Section 1. Identification

1.1 Product identifier
Product name: Solids NMR Sample Kit 1.2mm-6mm Probes, Part Number G5232-85001
Part No. (Chemical Kit): G5232-85001
Part No.: Adamantane 100277
Ammonium dihydrogenphosphate 204005
Glycine-15N 299294
Hexamethylbenzene 322377
Potassium bromide 0838

Validation date: 6/12/2014.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Material uses: Analytical chemistry.
Glass vials
4 X 5 g, 1 x 1 g
Adamantane 5 g
Ammonium dihydrogenphosphate 5 g
Glycine-15N 1 g
Hexamethylbenzene 5 g
Potassium bromide 5 g

1.3 Details of the supplier of the safety data sheet
Supplier/Manufacturer: Agilent Technologies, Inc.
Logistics Center - Americas
500 Ships Landing Way
New Castle, Delaware 19720
800-227-9770

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: Adamantane
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Ammonium dihydrogenphosphate
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Glycine-15N
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Hexamethylbenzene
While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Potassium bromide
This material is considered hazardous by the
Section 2. Hazards identification

Classification of the substance or mixture

Adamantane
H320	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B

Ammonium dihydrogenphosphate
H320	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B

Glycine-15N
Comb. Dusts	COMBUSTIBLE DUSTS

Hexamethylbenzene
No signal word.

Potassium bromide
H319 - Causes serious eye irritation.
H315 - Causes skin irritation.
H335 - May cause respiratory irritation.
H373 - May cause damage to organs through prolonged or repeated exposure.

Ingredients of unknown toxicity:
- Adamantane
- Ammonium dihydrogenphosphate
- Glycine-15N
- Hexamethylbenzene
- Potassium bromide

2.2 GHS label elements

Hazard pictograms:

Signal word:
- Adamantane: Warning
- Ammonium dihydrogenphosphate: Warning
- Glycine-15N: Warning
- Hexamethylbenzene: No signal word.
- Potassium bromide: Warning

Hazard statements:
- Adamantane: H320 - Causes eye irritation.
- Ammonium dihydrogenphosphate: H320 - Causes eye irritation.
- Glycine-15N: No Code(s) - May form combustible dust concentrations in air.
- Hexamethylbenzene: No known significant effects or critical hazards.
- Potassium bromide: H319 - Causes serious eye irritation.
- H315 - Causes skin irritation.
- H335 - May cause respiratory irritation.
- H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention:
- Adamantane: P280 - Wear eye or face protection.
- P264 - Wash hands thoroughly after handling.
- Ammonium dihydrogenphosphate: P280 - Wear eye or face protection.
- P264 - Wash hands thoroughly after handling.
- Glycine-15N: Not applicable.
- Hexamethylbenzene: Not applicable.
- Potassium bromide: P280 - Wear protective gloves. Wear eye or face protection.

Date of issue: 06/12/2014

Section 2. Hazards identification

Response

- **Adamantane**
  - P271 - Use only outdoors or in a well-ventilated area.
  - P260 - Do not breathe dust.
  - P264 - Wash hands thoroughly after handling.
  - P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337 + P313 - If eye irritation persists: Get medical attention.

- **Ammonium dihydrogenphosphate**
  - P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337 + P313 - If eye irritation persists: Get medical attention.

- **Glycine-15N**
  - Not applicable.

- **Hexamethylbenzene**
  - Not applicable.

- **Potassium bromide**
  - P314 - Get medical attention if you feel unwell.
  - P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
  - P302 + P352 + P362-2 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse.
  - P332 + P313 - If skin irritation occurs: Get medical attention.
  - P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337 + P313 - If eye irritation persists: Get medical attention.

Storage

- **Adamantane**
  - Not applicable.

- **Ammonium dihydrogenphosphate**
  - Not applicable.

- **Glycine-15N**
  - Not applicable.

- **Hexamethylbenzene**
  - Not applicable.

- **Potassium bromide**
  - P405 - Store locked up.

Disposal

- **Adamantane**
  - Not applicable.

- **Ammonium dihydrogenphosphate**
  - Not applicable.

- **Glycine-15N**
  - Not applicable.

