 + P313 | nwg        |
| Cobalt(II) chloride hexahydrate                        | 7791-13-1    | 49-60-22-42/43-50/53-68          | 53-45-60-61       | GHS07, GHS08, GHS09  | H302-H317-H334-H341-H350i-H360F-H410 | P201-P261-P273-P280-P308 + P313-P501     | 3          |
| Congo Red  | 573-58-0     | 45-63                            | 53-45             | GHS07, GHS08         | H319-H350-H361d                      | P201-P281-P305 + P351 + P338-P308 + P313 | 3          |
| Copper(II) chloride dihydrate                          | 10125-13-0   | 21/22-38-41-50                   | 26-36/37/39-60-61 | GHS05, GHS07, GHS09  | H290-H302 + H312-H315-H318-H400-H411 | P273-P280-P305 + P351 + P338             | 3          |
| Cystamine dihydrochloride                              | 56-17-7      | 22                               |                   | GHS07                | H302                                 |  | 3          |
| Cystathionine  | 535-34-2     |                                  |                   |                      |                                      |  |            |
| Cytosine   | 71-30-7      | 36/37/38                         | 26                | GHS07                | H315-H319-H335                       | P261-P305 + P351 + P338                  | 1          |
| D-(+)-Cellobiose                                       | 528-50-7     |                                  |                   |                      |                                      |  | 3          |
| D-(+)-Maltose monohydrate                              | 6363-53-7    |                                  |                   |                      |                                      |  | 3          |
| D-(+)-Maltotriose                                      | 207511-08-8  |                                  |                   |                      |                                      |  | 3          |
| D-(+)-Melezitose hydrate                               | 207511-10-2  |                                  |                   |                      |                                      |  | 3          |
| D-(+)-Melibiose monohydrate                            | 585-99-9     |                                  |                   |                      |                                      |  | 3          |
| D-(+)-Raffinose pentahydrate                           | 17629-30-0   |                                  |                   |                      |                                      |  | 3          |
| D-(+)-Trehalose dihydrate                              | 6138-23-4    |                                  |                   |                      |                                      |  | 2          |
| D-3-Phosphoglyceric acid disodium salt                 |              |                                  |                   |                      |                                      |  | 3          |
| Deoxyribonuclease I                                    | 9003-98-9    |                                  |                   |                      |                                      |  | 3          |
| Deoxyribonucleic acid                                  | 100403-24-5  |                                  |                   |                      |                                      |  | 3          |
| Dextran sulfate sodium salt                            | 9011-18-1    |                                  |                   |                      |                                      |  | 2          |
| Dextranase   | 9025-70-1    |                                  |                   |                      |                                      |  | 3          |
| D-Fructose 1,6-bisphosphate trisodium salt octahydrate | 38099-82-0   |                                  |                   |                      |                                      |  | 3          |
| D-Glucose 6-phosphate sodium salt                      | 54010-71-8   |                                  |                   |                      |                                      |  | 3          |
| Diethylenetriaminepentakis(methylphosphonic acid)      | 15827-60-8   | 36/37/38                         | 26                | GHS07                | H315-H319-H335                       | P261-P305 + P351 + P338                  | 1          |



