

**Kit Components**

| Product code | Description                                  |
|--------------|----------------------------------------------|
| CPO50        | <b>Chagas Detect™ <i>Plus</i> Rapid Test</b> |

The Chagas *Detect*™ *Plus* Rapid Test is a rapid immunochromatographic strip assay for the qualitative detection of antibodies to *Trypanosoma cruzi* (*T. cruzi*) in human serum or whole blood samples.

**Components:**

|  |                                                |
|--|------------------------------------------------|
|  | Chagas Detect™ <i>Plus</i> Rapid Test Cassette |
|  | Chase Buffer Type A                            |
|  | Gold Solution                                  |

**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/13/2016

**\* 1 Identification**

- **Product Identifier**
- **Trade name:** Chagas Detect™ Plus Rapid Test Cassette
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description** Scientific reagent
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**  
InBios International, Inc.  
562 1st Ave. South  
Suite 600  
Seattle, WA 98104  
Ph: 206-344-5821  
Fax: 206-344-5823
- **Emergency telephone number:**  
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300 or Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

**\* 2 Hazard(s) Identification**

- **Classification of the substance or mixture:**  
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.
- **Label elements:**
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:** Non-Regulated Material
- **Unknown acute toxicity:**  
99 % of the mixture consists of component(s) of unknown toxicity.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

|            |   |                |
|------------|---|----------------|
| HEALTH     | 0 | Health = 0     |
| FIRE       | 0 | Fire = 0       |
| REACTIVITY | 0 | Reactivity = 0 |

- **Hazard(s) not otherwise classified (HNOC):** None known

**\* 3 Composition/Information on Ingredients**

- **Chemical characterization: Substance**
- **CAS No. Description**  
9004-70-0 cellulose nitrate
- **Chemical characterization: Mixtures**
- **Description:** Reagent mixture

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/13/2016

**Trade name: Chagas Detect™ Plus Rapid Test Cassette**

- **Dangerous Components:** Non-Regulated Material

**4 First-Aid Measures**

- **Description of first aid measures:**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
No further relevant information available.

**5 Fire-Fighting Measures**

- **Extinguishing media:**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:**  
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

**6 Accidental Release Measures**

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Dispose of the collected material according to regulations.
- **Reference to other sections:**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and Storage**

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

**8 Exposure Controls/Personal Protection**

- **Additional information about design of technical systems:** No further data; see section 7.

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/13/2016

**Trade name: Chagas Detect™ Plus Rapid Test Cassette**

- **Control parameters:**
- **Components with occupational exposure limits:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:** No special measures required.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves:**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:** Not required.

**\* 9 Physical and Chemical Properties**

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form:** Solid
  - Color:** White
  - Odor:** Odorless
  - Odor threshold:** Not determined.
  - pH-value:** Not applicable.
- **Change in condition**
  - Melting point/Melting range:** Not determined.
  - Boiling point/Boiling range:** Not determined.
- **Flash point:** None
- **Flammability (solid, gaseous):** Product is not flammable.
- **Ignition temperature:** 180 °C (356 °F)
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Not determined.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower:** Not determined.
  - Upper:** Not determined.
- **Vapor pressure @ 20 °C (68 °F):** 58.7 hPa (44 mm Hg)
- **Density @ 20 °C (68 °F):** 1.65 g/cm<sup>3</sup> (13.769 lbs/gal)
- **Bulk density @ 20 °C (68 °F):** 0.25 kg/m<sup>3</sup>
- **Relative density:** Not determined.
- **Vapor density:** Not applicable.
- **Evaporation rate:** Not applicable.

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/13/2016

**Trade name: Chagas Detect™ Plus Rapid Test Cassette****· Solubility in / Miscibility with:****Water:** Insoluble.**· Partition coefficient (n-octanol/water):** Not determined.**· Viscosity:****Dynamic:** Not applicable.**Kinematic:** Not applicable.**· Solvent content:****Organic solvents:** 0.0 %**Solids content:** 100.0 %**· Other information:** No further relevant information available.**10 Stability and Reactivity**

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

**11 Toxicological Information****· Information on toxicological effects:****· Acute toxicity:****· Primary irritant effect:****· On the skin:** No irritating effect.**· On the eye:** No irritating effect.**· Additional toxicological information:**

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

The substance is not subject to classification.

**· Carcinogenic categories:****· IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

**· NTP (National Toxicology Program):**

None of the ingredients are listed.

**· OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

**12 Ecological Information****· Toxicity:****· Aquatic toxicity:** No further relevant information available.**· Persistence and degradability:** No further relevant information available.**· Behavior in environmental systems:****· Bioaccumulative potential:** No further relevant information available.**· Mobility in soil:** No further relevant information available.

