Section 1. Identification

1.1 Product identifier
Product name: Polyclonal rabbit/goat/Swine HRP conjugates
Part No.: P0042, P0128, P0129, P0130, P0141, P0159, P0160, P0161, P0162, P0163, P0164, P0174, P0175, P0176, P0212, P0213, P0214, P0215, P0216, P0217, P0226, P0246, P0260, P0322, P0356, P0361, P0374, P0402, P0406, P0419, P0447, P0449

Validation date: 7/20/2017

1.2 Relevant identified uses of the substance or mixture and uses advised against
Material uses: Laboratory use
Container type: vial / Bottle
P0042 // Polyclonal Rabbit Anti-Human Pregnancy-Associated Plasma Protein A (PAPP-A)/HRP // 2 mL - 3000 mL
P0128 // Polyclonal Rabbit Anti-Human Alpha-1-Fetoprotein/HRP // 2 mL - 3000 mL
P0129 // Polyclonal Rabbit Anti-Human Kappa Light Chains/HRP // 2 mL - 3000 mL
P0130 // Polyclonal Rabbit Anti-Human Lambda Light Chains/HRP // 2 mL - 3000 mL
P0141 // Polyclonal Rabbit Anti-Guinea Pig Immunoglobulins/HRP // 2 mL - 3000 mL
P0159 // Polyclonal Rabbit Anti-Cow Immunoglobulins/HRP // 2 mL - 3000 mL
P0160 // Polyclonal Rabbit Anti-Goat Immunoglobulins/HRP // 2 mL - 3000 mL
P0161 // Polyclonal Rabbit Anti-Mouse Immunoglobulins/HRP // 2 mL - 3000 mL
P0162 // Polyclonal Rabbit Anti-Rat Immunoglobulins/HRP // 2 mL - 3000 mL
P0163 // Polyclonal Rabbit Anti-Sheep Immunoglobulins/HRP // 2 mL - 3000 mL
P0164 // Polyclonal Rabbit Anti-Swine Immunoglobulins/HRP // 2 mL - 3000 mL
P0174 // Polyclonal Rabbit Anti-Human Beta-2-Microglobulin/HRP // 2 mL - 3000 mL
P0175 // Polyclonal Rabbit Anti-Herpes Simplex Virus Type 1/HRP // 2 mL - 3000 mL
P0176 // Polyclonal Rabbit Anti-Herpes Simplex Virus Type 2/HRP // 2 mL - 3000 mL
P0212 // Polyclonal Rabbit Anti-Human IgA, IgG, IgM, Kappa, Lambda/HRP // 2 mL - 3000 mL
P0213 // Polyclonal Rabbit Anti-Human C3c Complement/HRP // 2 mL - 3000 mL
P0214 // Polyclonal Rabbit Anti-Human IgG/HRP // 2 mL - 3000 mL
P0215 // Polyclonal Rabbit Anti-Human IgM/HRP // 2 mL - 3000 mL
P0216 // Polyclonal Rabbit Anti-Human IgA/HRP // 2 mL - 3000 mL
P0217 // Polyclonal Swine Anti-Rabbit Immunoglobulins/HRP // 2 mL - 3000 mL
P0226 // Polyclonal Rabbit Anti-Human von Willebrand Factor/HRP // 2 mL - 3000 mL
P0246 // Polyclonal Rabbit Anti-Human Fibronectin/HRP // 2 mL - 3000 mL
P0260 // Polyclonal Rabbit Anti-Human Immunoglobulins/HRP // 2 mL - 3000 mL
P0322 // Polyclonal Rabbit Anti-Human IgM, F(ab')2-fragmented (Specific for Mu-Chains)/HRP// 2 mL - 3000 mL
P0356 // Polyclonal Rabbit Anti-Human Albumin/HRP // 2 mL - 3000 mL
P0361 // Polyclonal Rabbit Anti-Escherichia Coli/HRP // 2 mL - 3000 mL
P0374 // Polyclonal Rabbit Anti-Human Protein C/HRP// 2 mL - 3000 mL
P0402 // Polyclonal Rabbit Anti- Dinitrophenyl/HRP // 2 mL - 3000 mL
P0406 // Polyclonal Rabbit Anti-Human IgG, F(ab')2-fragmented (Specific for Gamma-Chains)/HRP// 2 mL - 3000 mL
P0419 // Polyclonal Rabbit Anti-Human Protein S/HRP // 2 mL - 3000 mL
P0447 // Polyclonal Goat Anti-Mouse Immunoglobulins/HRP // 1 mL - 3000 mL
P0449 // Polyclonal Rabbit Anti-Goat Immunoglobulins/HRP // 2 mL - 3000 mL
Reference number: SDS428