**(CONTINUED) - SECTION 16: Other Information**

| <b>Kit Components</b>                    |              |                 |                 |                      |                         |                                |            |
|--|--------------|-----------------|-----------------|----------------------|-------------------------|--------------------------------|------------|
| <b>Substance Name</b>                    | <b>[CAS]</b> | <b>R-Phrase</b> | <b>S-Phrase</b> | <b>GHS Pictogram</b> | <b>Hazard Statement</b> | <b>Precautionary Statement</b> | <b>WKG</b> |
| Diloxanide furoate                       | 3736-81-0    | 22              | 36              | GHS07                | H302                    |                                | 3          |
| Dithioerythritol                         | 6892-68-8    | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338        | 3          |
| Dodecanedioic acid                       | 693-23-2     | 36              | 26              | GHS07                | H319                    | P305 + P351 + P338             | nwg        |
| D-Sorbitol                               | 50-70-4      |                 |                 |                      |                         |                                | nwg        |
| Fumaric acid                             | 110-17-8     | 36              | 26              | GHS07                | H319                    | P305 + P351 + P338             | 1          |
| Gadolinium(III) chloride hexahydrate     | 13450-84-5   | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338        | 3          |
| Gallic acid monohydrate                  | 5995-86-8    | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338        | 2          |
| Glutaric acid                            | 110-94-1     | 36              | 26              | GHS07                | H319                    | P305 + P351 + P338             | 1          |
| Gly-asp                                  | 4685-12-5    |                 |                 |                      |                         |                                | 3          |
| Glycerol                                 | 56-81-5      |                 |                 |                      |                         |                                | 1          |
| Glycerol phosphate disodium salt hydrate | 154804-51-0  |                 |                 |                      |                         |                                | 3          |
| Glycine                                  | 56-40-6      |                 |                 |                      |                         |                                | 1          |
| Gly-gly                                  | 556-50-3     | 36              | 26              | GHS07                | H319                    | P305 + P351 + P338             | 3          |
| Gly-gly-gly                              | 556-33-2     |                 |                 |                      |                         |                                | 3          |
| Gly-gly-gly-gly                          | 637-84-3     |                 |                 |                      |                         |                                | 3          |
| Gly-phe                                  | 3321-03-7    |                 |                 |                      |                         |                                | 3          |
| Gly-ser                                  | 7361-43-5    |                 |                 |                      |                         |                                | 3          |
| Gly-tyr                                  | 658-79-7     |                 |                 |                      |                         |                                | 3          |
| Guanidine hydrochloride                  | 50-01-1      | 22-36/38        | 22              | GHS07                | H302-H315-H319          | P305 + P351 + P338             | 2          |
| Hemoglobin                               | 9008-02-0    |                 |                 |                      |                         |                                | 3          |
| HEPES                                    | 7365-45-9    |                 |                 |                      |                         |                                | 3          |
| HEPES sodium pH 6.8                      | 75277-39-3   |                 |                 |                      |                         |                                | 3          |
| Hexadecanedioic acid                     |              |                 |                 |                      |                         |                                | 3          |
| Hexamminecobalt(III) Chloride            | 10534-89-1   | 36/37/38        | 26              | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338        | 3          |
| Hippuric acid                            | 495-69-2     | 22-37/38-41     |                 |                      |                         |                                | 3          |
| L-(-)-Threonine                          | 72-19-5      |                 |                 |                      |                         |                                | 1          |
| L-(+)-Lysine                             | 56-87-1      |                 |                 |                      |                         |                                | 1          |
| L-Alanine                                | 56-41-7      |                 |                 |                      |                         |                                | 1          |
| L-Arginine                               | 74-79-3      |                 |                 |                      |                         |                                | 1          |
| L-Asparagine monohydrate                 | 5794-13-8    |                 |                 |                      |                         |                                | 1          |
| L-Aspartic acid                          | 56-84-8      |                 |                 |                      |                         |                                | 1          |
| L-Canavanine                             | 543-38-4     | 20/21/22        | 36              | GHS07                | H302-H312-H332          |                                | 3          |
| L-Carnitine hydrochloride                | 6645-46-1    | 36/37/38        | 26              | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338        | 2          |
| L-Citrulline                             |              |                 |                 |                      |                         |                                | 3          |
| L-Cystine                                | 56-89-3      |                 |                 |                      |                         |                                | 3          |