- **Hexamethylbenzene**
  - Not applicable.

- **Potassium bromide**
  - P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

- **Adamantane**
  - None known.

- **Ammonium dihydrogenphosphate**
  - None known.

- **Glycine-15N**
  - Keep container tightly closed. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Prevent dust accumulation.

- **Hexamethylbenzene**
  - None known.

- **Potassium bromide**
  - None known.

2.3 Other hazards

Date of issue: 06/12/2014
Section 2. Hazards identification

Hazards not otherwise classified:
- **Adamantane**: None known.
- **Ammonium dihydrogenphosphate**: None known.
- **Glycine-15N**: Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.
- **Hexamethylbenzene**: None known.
- **Potassium bromide**: None known.

Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>Tricyclo[3.3.1.13,7]decane</td>
<td>60 - 100</td>
<td>281-23-2</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>Ammonium dihydrogenorthophosphate</td>
<td>60 - 100</td>
<td>7722-76-1</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>Glycine-15n</td>
<td>60 - 100</td>
<td>7299-33-4</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>Hexamethylbenzene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Potassium bromide</td>
<td>60 - 100</td>
<td>7758-02-3</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.

Section 4. First aid measures

4.1 Description of necessary first aid measures

**Eye contact**
- **Adamantane**: 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. If irritation persists, get medical attention.
- **Ammonium dihydrogenphosphate**: 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. If irritation persists, get medical attention.
- **Glycine-15N**: 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.
- **Hexamethylbenzene**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Date of issue: 06/12/2014
Section 4. First aid measures

Potassium bromide

- Medical attention if irritation occurs.
- 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.

**Inhalation:**

- Adamantane

  Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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.

Ammonium dihydrogenphosphate

- Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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 case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Glycine-15N

- Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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 case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Hexamethylbenzene

- Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Potassium bromide

- 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
Section 4. First aid measures

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.

**Skin contact**

- **Adamantane**
  - 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.

- **Ammonium dihydrogenphosphate**
  - 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.

- **Glycine-15N**
  - 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.

- **Hexamethylbenzene**
  - Flush contaminated skin with plenty of water.
  - Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

- **Potassium bromide**
  - Flush contaminated skin with plenty of water.
  - Remove contaminated clothing and shoes.
  - Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**

- **Adamantane**
  - 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.

- **Ammonium dihydrogenphosphate**
  - 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
Section 4. First aid measures

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.

**Glycine-15N**
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.

**Hexamethylbenzene**
Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

**Potassium bromide**
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 following exposure or if feeling unwell. 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**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adamantane</td>
</tr>
<tr>
<td></td>
<td>Ammonium dihydrogenphosphate</td>
</tr>
<tr>
<td></td>
<td>Glycine-15N</td>
</tr>
<tr>
<td></td>
<td>Hexamethylbenzene</td>
</tr>
<tr>
<td></td>
<td>Potassium bromide</td>
</tr>
</tbody>
</table>

- **Adamantane**: Causes eye irritation.
- **Ammonium dihydrogenphosphate**: Causes eye irritation.
- **Glycine-15N**: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- **Hexamethylbenzene**: No known significant effects or critical hazards.
- **Potassium bromide**: Causes serious eye irritation.