1.3 Details of the supplier of the safety data sheet
Supplier/Manufacturer: Dako North America, Inc.
6392 Via Real
Carpinteria, California 93013
United States
Tel: (805) 566-6655
www.Agilent.com

Date of issue: 07/20/2017
Section 1. Identification

e-mail address of person responsible for this SDS : SDS@Agilent.com

1.4 Emergency telephone number
In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture
OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture
H334 RESPIRATORY SENSITIZATION - Category 1

2.2 GHS label elements
Hazard pictograms :

Signal word : Danger
Hazard statements : H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary statements
Prevention : P284 - Wear respiratory protection.
P261 - Avoid breathing vapor.
Response : P304 + P341 (OSHA) - IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or physician.
Storage : Not applicable.
Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards
Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peroxidase</td>
<td>≤1</td>
<td>9003-99-0</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Date of issue : 07/20/2017
Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: No known significant effects or critical hazards.

Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.

Inhalation: Adverse symptoms may include the following: wheezing and breathing difficulties

Skin contact: No specific data.

Ingestion: No specific data.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

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

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Date of issue: 07/20/2017
Section 5. Fire-fighting measures

5.1 Extinguishing media

**Suitable extinguishing media**: Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**: None known.

5.2 Special hazards arising from the substance or mixture

**Specific hazards arising from the chemical**: In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products**: No specific data.

5.3 Advice for firefighters

**Special protective actions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

**Methods and materials for containment and cleaning up**

**Methods for cleaning up**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

**Protective measures**: Put on appropriate personal protective equipment (see Section 8). Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Section 7. Handling and storage

**Advice on general occupational hygiene**
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**7.2 Conditions for safe storage, including any incompatibilities**
Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**7.3 Specific end use(s)**
- **Recommendations**: Industrial applications, Professional applications.
- **Industrial sector specific solutions**: Not applicable.

Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peroxidase</td>
<td>None.</td>
</tr>
</tbody>
</table>

### 8.2 Exposure controls

#### Appropriate engineering controls
Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### Environmental exposure controls
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### Individual protection measures

##### Hygiene measures
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

##### Eye/face protection
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Date of issue: 07/20/2017
Section 8. Exposure controls/personal protection

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

**Appearance**

- **Physical state**: Liquid. [Clear.]
- **Color**: Brownish
- **Odor**: Odorless.
- **Odor threshold**: Not available.
- **pH**: 7.2
- **Melting point**: 0°C (32°F)
- **Boiling point**: 100°C (212°F)
- **Flash point**: Not available.
- **Evaporation rate**: Not available.
- **Flammability (solid, gas)**: Not applicable.
- **Lower and upper explosive (flammable) limits**: Not available.
- **Vapor pressure**: Not available.
- **Vapor density**: Not available.
- **Relative density**: Not available.
- **Solubility**: Easily soluble in the following materials: cold water and hot water.
- **Partition coefficient: n-octanol/water**: Not available.

**Date of issue**: 07/20/2017
**Section 10. Stability and reactivity**

<table>
<thead>
<tr>
<th>10.1 Reactivity</th>
<th>: No specific test data related to reactivity available for this product or its ingredients.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2 Chemical stability</td>
<td>: The product is stable.</td>
</tr>
<tr>
<td>10.3 Possibility of hazardous reactions</td>
<td>: Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>10.4 Conditions to avoid</td>
<td>: No specific data.</td>
</tr>
<tr>
<td>10.5 Incompatible materials</td>
<td>: May react or be incompatible with oxidizing materials.</td>
</tr>
<tr>
<td>10.6 Hazardous decomposition products</td>
<td>: Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>

**Section 11. Toxicological information**

11.1 Information on toxicological effects

- **Acute toxicity**
  Not available.

