## Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

### 1.1 Product Identifier

| | |
|---|---|
| **Product Name** | **Xpert Flu/RSV XC; Xpert Xpress Flu/RSV; Xpert Flu; Xpert Xpress Flu; Xpert Xpress SARS-COV-2; Xpert Xpress SARS-CoV-2/Flu/RSV; Xpert Xpress CoV-2 *plus*; Xpert Mpox** |
| **Product Code** | GXFLU/RSV-10; GXFLU/RSV-CE-10; XPRSFLU/RSV-CN-10; RXPFLU/RSV-10; XPRSFLU/RSV-CE-10; RFLU/RSV-10; GXFLU-CE-10; XPRSFLU/RSV-10; XPRSFLU-10; XPRSFLU/RSV-NP-10 XPRSARS-COV2-10; 700-6944; XPSARS-COV2-MII-10; 900-0889; 900-0890; 900-0892; XPCOV2/FLU/RSV-10; XPRSARS-COV2-DOD; 900-0918; 900-0919; XP3SARS-COV2-10; 900-1079; GXMPX-10; XPRS-COV2-10, XP3SARS-COV2-GB-10, XPRSFLU/RSV-GB-10 |

### 1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

| | |
|---|---|
| **Relevant identified use(s)** | Laboratory use |

### 1.3 Details of the Supplier of the Safety Data Sheet

| | |
|---|---|
| **Manufacturer** | Cepheid<br>904 Caribbean Drive<br>Sunnyvale, CA 94089<br>United States<br>www.cepheid.com<br>US: techsupport@cepheid.com |
| **Telephone (General)** | 1 (888) 838-3222 - US Option 2 |
| **Telephone (General)** | 1 (408) 541-4191 - Outside of the US |
| **Supplier** | Cepheid AB<br>Röntgenvägen 5<br>SE-171 54 Solna<br>Sweden<br>www.cepheidinternational.com<br>EU: support@cepheideurope.com |
| **Telephone (General)** | +33 563 825 319 |
| | Cepheid Holdings Pty Ltd<br>Suite 2, Level 3, Building A<br>11 Talavera Road<br>Macquarie Park, NSW 2113<br>Australia<br>www.cepheidinternational.com<br>ANZ: TechSupportANZ@cepheid.com |
| **Telephone (Australia)** | 1800 107 884 |

### 1.4 Emergency Telephone Number

| | |
|---|---|
| **Manufacturer** | 1 (800) 535-5053 - INFOTRAC - 24 hr Emergency |
| **Manufacturer** | 1 (352) 323-3500 - Outside of the US |

## Section 2: Hazards Identification

### UN GHS (Labeling Content Used on Products)
**According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)**

### 2.1 Classification of the Substance or Mixture

**UN GHS**

Acute Toxicity Oral 5
Skin Mild Irritation 3
Eye Mild Irritation 2B

### 2.2 Label Elements

**UN GHS**

**WARNING**

**Hazard statements**

Harmful if swallowed
May be harmful in contact with skin
Causes eye irritation

**Precautionary statements**

**Prevention**

Wash hands thoroughly after handling.

**Response**

If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Call a POISON CENTER or doctor/physician if you feel unwell.

### 2.3 Other Hazards

**UN GHS**

According to the Globally Harmonized System for Classification and Labeling (GHS) this product is considered hazardous.

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### United States (US)
**According to: OSHA 29 CFR 1910.1200 HCS**

### 2.1 Classification of the Substance or Mixture

**OSHA HCS 2012**

Eye Mild Irritation 2B

### 2.2 Label Elements

**OSHA HCS 2012**

**Hazard statements**

Harmful if swallowed
May be harmful in contact with skin
Causes eye irritation

**Precautionary statements**

**Prevention**

Wash hands thoroughly after handling.

**Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

## 2.3 Other Hazards

**OSHA HCS 2012** Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is not considered hazardous.

---

**Canada**
**According to: WHMIS**

## 2.1 Classification of the Substance or Mixture

**WHMIS** Not classified

## 2.2 Label Elements

**WHMIS** No label element(s) required.

## 2.3 Other Hazards

**WHMIS** In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

---

## 2.4 Other Information

All other reagents, beads, and other constituents are at concentrations less than 1% in the mixture or not considered hazardous under US hazard communication regulations (29 CFR 1910.1200), EU directives for classification and labeling of substances or mixtures or the Global Harmonization System for classification and labeling of substances or mixtures.

## Section 3: Composition/Information on Ingredients

### 3.1 Substances

Material does not meet the criteria of a substance.

### 3.2 Mixtures

| Composition | | | | | |
|---|---|---|---|---|---|
| **Chemical Name** | **Identifiers** | **%** | **LD50/LC50** | **Classifications According to Regulation/Directive** | **Comments** |
| Guanidine Thiocyanate | **CAS:** 593-84-0<br>**EINECS:** 209-812-1 | 10% - 20% | 593 mg/kg | **UN GHS:** Acute Tox. 5 (Orl); Skin Irrit. 3; Eye Irrit. 2B<br>**OSHA HCS 2012:** Acute Tox. 5 (Orl); Eye Irrit. 2B | NDA |

## Section 4: First Aid Measures

### 4.1 Description of First Aid Measures

**Inhalation** First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Move victim to fresh air. Administer oxygen if breathing is difficult. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Give artificial respiration if victim is not breathing.

**Skin** First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing.

**Eye** First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

**Ingestion** First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If swallowed, rinse mouth with water (only if the person is conscious) Do NOT induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. Obtain medical attention immediately if ingested.

### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Refer to Section 11 - Toxicological Information.

### 4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

**Notes to Physician** All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

## Section 5: Firefighting Measures

### 5.1 Extinguishing Media

| | |
|---|---|
| **Suitable Extinguishing Media** | LARGE FIRES: Dry chemical, CO2, alcohol-resistant foam or water spray.<br>SMALL FIRES: Dry chemical, CO2 or water spray. |
| **Unsuitable Extinguishing Media** | No data available |

### 5.2 Special Hazards Arising from the Substance or Mixture

| | |
|---|---|
| **Unusual Fire and Explosion Hazards** | Plastic cartridge containing reagents may emit toxic vapors of carbon oxides, sulfur oxides, nitrogen oxides. |
| **Hazardous Combustion Products** | No data available |

### 5.3 Advice for Firefighters

Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
Wear positive pressure self-contained breathing apparatus (SCBA).
SMALL FIRES: Move containers from fire area if you can do it without risk.

## Section 6: Accidental Release Measures

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

| | |
|---|---|
| **Personal Precautions** | In the event a cartridge is broken these personal precautions are applicable. Wear appropriate protective clothing. Do not walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas. |
| **Emergency Procedures** | No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. |

### 6.2 Environmental Precautions

Prevent entry into waterways, sewers, basements or confined areas.

### 6.3 Methods and Material for Containment and Cleaning Up

| | |
|---|---|
| **Containment/ Clean-up Measures** | For small spills, wear gloves and absorb spill with paper towel. Do not dispose spilled materials down drain. |

### 6.4 Reference to other sections

Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

## Section 7: Handling and Storage

### 7.1 Precautions for safe handling

**Handling** No special handling necessary. If cartridge is broken avoid contact with spilled reagents. Avoid contact with skin and eyes.

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

**Storage** Store according to product labeling. Keep away from incompatible materials. Store locked up. Keep container/package tightly closed in a cool, well-ventilated place.

### 7.3 Specific end use(s)

Refer to Section 1.2 - Relevant identified uses.