Date of issue: 06/12/2014
## Section 4. First aid measures

<table>
<thead>
<tr>
<th><strong>Inhalation</strong></th>
<th>Adamantane</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ammonium dihydrogenphosphate</td>
<td>Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.</td>
<td></td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Skin contact</strong></th>
<th>Adamantane</th>
<th>No known significant effects or critical hazards.</th>
</tr>
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<tbody>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>May cause respiratory irritation.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ingestion</strong></th>
<th>Adamantane</th>
<th>May be irritating to mouth, throat and stomach.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>May be irritating to mouth, throat and stomach.</td>
<td></td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
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<td></td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Irritating to mouth, throat and stomach.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Over-exposure signs/symptoms</strong></th>
<th>Adamantane</th>
<th>Adverse symptoms may include the following: irritation watering redness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>Adverse symptoms may include the following: irritation watering redness</td>
<td></td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>Adverse symptoms may include the following: irritation watering redness</td>
<td></td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No specific data.</td>
<td></td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Adverse symptoms may include the following: pain or irritation watering redness</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Eye contact</strong></th>
<th>Adamantane</th>
<th>Adverse symptoms may include the following: irritation watering redness</th>
</tr>
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<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>Adverse symptoms may include the following: irritation watering redness</td>
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</tr>
<tr>
<td>Glycine-15N</td>
<td>Adverse symptoms may include the following: irritation watering redness</td>
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<td>Hexamethylbenzene</td>
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<td>Potassium bromide</td>
<td>Adverse symptoms may include the following: pain or irritation watering redness</td>
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<table>
<thead>
<tr>
<th><strong>Inhalation</strong></th>
<th>Adamantane</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No specific data.</td>
<td></td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>Adverse symptoms may include the following: respiratory tract irritation coughing</td>
<td></td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No specific data.</td>
<td></td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Adverse symptoms may include the following: respiratory tract irritation coughing</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Skin contact</strong></th>
<th>Adamantane</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No specific data.</td>
<td></td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No specific data.</td>
<td></td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>Adverse symptoms may include the following: irritation redness</td>
<td></td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>No specific data.</td>
<td></td>
</tr>
</tbody>
</table>
### Section 4. First aid measures

#### Protection of first-aiders

<table>
<thead>
<tr>
<th>Substance</th>
<th>Protection of First-Aiders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>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.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
</tbody>
</table>

#### Notes to physician

<table>
<thead>
<tr>
<th>Substance</th>
<th>Notes to Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
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<td>Potassium bromide</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
</tbody>
</table>

#### Specific treatments

<table>
<thead>
<tr>
<th>Substance</th>
<th>Specific Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>No specific treatment.</td>
</tr>
</tbody>
</table>

#### Ingestion

<table>
<thead>
<tr>
<th>Substance</th>
<th>Specific treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No specific data.</td>
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<tr>
<td>Glycine-15N</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

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

See toxicological information (Section 11)
Section 5. Fire-fighting measures

5.1 Extinguishing media

| Suitable extinguishing media | Adamantane | Use an extinguishing agent suitable for the surrounding fire. |
| Ammonium dihydrogenphosphate | Use an extinguishing agent suitable for the surrounding fire. |
| Glycine-15N | Use dry chemical powder. |
| Hexamethylbenzene | Use an extinguishing agent suitable for the surrounding fire. |
| Potassium bromide | Use an extinguishing agent suitable for the surrounding fire. |

| Unsuitable extinguishing media | Adamantane | None known. |
| Ammonium dihydrogenphosphate | None known. |
| Glycine-15N | Do not use water jet. |
| Hexamethylbenzene | None known. |
| Potassium bromide | None known. |

5.2 Special hazards arising from the substance or mixture

| Specific hazards arising from the chemical | Adamantane | No specific fire or explosion hazard. |
| Ammonium dihydrogenphosphate | No specific fire or explosion hazard. |
| Glycine-15N | Fine dust clouds may form explosive mixtures with air. |
| Hexamethylbenzene | No specific fire or explosion hazard. |
| Potassium bromide | No specific fire or explosion hazard. |

| Hazardous thermal decomposition products | Decomposition products may include the following materials: |
| carbon dioxide | carbon monoxide |
| nitrogen oxides | phosphorus oxides |
| halogenated compounds | metal oxide/oxides |

5.3 Advice for firefighters

| Special protective actions for firefighters | Adamantane | 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. |
| Ammonium dihydrogenphosphate | 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. |
| Glycine-15N | 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. |
| Hexamethylbenzene | 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. |
| Potassium bromide | 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. |
Section 5. Fire-fighting measures

Special protective equipment for fire-fighters:

- **Adamantane**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **Ammonium dihydrogenphosphate**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **Glycine-15N**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **Hexamethylbenzene**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **Potassium bromide**: 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 specialised 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

- **Adamantane**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- **Ammonium dihydrogenphosphate**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- **Glycine-15N**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- **Hexamethylbenzene**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- **Potassium bromide**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Date of issue: 06/12/2014
Section 6. Accidental release measures

6.3 Methods and materials for containment and cleaning up

Adamantane
Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Ammonium dihydrogenphosphate
Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Glycine-15N
Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Hexamethylbenzene
Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Potassium bromide
Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures: Adamantane
Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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.