**(CONTINUED) - SECTION 16: Other Information**

| <b>Kit Components</b>                                     |              |                                     |                 |                      |   |                                      |            |
|---|--------------|-------------------------------------|-----------------|----------------------|---|--------------------------------------|------------|
| <b>Substance Name</b>                                     | <b>[CAS]</b> | <b>R-Phrase</b>                     | <b>S-Phrase</b> | <b>GHS Pictogram</b> | <b>Hazard Statement</b>                               | <b>Precautionary Statement</b>       | <b>WKG</b> |
| Leu-gly-gly   | 1187-50-4    |                                     |                 |                      |   |                                      | 3          |
| L-Glutamic acid   | 56-86-0      |                                     |                 |                      |   |                                      | 1          |
| L-Glutamine   | 56-85-9      |                                     |                 |                      |   |                                      | 1          |
| L-Histidine   | 71-00-1      |                                     |                 |                      |   |                                      | 1          |
| L-Isoleucine  | 73-32-5      |                                     |                 |                      |   |                                      | 1          |
| L-Leucine   | 61-90-5      |                                     |                 |                      |   |                                      | 1          |
| L-Methionine  | 63-68-3      |                                     |                 |                      |   |                                      | 1          |
| L-O-Phosphoserine   | 407-41-0     |                                     |                 |                      |   |                                      | 3          |
| L-Ornithine hydrochloride                                 | 3184-13-2    | 36                                  | 26              | GHS07                | H319  | P305 + P351 + P338                   | 2          |
| L-Phenylalanine   | 63-91-2      |                                     |                 |                      |   |                                      | 1          |
| L-Proline   | 147-85-3     |                                     |                 |                      |   |                                      | 1          |
| L-Serine  | 56-45-1      |                                     |                 |                      |   |                                      | 1          |
| L-seryl-L-glutamic acid                                   | 6403-16-3    |                                     |                 |                      |   |                                      | 3          |
| L-Tryptophan  | 73-22-3      |                                     |                 |                      |   |                                      | 1          |
| L-Tyrosine  | 60-18-4      | 36/37/38                            | 26              | GHS07                | H315-H319-H335  | P261-P305 + P351 + P338              | 1          |
| L-Valine  | 72-18-4      |                                     |                 |                      |   |                                      | 1          |
| Magnesium chloride hexahydrate                            | 7791-18-6    |                                     |                 |                      |   |                                      | 1          |
| Maleic acid   | 110-16-7     | 22-36/37/38-43                      | 24-26-28-37-46  | GHS07                | H302-H315-H317-H319-H335                              | P261-P280-P305 + P351 + P338         | 1          |
| Manganese(II) chloride tetrahydrate                       | 13446-34-9   | 22-52                               |                 | GHS07                | H302  |                                      | 1          |
| m-Benzenedisulfonic acid disodium salt                    | 831-59-4     | 36/37/38                            | 26-36           | GHS07                | H315-H319-H335  | P261-P305 + P351 + P338              | 1          |
| Melatonin   | 73-31-4      |                                     |                 |                      |   |                                      | 2          |
| Mellitic acid   | 517-60-2     | 36/37/38                            | 26-36           | GHS07                | H315-H319-H335  | P261-P305 + P351 + P338              | 3          |
| MES monohydrate   | 145224-94-8  | 36/37/38                            | 26-36           | GHS07                | H315-H319-H335  | P261-P305 + P351 + P338              | 3          |
| Methylenediphosphonic acid                                | 1984-15-2    | 34                                  | 26-36/37/39-45  | GHS05                | H314  | P280-P305 + P351 + P338-P310         | 3          |
| myo-Inositol  | 87-89-8      |                                     |                 |                      |   |                                      | 2          |
| N-(2-acetamido)-2-aminoethanesulfonic acid                | 7365-82-4    |                                     |                 |                      |   |                                      | 3          |
| N-(2-carboxyethyl)-iminodiacetic acid                     | 6245-75-6    |                                     |                 |                      |   |                                      | 1          |
| Naphthalene-1,3,6-trisulfonic acid trisodium salt hydrate | 123409-01-8  | 36/37/38                            | 26              | GHS07                | H315-H319-H335  | P261-P305 + P351 + P338              | 3          |
| Nickel(II) chloride hexahydrate                           | 7791-20-0    | 49-61-23/25-38-42/43-48/23-50/53-68 | 53-45-60-61     | GHS06, GHS08, GHS09  | H301 + H331-H315-H317-H334-H341-H350i-H360D-H372-H410 | P201-P261-P273-P280-P301 + P310-P311 | 3          |
| Nicotinamide  | 98-92-0      | 36/37/38                            | 26-36           | GHS07                | H315-H319-H335  | P261-P305 + P351 + P338              | 1          |