- **Irritation/Corrosion**
  Not available.

- **Sensitization**
  Not available.

- **Conclusion/Summary**
  - **Respiratory** : May cause sensitization by inhalation.

- **Mutagenicity**
  Not available.

- **Carcinogenicity**
  Not available.

- **Reproductive toxicity**
  Not available.

- **Teratogenicity**
  Not available.

- **Specific target organ toxicity (single exposure)**
  Not available.

- **Specific target organ toxicity (repeated exposure)**
  Not available.

- **Aspiration hazard**
  Not available.

- **Information on the likely routes of exposure**
  Routes of entry anticipated: Oral, Dermal, Inhalation.

- **Potential acute health effects**
  No known significant effects or critical hazards.

**Date of issue**: 07/20/2017
Section 11. Toxicological information

**Inhalation**: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Skin contact**: No known significant effects or critical hazards.

**Ingestion**: No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact**: No specific data.

**Inhalation**: Adverse symptoms may include the following: wheezing and breathing difficulties, asthma.

**Skin contact**: No specific data.

**Ingestion**: No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

**Potential immediate effects**: Not available.

**Potential delayed effects**: Not available.

**Long term exposure**

**Potential immediate effects**: Not available.

**Potential delayed effects**: Not available.

**Potential chronic health effects**

**General**: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity**: No known significant effects or critical hazards.

**Mutagenicity**: No known significant effects or critical hazards.

**Teratogenicity**: No known significant effects or critical hazards.

**Developmental effects**: No known significant effects or critical hazards.

**Fertility effects**: No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

Not available.

Section 12. Ecological information

**12.1 Toxicity**

Not available.

**12.2 Persistence and degradability**

Not available.

**12.3 Bioaccumulative potential**

Not available.

Date of issue: 07/20/2017
Section 12. Ecological information

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT / TDG / Mexico / IMDG / IATA : Not regulated.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Section 15. Regulatory information

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

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Water Act (CWA) 307: Confidential information

Clean Water Act (CWA) 311: Confidential information

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed
Section 15. Regulatory information

Clean Air Act Section 602
Class I Substances : Not listed
Clean Air Act Section 602
Class II Substances : Not listed
DEA List I Chemicals
(Precurser Chemicals) : Not listed
DEA List II Chemicals
(Essential Chemicals) : Not listed

SARA 302/304
Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>EHS</th>
<th>SARA 302 TPQ (lbs)</th>
<th>SARA 304 RQ (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>≤0.1</td>
<td>Yes.</td>
<td>500</td>
<td>-</td>
</tr>
</tbody>
</table>

SARA 304 RQ : 1041666.7 lbs / 472916.7 kg

SARA 311/312
Classification : Immediate (acute) health hazard

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
</table>

State regulations

Massachusetts : None of the components are listed.
New York      : None of the components are listed.
New Jersey    : None of the components are listed.
Pennsylvania  : None of the components are listed.

California Prop. 65
Not available.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.

Montreal Protocol (Annexes A, B, C, E)
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list

Australia : Not determined.

Date of issue : 07/20/2017
Section 15. Regulatory information

Canada : At least one component is not listed in DSL but all such components are listed in NDSL.
China : Not determined.
Europe : All components are listed or exempted.
Japan : Japan inventory (ENCS): Not determined.
         Japan inventory (ISHL): Not determined.
Malaysia : Not determined.
New Zealand : Not determined.
Philippines : Not determined.
Republic of Korea : Not determined.
Taiwan : All components are listed or exempted.
Thailand : Not determined.
Turkey : Not determined.
United States : All components are listed or exempted.
Viet Nam : Not determined.

Section 16. Other information

History
Date of issue : 07/20/2017
Date of previous issue : 04/12/2017.
Version : 1.1

Disp [\text{Indicates information that has changed from previously issued version.}]

Notice to reader
Disclaimer: The information contained in this document is based on Dako state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.