Ammonium dihydrogenphosphate
Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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.

Glycine-15N
Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. 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. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and...
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

Adamantane
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 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.

Ammonium dihydrogenphosphate
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.

Glycine-15N
Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

Hexamethylbenzene
Store in accordance with local regulations. Store in original container protected from direct sunlight and can be hazardous. Do not reuse container.

Potassium bromide
Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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

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.

Potassium bromide
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. Store locked up. 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.

7.3 Specific end use(s)

Recommendations

Adamantane: Industrial applications, Professional applications.
Ammonium dihydrogenphosphate: Industrial applications, Professional applications.
Glycine-15N: Industrial applications, Professional applications.
Hexamethylbenzene: Industrial applications, Professional applications.
Potassium bromide: Industrial applications, Professional applications.

Industrial sector specific solutions
Not applicable.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits
None.

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.

Date of issue: 06/12/2014
Section 8. Exposure controls/personal protection

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: chemical splash goggles.

Skin 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: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:
- Adamantane: Solid. [Crystalline solid.]
- Ammonium dihydrogenphosphate: Solid. [Crystalline solid.]
- Hexamethylbenzene: Solid. [Crystalline solid.]
- Potassium bromide: Solid.

Color:
- Adamantane: Beige.
- Ammonium dihydrogenphosphate: Colorless.
- Hexamethylbenzene: Yellow.
- Potassium bromide: Not available.

Odor:
- Adamantane: Not available.
- Ammonium dihydrogenphosphate: Not available.
- Glycine-15N: Odorless.
- Hexamethylbenzene: Not available.
- Potassium bromide: Not available.

Odor threshold:
- Adamantane: Not available.
- Ammonium dihydrogenphosphate: Not available.
- Glycine-15N: Not available.
- Hexamethylbenzene: Not available.
- Potassium bromide: Not available.

pH:
- Adamantane: Not applicable.
- Ammonium dihydrogenphosphate: 7.8 to 8.2 [Conc. (% w/w): 5%]
- Glycine-15N: Not available.
- Hexamethylbenzene: Not available.
- Potassium bromide: 5 to 6 [Conc. (% w/w): 119%]
## Section 9. Physical and chemical properties

### Melting point
- **Adamantane**: 209 to 212°C (408.2 to 413.6°F)
- **Ammonium dihydrogenphosphate**: 190°C (374°F)
- **Glycine-15N**: 290°C (554°F)
- **Hexamethylbenzene**: 164 to 166°C (327.2 to 330.8°F)
- **Potassium bromide**: 734°C (1353.2°F)

### Boiling point
- **Adamantane**: Not available.
- **Ammonium dihydrogenphosphate**: Decomposes.
- **Glycine-15N**: Decomposes.
- **Hexamethylbenzene**: 264°C (507.2°F)
- **Potassium bromide**: 1453°C (2647.4°F)

### Flash point
- **Adamantane**: Not available.
- **Ammonium dihydrogenphosphate**: Not available.
- **Glycine-15N**: Not available.
- **Hexamethylbenzene**: Not available.
- **Potassium bromide**: Not available.

### Evaporation rate
- **Adamantane**: Not available.
- **Ammonium dihydrogenphosphate**: Not available.
- **Glycine-15N**: Not available.
- **Hexamethylbenzene**: Not available.
- **Potassium bromide**: Not available.

### Flammability (solid, gas)
- **Adamantane**: Not available.
- **Ammonium dihydrogenphosphate**: Not available.
- **Glycine-15N**: Not available.
- **Hexamethylbenzene**: Not available.
- **Potassium bromide**: Not available.

### Lower and upper explosive (flammable) limits
- **Adamantane**: Not available.
- **Ammonium dihydrogenphosphate**: Not available.
- **Glycine-15N**: Not available.
- **Hexamethylbenzene**: Not available.
- **Potassium bromide**: Not available.

### Vapor pressure
- **Adamantane**: Not available.
- **Ammonium dihydrogenphosphate**: Not available.
- **Glycine-15N**: Not available.
- **Hexamethylbenzene**: Not available.
- **Potassium bromide**: Not available.