## Section 8: Exposure Controls/Personal Protection

### 8.1 Control parameters

| | Exposure Limits/Guidelines | | | |
|---|---|---|---|---|
| | **Result** | **ACGIH** | **NIOSH** | **OSHA** |
| Guanidinium thiocyanate | TWA | Not established | Not established | Not established |

### 8.2 Exposure controls

**Engineering Measures/Controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Personal Protective Equipment**

**Respiratory** Respiratory equipment is not expected to be necessary if material is used under ordinary conditions and as recommended. Otherwise, follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

**Eye/Face** Wear chemical splash safety goggles.

**Skin/Body** Wear protective clothing

**Environmental Exposure Controls** Follow best practice for site management and disposal of waste.

**Key to abbreviations**
OSHA = Occupational Safety and Health Administration
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

## Section 9: Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

| | | | |
|---|---|---|---|
| **Material Description** | | | |
| Physical Form | Liquid | Color | Colorless |
| Odor | Odorless | Odor Threshold | Data lacking |
| **General Properties** | | | |
| Boiling Point | 212 °F(100 °C) | Melting Point/Freezing Point | 32 °F(0 °C) |
| Decomposition Temperature | Data lacking | pH | 3.3 to 8.8 |
| Specific Gravity/Relative Density | = 1 Water=1 | Water Solubility | Soluble 100 % |
| Viscosity | Data lacking | Explosive Properties | Data lacking |
| Oxidizing Properties: | Data lacking | | |
| **Volatility** | | | |
| Vapor Pressure | Minimal | Vapor Density | Data lacking |
| Evaporation Rate | Minimal | | |
| **Flammability** | | | |
| Flash Point | Data lacking | UEL | Data lacking |
| LEL | Data lacking | Autoignition | Data lacking |
| Flammability (solid, gas) | Data lacking | | |
| **Environmental** | | | |
| Octanol/Water Partition Coefficient | Data lacking | | |

### 9.2 Other Information

No additional physical and chemical parameters noted.

## Section 10: Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable

### 10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4 Conditions to avoid

Incompatible materials. Burning plastic cartridge containing reagents may liberate toxic byproducts

### 10.5 Incompatible materials

Acids.

### 10.6 Hazardous decomposition products

Burning plastic cartridge containing reagents may liberate toxic byproducts.

## Section 11: Toxicological Information

### 11.1 Information on toxicological effects

| Components | | |
|---|---|---|
| Guanidinium thiocyanate | 593-84-0 | **Acute Toxicity:** Intraperitoneal-Mouse LD50 • 593 mg/kg |

| GHS Properties | Classification |
|---|---|
| Acute Toxicity | **UN GHS**•Acute Toxicity - Oral 5<br>**OSHA HCS 2012**•Data lacking |
| Skin Corrosion/Irritation | **UN GHS**•Skin Mild Irritation 3<br>**OSHA HCS 2012**•Data lacking |
| Serious Eye Damage/Irritation | **UN GHS**•Eye Mild Irritation 2B<br>**OSHA HCS 2012**•Eye Mild Irritation 2B |
| Skin Sensitization | **UN GHS**•Data lacking<br>**OSHA HCS 2012**•Data lacking |
| Respiratory Sensitization | **UN GHS**•Data lacking<br>**OSHA HCS 2012**•Data lacking |
| Carcinogenicity | **UN GHS**•Data lacking<br>**OSHA HCS 2012**•Data lacking |
| Germ Cell Mutagenicity | **UN GHS**•Data lacking<br>**OSHA HCS 2012**•Data lacking |
| Toxicity for Reproduction | **UN GHS**•Data lacking<br>**OSHA HCS 2012**•Data lacking |
| STOT-SE | **UN GHS**•Data lacking<br>**OSHA HCS 2012**•Data lacking |

### Potential Health Effects

**Inhalation**
**Acute (Immediate)** May cause irritation.
**Chronic (Delayed)** No data available

**Skin**
**Acute (Immediate)** Causes mild skin irritation.
**Chronic (Delayed)** No data available

**Eye**
**Acute (Immediate)** Causes eye irritation.
**Chronic (Delayed)** No data available

**Ingestion**
**Acute (Immediate)** May be harmful if swallowed.
**Chronic (Delayed)** No data available

**Key to abbreviations**
LD = Lethal Dose

## Section 12: Ecological Information

### 12.1 Toxicity

LC50 (guppy): 89.1 mg/l @ 96 h

### 12.2 Persistence and degradability

Material data lacking.