**(CONTINUED) - SECTION 16: Other Information**

| <b>Kit Components</b>                                    |              |                            |                         |                            |                               |  |            |
|--|--------------|----------------------------|-------------------------|----------------------------|-------------------------------|--|------------|
| <b>Substance Name</b>                                    | <b>[CAS]</b> | <b>R-Phrase</b>            | <b>S-Phrase</b>         | <b>GHS Pictogram</b>       | <b>Hazard Statement</b>       | <b>Precautionary Statement</b>                     | <b>WKG</b> |
| O-Phospho-L-tyrosine                                     | 21820-51-9   |                            |                         |                            |                               |  | 3          |
| o-Sulfobenzoic acid monoammonium salt                    | 6939-89-5    |                            |                         |                            |                               |  |            |
| Ovalbumin  | 9006-59-1    | 42                         | 22-45                   | GHS08                      | H334                          | P261-P342 + P311                                   | 2          |
| Ovalbumin digested with Proteinase K, Trypsin and Pepsin |              |                            |                         |                            |                               |  |            |
| Oxalacetic acid  | 328-42-7     | 34                         | 26-36/37/39-45          | GHS05                      | H314                          | P280-P305 + P351 + P338-P310                       | 3          |
| Oxalic acid anhydrous                                    | 144-62-7     | 21/22-41                   | 26-36-37-39             |                            | H302 + H312-H318              | P280-P305 + P351 + P338                            | 1          |
| Oxamic acid  | 471-47-6     | 36/37/38                   | 26-36                   |                            | H315-H319-H335                | P261-P305 + P351 + P338                            | 3          |
| p-Coumaric acid  | 501-98-4     | 36/37/38                   | 26-36                   | GHS07                      | H315-H319-H335                | P261-P305 + P351 + P338                            | 2          |
| Pentaglycine   | 7093-67-6    |                            |                         |                            |                               |  | 3          |
| Pepsin   | 9001-75-6    | 36/37/38-42                | 22-24-26-36/37          | GHS07, GHS08               | H315-H319-H334-H335           | P261-P305 + P351 + P338-P342 + P311                | 1          |
| Phenol   | 108-95-2     | 23/24/25-34-48/20/21/22-68 | 24/25-26-28-36/37/39-45 | GHS05, GHS06, GHS08, GHS09 |                               | P261-P273-P280-P301 + P310-P305 + P351 + P338-P310 | 2          |
| Phenylglyoxal monohydrate                                | 1074-12-0    | 22-36/37/38                | 22-26-36                | GHS07                      | H302-H315-H319-H335           | P261-P305 + P351 + P338                            | 3          |
| Phenylurea   | 64-10-8      | 22                         |                         | GHS07                      | H302                          |  | 3          |
| Phloroglucinol   | 108-73-6     | 36/37/38-43                | 26-36/37                | GHS07                      | H315-H317-H319-H335           | P261-P280-P305 + P351 + P338                       | 2          |
| Phytic acid sodium salt hydrate                          | 14306-25-3   |                            |                         |                            | H315-H317-H319-H335           | P261-P280-P305 + P351 + P338                       | 3          |
| Pimelic acid   | 111-16-0     | 36/37/38                   | 26-36                   | GHS07                      | H315-H319-H335                | P261-P305 + P351 + P338                            | 2          |
| PIPES  | 5625-37-6    |                            |                         |                            |                               |  | 3          |
| Poly(3-hydroxybutyric acid)                              | 29435-48-1   |                            |                         |                            |                               |  | 3          |
| Protamine sulfate  | 53597-25-4   |                            |                         |                            |                               |  | 3          |
| Protease   | 9014-01-1    | 22-37/38-41-42-50          | 22-24-26-36/37/39-61    | GHS05, GHS07, GHS08, GHS09 | H302-H315-H318-H334-H335-H410 | P261-P273-P280-P305 + P351 + P338-P342 + P311      | 1          |
| Proteinase K   | 39450-01-6   | 36/37/38-42                | 22-24-26-36/37          | GHS07, GHS08               | H315-H319-H334-H335           | P261-P305 + P351 + P338-P342 + P311                | 1          |
| Pyromellitic acid  | 89-05-4      |                            |                         |                            |                               |  | 3          |
| Resorcinol   | 108-46-3     | 22-38-41-50                | 26-39-61                |                            | H302-H315-H318-H400           | P273-P280-P305 + P351 + P338                       | 2          |
| Rhenium(IV) oxide  | 12036-09-8   |                            |                         |                            |                               |  | 3          |