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/13/2016

**Trade name: Chagas Detect™ Plus Rapid Test Cassette**

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

**13 Disposal Considerations**

- **Waste treatment methods:**
- **Recommendation:**  
Smaller quantities can be disposed of with household waste.  
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**\* 14 Transport Information**

- **UN-Number:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

**\* 15 Regulatory Information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

|                                                        |
|--------------------------------------------------------|
| · <b>Section 355 (extremely hazardous substances):</b> |
|--------------------------------------------------------|

|                                     |
|-------------------------------------|
| None of the ingredients are listed. |
|-------------------------------------|

|                                                          |
|----------------------------------------------------------|
| · <b>Section 313 (Specific toxic chemical listings):</b> |
|----------------------------------------------------------|

|                                     |
|-------------------------------------|
| None of the ingredients are listed. |
|-------------------------------------|

|                                               |
|-----------------------------------------------|
| · <b>TSCA (Toxic Substances Control Act):</b> |
|-----------------------------------------------|

|                             |
|-----------------------------|
| All ingredients are listed. |
|-----------------------------|

|                                     |
|-------------------------------------|
| · <b>California Proposition 65:</b> |
|-------------------------------------|

|                                           |
|-------------------------------------------|
| · <b>Chemicals known to cause cancer:</b> |
|-------------------------------------------|

|                                     |
|-------------------------------------|
| None of the ingredients are listed. |
|-------------------------------------|

|                                                                      |
|----------------------------------------------------------------------|
| · <b>Chemicals known to cause reproductive toxicity for females:</b> |
|----------------------------------------------------------------------|

|                                     |
|-------------------------------------|
| None of the ingredients are listed. |
|-------------------------------------|

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/13/2016

**Trade name: Chagas Detect™ Plus Rapid Test Cassette****· Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**· Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**· Carcinogenic categories:****· EPA (Environmental Protection Agency):**

None of the ingredients are listed.

**· TLV (Threshold Limit Value established by ACGIH):**

None of the ingredients are listed.

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

None of the ingredients are listed.

**· GHS label elements** Non-Regulated Material**· Hazard pictograms:** Non-Regulated Material**· Signal word:** Non-Regulated Material**· Hazard statements:** Non-Regulated Material**· National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

**· State Right to Know:**

None of the ingredients are listed.

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

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

**· Date of preparation / last revision:** 01/18/2016 / 3**· Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety &amp; Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

**· \* Data compared to the previous version altered.**

SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106

**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/18/2016

**\* 1 Identification**

- **Product Identifier**
- **Trade name:** Chase Buffer Type A
- **Product Number:** 500235
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description** Scientific reagent
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**  
InBios International, Inc.  
562 1st Ave. South  
Suite 600  
Seattle, WA 98104  
Ph: 206-344-5821  
Fax: 206-344-5823
- **Emergency telephone number:**  
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300 or Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

**\* 2 Hazard(s) Identification**

- **Classification of the substance or mixture:**  
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.
- **Label elements:**
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:** Non-Regulated Material
- **Unknown acute toxicity:**  
1 % of the mixture consists of component(s) of unknown toxicity.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

|            |   |                |
|------------|---|----------------|
| HEALTH     | 0 | Health = 0     |
| FIRE       | 0 | Fire = 0       |
| REACTIVITY | 0 | Reactivity = 0 |

- **Hazard(s) not otherwise classified (HNOC):** None known

**\* 3 Composition/Information on Ingredients**

- **Chemical characterization: Mixtures**
- **Description:** Mixture: consisting of the following components.

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/18/2016

**Trade name: Chase Buffer Type A**

|                                |                                                              |        |
|--------------------------------|--------------------------------------------------------------|--------|
| <b>· Dangerous Components:</b> |                                                              |        |
|                                | Trade Secret                                                 | ≤ 2.5% |
|                                | Combustible Dust                                             |        |
| CAS: 7647-01-0                 | Hydrochloric acid                                            | ≤ 2.5% |
| RTECS: MW 9620000              | ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H332; STOT SE 3, H335 |        |

**· Additional information:**

Trade secret made in accordance with paragraph (i) of §1910.1200 of 29 CFR 1910.1200, the OSHA Hazard Communication Standard and U.S. Code of Federal Regulations.

\* **4 First-Aid Measures****· Description of first aid measures:****· General information:**

Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.

**· After inhalation:**

Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

**· After skin contact:** Generally the product does not irritate the skin.**· After eye contact:** Rinse opened eye for several minutes under running water.**· After swallowing:** If swallowed and symptoms occur, consult a doctor.**· Information for doctor:****· Most important symptoms and effects, both acute and delayed:** No further relevant information available.**· Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

\* **5 Fire-Fighting Measures****· Extinguishing media:****· Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**· Special hazards arising from the substance or mixture:** No further relevant information available.**· Advice for firefighters:****· Protective equipment:**

Mouth respiratory protective device.