### Vapor density
- **Adamantane**: Not available.
- **Ammonium dihydrogenphosphate**: Not available.
- **Glycine-15N**: 5.6 [Air = 1]
- **Hexamethylbenzene**: Not available.
- **Potassium bromide**: Not available.

### Relative density
- **Adamantane**: 1.07
- **Ammonium dihydrogenphosphate**: 1.8
- **Glycine-15N**: Not available.
- **Hexamethylbenzene**: 1.063
- **Potassium bromide**: 2.75

### Solubility
- **Adamantane**: Insoluble in the following materials: cold water and hot water.
- **Ammonium dihydrogenphosphate**: Soluble in the following materials: cold water and hot water.
- **Glycine-15N**: Very slightly soluble in the following materials: acetone.
- **Hexamethylbenzene**: Insoluble in the following materials: diethyl ether.
- **Potassium bromide**: Easily soluble in the following materials: cold water and hot water.
Section 9. Physical and chemical properties

Solubility in water: Not available.

Partition coefficient: n-octanol/water

<table>
<thead>
<tr>
<th>Compound</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>4.24</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>Not available</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>-3.21</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>5.11</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not available.

Section 10. Stability and reactivity

10.1 Reactivity

<table>
<thead>
<tr>
<th>Compound</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
</tbody>
</table>

10.2 Chemical stability

<table>
<thead>
<tr>
<th>Compound</th>
<th>Stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>The product is stable.</td>
</tr>
</tbody>
</table>

10.3 Possibility of hazardous reactions

<table>
<thead>
<tr>
<th>Compound</th>
<th>Hazardous reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
</tbody>
</table>

Date of issue: 06/12/2014
Section 10. Stability and reactivity

10.4 Conditions to avoid

- Adamantane
- Ammonium dihydrogenphosphate
- Glycine-15N

No specific data.

- Hexamethylbenzene
- Potassium bromide

No specific data.

10.5 Incompatible materials

- Adamantane
- Ammonium dihydrogenphosphate
- Glycine-15N

No specific data.

- Hexamethylbenzene
- Potassium bromide

No specific data.

10.6 Hazardous decomposition products

- Adamantane
- Ammonium dihydrogenphosphate
- Glycine-15N

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

- Hexamethylbenzene
- Potassium bromide

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;10 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>Tricyclo[3.3.1.13,7]decane</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>7930 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Glycine-15n</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3070 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>50 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Tricyclo[3.3.1.13,7]decane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sensitization

Not available.
## Section 11. Toxicological information

### Mutagenicity
Not available.

### Carcinogenicity
Not available.

### Reproductive toxicity
Not available.

### Teratogenicity
Not available.

### Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium bromide</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

### Specific target organ toxicity (repeated exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium bromide</td>
<td>Category 2</td>
<td>Not determined</td>
<td>central nervous system (CNS)</td>
</tr>
</tbody>
</table>

### Aspiration hazard
Not available.

### Information on the likely routes of exposure

- skin
- Eyes
- Ingestion
- Inhalation

### Potential acute health effects

#### Eye contact

- **Adamantane**
  - Causes eye irritation.
- **Ammonium dihydrogenphosphate**
  - Causes eye irritation.
- **Glycine-15N**
  - Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- **Hexamethylbenzene**
  - No known significant effects or critical hazards.
  - Causes serious eye irritation.

#### Inhalation

- **Adamantane**
  - No known significant effects or critical hazards.
- **Ammonium dihydrogenphosphate**
  - Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- **Glycine-15N**
  - Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
  - Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- **Hexamethylbenzene**
  - No known significant effects or critical hazards.
- **Potassium bromide**
  - May cause respiratory irritation.
## Section 11. Toxicological information

### Skin contact

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Causes skin irritation.</td>
</tr>
</tbody>
</table>

### Ingestion

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>May be irritating to mouth, throat and stomach.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>May be irritating to mouth, throat and stomach.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Irritating to mouth, throat and stomach.</td>
</tr>
</tbody>
</table>