**(CONTINUED) - SECTION 16: Other Information**

| <b>Kit Components</b>                        |              |                 |                 |                      |                         |                                     |            |
|--|--------------|-----------------|-----------------|----------------------|-------------------------|-------------------------------------|------------|
| <b>Substance Name</b>                        | <b>[CAS]</b> | <b>R-Phrase</b> | <b>S-Phrase</b> | <b>GHS Pictogram</b> | <b>Hazard Statement</b> | <b>Precautionary Statement</b>      | <b>WKG</b> |
| Ribonuclease A                               | 9001-99-4    |                 |                 |                      |                         |                                     | 3          |
| Ribonucleic acid                             | 63231-63-0   |                 |                 |                      |                         |                                     | 3          |
| Salicin                                      | 138-52-3     | 43              | 36/37           | GHS07                | H317                    | P280                                | 3          |
| Salicylamide                                 | 65-45-2      | 22-36/37/38     | 26-36           | GHS07                | H302-H315-H319-H335     | P261-P305 + P351 + P338             | 3          |
| Salicylic acid                               | 69-72-7      | 22-41           | 26-39           | GHS05, GHS07         | H302-H318               | P280-P305 + P351 + P338             | 1          |
| Samarium(III) chloride hexahydrate           | 13465-55-9   |                 |                 |                      |                         |                                     | 3          |
| Sarcosine                                    | 107-97-1     |                 |                 |                      |                         |                                     | 1          |
| Sebacic acid                                 | 111-20-6     |                 |                 |                      |                         |                                     | 1          |
| Ser-tyr                                      | 21435-27-8   |                 |                 |                      |                         |                                     | 3          |
| Sodium 1-pentanesulfonate monohydrate        | 207605-40-1  |                 |                 |                      |                         |                                     | 3          |
| Sodium 4-aminosalicylate dihydrate           | 6018-19-5    | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 3          |
| Sodium bromide                               | 7647-15-6    |                 | 17-26           |                      |                         |                                     | 1          |
| Sodium nitrate                               | 7631-99-4    | 8-36            | 17-26           | GHS03, GHS07         | H272-H319               | P220-P305 + P351 + P338             | 1          |
| Sodium phosphate dibasic dihydrate           | 10028-24-7   |                 |                 |                      |                         |                                     | 1          |
| Sodium pyrophosphate tetra-basic decahydrate | 13472-36-1   | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 1          |
| Sodium tetraborate decahydrate               | 1303-96-4    | 60-61           | 53-45           | GHS08                | H360FD                  | P201-P308 + P313                    | 1          |
| Sodium triphosphate penta-basic              | 7758-29-4    |                 |                 |                      |                         |                                     | 1          |
| Spermidine                                   | 124-20-9     | 34              | 26-36/37/39-45  | GHS05                | H314                    | P280-P305 + P351 + P338-P310        | 3          |
| Spermine                                     | 71-44-3      | 34              | 26-36/37/39-45  | GHS05                | H314                    | P280-P305 + P351 + P338-P310        | 3          |
| Stachyose hydrate                            | 54261-98-2   |                 |                 |                      |                         |                                     | 1          |
| Suberic acid                                 | 505-48-6     | 36              | 26              | GHS07                | H319                    | P305 + P351 + P338                  | 1          |
| Sulfaguanidine                               | 57-67-0      | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P280-P305 + P351 + P338-P337 + P313 | 3          |
| Sulfanilamide                                | 63-74-1      |                 |                 |                      |                         |                                     | 3          |
| Sulfanilic acid                              | 121-57-3     | 36/38-43        | 24-37           | GHS07                | H315-H317-H319          | P280-P305 + P351 + P338             | 1          |
| TACSIMATE pH 7.0                             |              |                 |                 |                      |                         |                                     |            |
| Taurine                                      | 107-35-7     | 36/37/38        | 26-36           | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338             | 2          |
| Terephthalic acid                            | 100-21-0     |                 |                 |                      |                         |                                     | 3          |
| Tetrahydroxy-1,4-benzoquinone hydrate        | 123334-16-7  | 36/37/38        | 26-36           |                      | H315-H319-H335          | P261-P305 + P351 + P338             |            |