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

\* **6 Accidental Release Measures****· Personal precautions, protective equipment and emergency procedures:** Not required.**· Environmental precautions:**

Dilute with plenty of water.

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

**· Methods and material for containment and cleaning up:**

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

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

**· Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/18/2016

**Trade name: Chase Buffer Type A**

See Section 13 for disposal information.

**7 Handling and Storage**

- **Handling**
- **Precautions for safe handling:**  
No special measures required.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities:**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

**8 Exposure Controls/Personal Protection**

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**

**Components with occupational exposure limits:****7647-01-0 Hydrochloric acid**

|     |                                                     |
|-----|-----------------------------------------------------|
| PEL | Ceiling limit value: 7 mg/m <sup>3</sup> , 5 ppm    |
| REL | Ceiling limit value: 7 mg/m <sup>3</sup> , 5 ppm    |
| TLV | Ceiling limit value: 2.98 mg/m <sup>3</sup> , 2 ppm |

**26628-22-8 Sodium Azide**

|     |                                                                                                               |
|-----|---------------------------------------------------------------------------------------------------------------|
| REL | Ceiling limit value: 0.3** mg/m <sup>3</sup> , 0.1* ppm<br>*as HN <sub>3</sub> ; **as NaN <sub>3</sub> ; Skin |
| TLV | Ceiling limit value: 0.29** mg/m <sup>3</sup> , 0.11* ppm<br>*as HN <sub>3</sub> vapor **as NaN <sub>3</sub>  |

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves:** Not required.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:**



Goggles recommended during refilling.

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/18/2016

**Trade name: Chase Buffer Type A****\* 9 Physical and Chemical Properties****· Information on basic physical and chemical properties****· General Information****· Appearance:****Form:**

Liquid

**Color:**

Colorless

**· Odor:**

Odorless

**· Odor threshold:**

Not determined.

**· Change in condition****Melting point/Melting range:**

Not determined.

**Boiling point/Boiling range:**

100 °C (212 °F)

**· Flash point:**

None

**· Flammability (solid, gaseous):**

Not applicable.

**· Ignition temperature:**

Not determined

**· Decomposition temperature:**

Not determined.

**· Auto igniting:**

Product is not self-igniting.

**· Danger of explosion:**

Product does not present an explosion hazard.

**· Explosion limits:****Lower:**

Not determined.

**Upper:**

Not determined.

**· Vapor pressure:**

Not determined.

**· Density:****Relative density:**

Not determined.

**Vapor density:**

Not determined.

**Evaporation rate:**

Not determined.

**· Solubility in / Miscibility with:****Water:**

Fully miscible.

**· Partition coefficient (n-octanol/water):**

Not determined.

**· Viscosity:****Dynamic:**

Not determined.

**Kinematic:**

Not determined.

**· Solvent content:****Organic solvents:**

0.0 %

**· Other information:**

No further relevant information available.

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

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/18/2016

**Trade name: Chase Buffer Type A**

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

**\* 11 Toxicological Information**

- **Information on toxicological effects:**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**7647-01-0 Hydrochloric acid**

|            |          |                                                                                                                             |
|------------|----------|-----------------------------------------------------------------------------------------------------------------------------|
| Oral       | LD50     | 700 mg/kg (rat)<br>900 mg/kg (rabbit)                                                                                       |
| Dermal     | LD50     | 5010 mg/kg (rabbit)                                                                                                         |
| Inhalative | LC50/4 h | 6.41 mg/l (rat)<br>Exposure to the mist and vapor may erode exposed teeth. Causes corrosive action on the mucous membranes. |

**26628-22-8 Sodium Azide**

|        |      |                   |
|--------|------|-------------------|
| Oral   | LD50 | 27 mg/kg (rat)    |
| Dermal | LD50 | 20 mg/kg (rabbit) |

- **Primary irritant effect:**

- **On the skin:**

**7647-01-0 Hydrochloric acid**

|                    |                 |          |
|--------------------|-----------------|----------|
| Irritation of skin | Skin Irritation | (rabbit) |
|--------------------|-----------------|----------|

- **On the eye:**

**7647-01-0 Hydrochloric acid**

|                    |                |          |
|--------------------|----------------|----------|
| Irritation of eyes | Eye Irritation | (rabbit) |
|--------------------|----------------|----------|

- **Additional toxicological information:**

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

- **Carcinogenic categories:**

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

Group 1 - Carcinogenic to humans  
Group 2A - Probably carcinogenic to humans  
Group 2B - Possibly carcinogenic to humans  
Group 3 - Not classifiable as to its carcinogenicity to humans  
Group 4 - Probably not carcinogenic to humans