### 12.3 Bioaccumulative potential

Material data lacking.

### 12.4 Mobility in Soil

Material data lacking.

### 12.5 Results of PBT and vPvB assessment

No PBT and vPvB assessment has been conducted.

### 12.6 Other adverse effects

No studies have been found.

## Section 13: Disposal Considerations

### 13.1 Waste treatment methods

| | |
|---|---|
| **Product waste** | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. |
| **Packaging waste** | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. |

### 13.2 Other Information

Biological specimens, transfer devices, and used cartridges should be considered capable of transmitting infectious agents requiring standard precautions. Follow your institution's environmental waste procedures for proper disposal of used cartridges and unused reagents. These materials may exhibit characteristics of chemical hazardous waste requiring specific national or regional diposal procedures. If national or regional regulations do not provide clear direction on proper disposal, biological specimens and used cartridges should be disposed per WHO (World Health Organization) medical waste handling and disposal guidelines.

## Section 14: Transport Information

| | 14.1 UN Number | 14.2 UN Proper Shipping Name | 14.3 Transport Hazard Class(es) | 14.4 Packing Group | 14.5 Environmental Hazards |
|---|---|---|---|---|---|
| **DOT** | Not Regulated | Not Regulated | Not Regulated | Not Regulated | Not Applicable |
| **TDG** | Not Regulated | Not Regulated | Not Regulated | Not Regulated | Not Applicable |
| **IMO/IMDG** | Not Regulated | Not Regulated | Not Regulated | Not Regulated | Not Applicable |
| **IATA/ICAO** | Not Regulated | Not Regulated | Not Regulated | Not Regulated | Not Applicable |

### 14.6 Special Precautions for User

None specified.

### 14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

## Section 15: Regulatory Information

### 15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

**SARA Hazard Classifications** Acute

| Inventory | | | | | | |
|---|---|---|---|---|---|---|
| **Component** | **CAS** | **Canada DSL** | **Canada NDSL** | **EU EINECS** | **EU ELNICS** | **TSCA** |
| Guanidinium thiocyanate | 593-84-0 | Yes | No | Yes | No | Yes |

### Canada

#### Labor

**Canada - WHMIS - Classifications of Substances**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

**Canada - WHMIS - Ingredient Disclosure List**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

#### Environment

**Canada - CEPA - Priority Substances List**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

### United States

#### Labor

**U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

**U.S. - OSHA - Specifically Regulated Chemicals**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

#### Environment

**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

**U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

**U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing**

| | | |
|---|---|---|
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

### United States - California

**Environment**

| | | |
|---|---|---|
| **U.S. - California - Proposition 65 - Carcinogens List** | | |
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |
| **U.S. - California - Proposition 65 - Developmental Toxicity** | | |
| •Guanidinium thiocyanate | 593-84-0 | *Not Listed* |
| **U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)** | | |
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |
| **U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)** | | |
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |
| **U.S. - California - Proposition 65 - Reproductive Toxicity - Female** | | |
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |
| **U.S. - California - Proposition 65 - Reproductive Toxicity - Male** | | |
| •Guanidinium thiocyanate | 593-84-0 | Not Listed |

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

## Section 16: Other Information

**Relevant Phrases (code & full text)**

H302 - Harmful if swallowed
H313 - May be harmful in contact with skin
H320 - Causes eye irritation

**Disclaimer/ Statement of Liability**

The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties, protections, and disposal which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material. The above information is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information relevant to the foreseeable handling of the material. However, in the event of an adverse incident associated with this product, this Safety Data Sheet is not, and is not intended to be, a substitute for consultation with appropriately trained personnel.

**Key to abbreviations**
NDA = No data available