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

#### Eye contact

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>Adverse symptoms may include the following: irritation, watering, redness</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>Adverse symptoms may include the following: irritation, watering, redness</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>Adverse symptoms may include the following: irritation, watering, redness</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Adverse symptoms may include the following: pain or irritation, watering, redness</td>
</tr>
</tbody>
</table>

#### Inhalation

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>Adverse symptoms may include the following: respiratory tract irritation, coughing</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Adverse symptoms may include the following: respiratory tract irritation, coughing</td>
</tr>
</tbody>
</table>

#### Skin contact

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Adverse symptoms may include the following: irritation, redness</td>
</tr>
</tbody>
</table>

#### Ingestion

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

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

#### Short term exposure

<table>
<thead>
<tr>
<th>Potential immediate effects</th>
<th>Not available.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Potential delayed effects</th>
<th>Not available.</th>
</tr>
</thead>
</table>

Date of issue: 06/12/2014
Section 11. Toxicological information

**Long term exposure**

| Potential immediate effects | Not available. |
| Potential delayed effects  | Not available. |

**Potential chronic health effects**

Not available.

**General**

- Adamantane: No known significant effects or critical hazards.
- Ammonium dihydrogenphosphate: No known significant effects or critical hazards.
- Glycine-15N: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- Hexamethylbenzene: No known significant effects or critical hazards.
- Potassium bromide: May cause damage to organs through prolonged or repeated exposure.

**Carcinogenicity**

- Adamantane: No known significant effects or critical hazards.
- Ammonium dihydrogenphosphate: No known significant effects or critical hazards.
- Glycine-15N: No known significant effects or critical hazards.
- Hexamethylbenzene: No known significant effects or critical hazards.
- Potassium bromide: No known significant effects or critical hazards.

**Mutagenicity**

- Adamantane: No known significant effects or critical hazards.
- Ammonium dihydrogenphosphate: No known significant effects or critical hazards.
- Glycine-15N: No known significant effects or critical hazards.
- Hexamethylbenzene: No known significant effects or critical hazards.
- Potassium bromide: No known significant effects or critical hazards.

**Teratogenicity**

- Adamantane: No known significant effects or critical hazards.
- Ammonium dihydrogenphosphate: No known significant effects or critical hazards.
- Glycine-15N: No known significant effects or critical hazards.
- Hexamethylbenzene: No known significant effects or critical hazards.
- Potassium bromide: No known significant effects or critical hazards.

**Developmental effects**

- Adamantane: No known significant effects or critical hazards.
- Ammonium dihydrogenphosphate: No known significant effects or critical hazards.
- Glycine-15N: No known significant effects or critical hazards.
- Hexamethylbenzene: No known significant effects or critical hazards.
- Potassium bromide: No known significant effects or critical hazards.

**Fertility effects**

- Adamantane: No known significant effects or critical hazards.
- Ammonium dihydrogenphosphate: No known significant effects or critical hazards.
- Glycine-15N: No known significant effects or critical hazards.
- Hexamethylbenzene: No known significant effects or critical hazards.
- Potassium bromide: No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium bromide</td>
<td>3070 mg/kg</td>
</tr>
</tbody>
</table>

**Other information**

- Adamantane: Not available.
- Ammonium dihydrogenphosphate: Not available.
- Glycine-15N: Not available.
- Hexamethylbenzene: Not available.
- Potassium bromide: Not available.

**Date of issue:** 06/12/2014
Section 12. Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>Acute LC50 285 to 312 µg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td>Tricyclo[3.3.1.13,7]decane</td>
<td>Acute LC50 100 mg/l Fresh water</td>
<td>Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>96 hours</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>Acute LC50 100 mg/l Fresh water</td>
<td>Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamantane</td>
<td>4.24</td>
<td>-</td>
<td>high</td>
</tr>
<tr>
<td>Tricyclo[3.3.1.13,7]decane</td>
<td>4.24</td>
<td>-</td>
<td>high</td>
</tr>
<tr>
<td>Glycine-15N</td>
<td>-3.21</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Hexamethylbenzene</td>
<td>5.11</td>
<td>-</td>
<td>high</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>-</td>
<td>1.41</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

| Soil/water partition coefficient (K_{oc}) | Not available. |

12.5 Other adverse effects

- Adamantane: No known significant effects or critical hazards.
- Ammonium dihydrogenphosphate: No known significant effects or critical hazards.
- Glycine-15N: No known significant effects or critical hazards.
- Hexamethylbenzene: No known significant effects or critical hazards.
- Potassium bromide: 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. |