**(CONTINUED) - SECTION 16: Other Information**

| <b>Kit Components</b>                   |              |                 |                      |                      |                         |  |            |
|---|--------------|-----------------|----------------------|----------------------|-------------------------|--|------------|
| <b>Substance Name</b>                   | <b>[CAS]</b> | <b>R-Phrase</b> | <b>S-Phrase</b>      | <b>GHS Pictogram</b> | <b>Hazard Statement</b> | <b>Precautionary Statement</b>         | <b>WKG</b> |
| trans-1,2-Cyclohexanedi-carboxylic acid | 2305-32-0    | 36/37/38        | 26-36                | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338                | 3          |
| trans-Aconitic acid                     | 4023-65-8    |                 |                      |                      |                         |  | 3          |
| trans-Cinnamic acid                     | 140-10-3     | 36/37/38        | 26-36                | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338                | 3          |
| Trimellitic acid                        | 528-44-9     | 36/37/38        | 26-36                | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338                | 2          |
| Trimesic acid                           | 554-95-0     | 36/37/38        | 26-36/37/39          | GHS07                | H315-H319-H335          | P261-P305 + P351 + P338                | 3          |
| Trimethylamine N-oxide dihydrate        | 62637-93-8   | 36/38           | 26-36                | GHS07                | H315-H319               | P305 + P351 + P338                     | 2          |
| Tris                                    | 77-86-1      |                 |                      |                      |                         |  | 2          |
| Trypsin                                 | 9002-07-7    | 36/37/38-42     | 22-24-26-36/37       | GHS07, GHS08         |                         |  | 1          |
| Tryptone                                | 91079-40-2   |                 |                      |                      |                         |  | 3          |
| Tyr-ala                                 | 730-08-5     |                 |                      |                      |                         |  | 3          |
| Tyr-phe                                 | 17355-11-2   |                 |                      |                      |                         |  | 3          |
| Urea                                    | 57-13-6      |                 |                      |                      |                         |  | 1          |
| Vanillic acid                           | 121-34-6     |                 |                      |                      |                         |  | 1          |
| Zinc chloride                           | 7646-85-7    | 22-34-50/53     | 26-36/37/39-45-60-61 | GHS05, GHS07, GHS09  | H302-H314-H410          | P273-P280-P305 + P351 + P338-P310-P501 | 3          |
| $\alpha$ -Amylase                       | 9000-90-2    | 42              | 22-24-36/37          | GHS08                | H334                    | P261-P342 + P311                       | 1          |
| $\beta$ -Alanine                        | 107-95-9     |                 |                      |                      |                         |  | 3          |
| $\beta$ -Cyclodextrin                   | 7585-39-9    |                 |                      |                      |                         |  | 2          |

**Relevant R-phrase(s), S-phrase(s), GHS Pictogram(s), Hazard statement(s), and Precautionary statement(s)****Risk Phrase(s)**

- R 8 : Contact with combustible material may cause fire
- R 11 : Highly Flammable
- R 20/21/22 : Harmful by inhalation, in contact with skin and if swallowed
- R 21/22 : Harmful in contact with skin and if swallowed
- R 22 : Harmful if swallowed
- R 23 : Toxic by inhalation
- R 23/24/25 : Toxic by inhalation, in contact with skin and if swallowed
- S 23/25 : Toxic by inhalation and if swallowed
- R 25 : Toxic if swallowed
- R 26 : Very Toxic by inhalation
- R 34 : Causes burns
- R 36 : Irritating to the eyes
- R 36/38 : Irritating to eyes and skin
- R 36/37/38 : Irritating to eyes, respiratory system and skin
- R 37 : Irritating to the respiratory system
- R 37/38 : Irritating to respiratory system and skin

## (CONTINUED) - SECTION 16: Other Information

### Relevant R-phrases, S-phrases, GHS Pictogram(s), Hazard statement(s), and Precautionary statement(s) (CONTINUED) - Risk Phrase(s)




- R 38 : Irritating to the skin
- R 41 : Risk of serious damage to eyes
- R 42 : May cause sensitization by inhalation
- R 42/43 : May cause sensitization by inhalation and skin contact
- R 43 : May cause sensitization by skin contact
- R 45 : May cause cancer
- R 46 : May cause heritable genetic damage
- R 48/20/21/22 : Harmful: danger of serious damage to health by prolonged exposure through inhalation, and in contact with skin and if swallowed
- R 48/23 : Toxic: danger of serious damage to health by prolonged exposure through inhalation
- R 48/23/25 : Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
- R 49 : May cause cancer by inhalation
- R 50 : Very Toxic to aquatic organisms
- R 50/53 : Very Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R 52 : Harmful to aquatic organisms
- R 53 : May cause long-term adverse effects in the aquatic environment
- R 60 : May impair fertility
- R 61 : May cause harm to the unborn child
- R 63 : Possible risk of irreversible effects
- R 68 : Possible risk of harm to the unborn child