Date of issue: 06/12/2014
Section 13. Disposal considerations

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

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>UN3316</td>
<td>Chemical kits</td>
<td>9</td>
<td>III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDG</td>
<td>UN3316</td>
<td>CHEMICAL KIT</td>
<td>9</td>
<td>III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>UN3316</td>
<td>EQUIPO QUIMICO</td>
<td>9</td>
<td>III</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional information: Special provisions 251, 340

Limited quantity
Yes.

Packaging instruction
Passenger aircraft
Quantity limitation: 10 kg

Cargo aircraft
Quantity limitation: 10 kg

Special provisions
15

Explosive Limit and Limited Quantity Index
0

Passenger Carrying Road or Rail Index
10

Special provisions
65

Special provisions
251, 340

Date of issue: 06/12/2014
## Section 14. Transport information

<table>
<thead>
<tr>
<th>IMDG</th>
<th>UN3316</th>
<th>CHEMICAL KIT. Marine pollutant (Tricyclo[3.3.1.13,7] decane)</th>
<th>9</th>
<th>III</th>
<th>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA</td>
<td>UN3316</td>
<td>Chemical kit</td>
<td>9</td>
<td>III</td>
<td>The environmentally hazardous substance mark may appear if required by other transportation regulations.</td>
</tr>
</tbody>
</table>

### Emergency schedules (EmS)
- F-A, _S-P_

### Special provisions
- 251, 340

### Passenger and Cargo Aircraft
- **Quantity limitation:** 10 kg
- **Packaging instructions:** 960
- **Cargo Aircraft Only**
  - **Quantity limitation:** 10 kg
  - **Packaging instructions:** 960
- **Limited Quantities - Passenger Aircraft**
  - **Quantity limitation:** 1 kg
  - **Packaging instructions:** Y960

### Special provisions
- A44, A163

PG* : Packing group

## Section 15. Regulatory information

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

**U.S. Federal regulations**
- TSCA 4(a) proposed test rules: Glycine-15n
- **Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)**: Not listed
- **Clean Air Act Section 602 Class I Substances**: Not listed
- **Clean Air Act Section 602 Class II Substances**: Not listed
- **DEA List I Chemicals (Precursor Chemicals)**: Not listed

**Clean Air Act Section 112**

**United States inventory (TSCA 8b)**: All components are listed or exempted.

**Date of issue**: 06/12/2014
Section 15. Regulatory information

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients
No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312
Classification : Immediate (acute) health hazard
Delayed (chronic) 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>
<tbody>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>60 - 100</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>Potassium bromide</td>
<td>60 - 100</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

SARA 313

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form R - Reporting requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>7722-76-1</td>
<td>60 - 100</td>
</tr>
<tr>
<td>Ammonium dihydrogenorthophosphate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Supplier notification

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium dihydrogenphosphate</td>
<td>7722-76-1</td>
<td>60 - 100</td>
</tr>
<tr>
<td>Ammonium dihydrogenorthophosphate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

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 : None products were found.

Canada inventory : At least one component is not listed in DSL but all such components are listed in NDSL.

International regulations

International lists

Australia inventory (AICS) : Not determined.
China inventory (IECSC) : Not determined.
Japan inventory : All components are listed or exempted.
Korea inventory : Not determined.
Malaysia Inventory (EHS Register) : Not determined.
New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.
Philippines inventory (PICCS) : Not determined.

Date of issue : 06/12/2014
Section 15. Regulatory information

Taiwan inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule I Chemicals: Not listed

Chemical Weapons Convention List Schedule II Chemicals: Not listed

Chemical Weapons Convention List Schedule III Chemicals: Not listed

Section 16. Other information

History
Date of issue: 6/12/2014.
Date of previous issue: 8/2/2012.
Version: 2

* Indicates information that has changed from previously issued version.

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