### Safety Phrase(s)

- S 16 : Keep away from sources of ignition - No smoking
- S 17 : Keep away from combustible material
- S 22 : Do not breathe dust
- S 24 : Avoid contact with skin
- S 24/25 : Avoid contact with skin and eyes
- S 25 : Avoid contact with eyes
- S 26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S 28 : After contact with skin, wash immediately with plenty of water
- S 36 : Wear suitable protective clothing
- S 36/37/39 : Wear suitable protective clothing, gloves and eye/face protection
- S 36/37 : Wear suitable protective clothing and gloves
- S 37 : Wear suitable gloves
- S 37/39 : Wear suitable gloves and eye/face protection
- S 38 : In case of insufficient ventilation, wear suitable respiratory equipment
- S 39 : Wear eye/face protection
- S 45 : In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)
- S 46 : If swallowed, seek medical advice immediately and show this container or label
- S 49 : Keep only in the original container
- S 53 : Avoid exposure - obtain special instruction before use
- S 60 : This material and/or its container must be disposed of as hazardous waste
- S 61 : Avoid release to the environment. Refer to special instructions safety data sheet

## (CONTINUED) - SECTION 16: Other Information

### GHS Pictogram

|       |                     |   |       |                                    |   |
|-------|---------------------|---|-------|------------------------------------|---|
| GHS02 | : Flammable liquids |  | GHS05 | : Eye Irritation                   |  |
| GHS06 | : Acute Toxicity    |  | GHS07 | : Acute Toxicity                   |  |
| GHS08 | : Health Hazard     |  | GHS09 | : Hazardous to aquatic environment |  |

### Hazard statement(s)

|             |   |
|-------------|---|
| H228        | : Flammable solid   |
| H272        | : May intensify fire; oxidizer  |
| H290        | : May be corrosive to metals  |
| H301        | : Toxic if swallowed  |
| H302        | : Harmful if swallowed  |
| H302 + H312 | : Harmful if swallowed or in contact with skin                              |
| H312        | : Harmful in contact with skin  |
| H314        | : Causes severe skin burns and eye damage                                   |
| H315        | : Causes skin irritation  |
| H317        | : May cause an allergic skin reaction                                       |
| H318        | : Causes serious eye damage   |
| H319        | : Causes serious eye irritation   |
| H330        | : Fatal if inhaled  |
| H331        | : Toxic if inhaled  |
| H334        | : May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H335        | : May cause respiratory irritation  |
| H341        | : Suspected of causing genetic defects                                      |
| H350        | : May cause cancer  |
| H350i       | : May cause cancer by inhalation  |
| H360D       | : May damage the unborn child   |
| H360FD      | : May damage fertility  |
| H361d       | : Suspected of damaging the unborn child                                    |
| H410        | : Causes damage to organs through prolonged or repeated exposure            |
| H410        | : Very toxic to aquatic life with long lasting effects                      |
| H411        | : Toxic to aquatic life with long lasting effects                           |

### Precautionary statement(s)

|      |  |
|------|--|
| P201 | : Obtain special instructions before use                                     |
| P210 | : Keep away from heat/sparks/open flames/hot surfaces. — No smoking          |
| P220 | : Keep/Store away from clothing/.../combustible materials.                   |
| P261 | : Avoid breathing dust/fume/gas/mist/vapours/spray.                          |
| P264 | : Wash hands thoroughly after handling.                                      |
| P273 | : Avoid release to the environment.  |
| P280 | : Wear protective gloves/protective clothing/eye protection/face protection. |
| P310 | : Immediately call a POISON CENTER or doctor/physician.                      |

## (CONTINUED) - SECTION 16: Other Information

### Relevant R-phras(e), S-phras(e), GHS Pictogram(s), Hazard statement(s), and Precautionary statement(s) (CONTINUED) - Precautionary statement(s)

P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 : IF exposed or concerned: Get medical advice/attention.

P337 + P313 : IF eye irritation persists: Get medical advice/attention.

P342 +P311 : IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician

P501 : Dispose of contents/container to a licensed disposal company.

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### WARRANTY

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