7647-01-0 Hydrochloric acid

3

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

**12 Ecological Information**

- **Toxicity:**

- **Aquatic toxicity:**

**7647-01-0 Hydrochloric acid**

|      |                             |
|------|-----------------------------|
| EC50 | 3.6 mg/l (Bluegill/sunfish) |
|------|-----------------------------|

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/18/2016

**Trade name: Chase Buffer Type A**

&gt;56 mg/l (daphnia)

- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

**\* 13 Disposal Considerations**

- **Waste treatment methods:**
- **Recommendation:**  
Smaller quantities can be disposed of with household waste.  
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

**\* 14 Transport Information**

- **UN-Number:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

**\* 15 Regulatory Information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

|                                                          |                   |
|----------------------------------------------------------|-------------------|
| · <b>Section 355 (extremely hazardous substances):</b>   |                   |
| 7647-01-0                                                | Hydrochloric acid |
| 26628-22-8                                               | Sodium Azide      |
| · <b>Section 313 (Specific toxic chemical listings):</b> |                   |
| 7647-01-0                                                | Hydrochloric acid |

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/18/2016

**Trade name: Chase Buffer Type A**

|                                                                                                                       |                                                                                               |        |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------|
| 26628-22-8                                                                                                            | Sodium Azide                                                                                  |        |
| <b>· TSCA (Toxic Substances Control Act):</b>                                                                         |                                                                                               |        |
| 7732-18-5                                                                                                             | Highly Purified Water                                                                         |        |
| 7647-01-0                                                                                                             | Hydrochloric acid                                                                             |        |
| 7647-14-5                                                                                                             | Sodium Chloride                                                                               |        |
| 7558-79-4                                                                                                             | Sodium Phosphate, dibasic                                                                     |        |
| 1310-73-2                                                                                                             | Sodium Hydroxide                                                                              |        |
| 26628-22-8                                                                                                            | Sodium Azide                                                                                  |        |
| <b>· California Proposition 65:</b>                                                                                   |                                                                                               |        |
| <b>· Chemicals known to cause cancer:</b>                                                                             |                                                                                               |        |
| None of the ingredients are listed.                                                                                   |                                                                                               |        |
| <b>· Chemicals known to cause reproductive toxicity for females:</b>                                                  |                                                                                               |        |
| None of the ingredients are listed.                                                                                   |                                                                                               |        |
| <b>· Chemicals known to cause reproductive toxicity for males:</b>                                                    |                                                                                               |        |
| None of the ingredients are listed.                                                                                   |                                                                                               |        |
| <b>· Chemicals known to cause developmental toxicity:</b>                                                             |                                                                                               |        |
| None of the ingredients are listed.                                                                                   |                                                                                               |        |
| <b>· Carcinogenic categories:</b>                                                                                     |                                                                                               |        |
| <b>· EPA (Environmental Protection Agency):</b>                                                                       |                                                                                               |        |
| None of the ingredients are listed.                                                                                   |                                                                                               |        |
| <b>· TLV (Threshold Limit Value established by ACGIH):</b>                                                            |                                                                                               |        |
| 7647-01-0                                                                                                             | Hydrochloric acid                                                                             | A4     |
| 26628-22-8                                                                                                            | Sodium Azide                                                                                  | A4     |
| <b>· NIOSH-Ca (National Institute for Occupational Safety and Health):</b>                                            |                                                                                               |        |
| None of the ingredients are listed.                                                                                   |                                                                                               |        |
| <b>· GHS label elements</b> Non-Regulated Material                                                                    |                                                                                               |        |
| <b>· Hazard pictograms:</b> Non-Regulated Material                                                                    |                                                                                               |        |
| <b>· Signal word:</b> Non-Regulated Material                                                                          |                                                                                               |        |
| <b>· Hazard statements:</b> Non-Regulated Material                                                                    |                                                                                               |        |
| <b>· National regulations:</b>                                                                                        |                                                                                               |        |
| The product is subject to be classified according with the latest version of the regulations on hazardous substances. |                                                                                               |        |
| <b>· State Right to Know:</b>                                                                                         |                                                                                               |        |
| CAS: 7732-18-5                                                                                                        | Highly Purified Water                                                                         | 90-99% |
|                                                                                                                       | Trade Secret                                                                                  | ≤ 2.5% |
|                                                                                                                       | Combustible Dust                                                                              |        |
| CAS: 7647-01-0<br>RTECS: MW 9620000                                                                                   | Hydrochloric acid<br>⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H332; STOT SE 3, H335             | ≤ 2.5% |
| CAS: 7647-14-5<br>RTECS: VZ4725000                                                                                    | Sodium Chloride<br>⚠ STOT SE 3, H335                                                          | ≤ 2.5% |
| CAS: 7558-79-4<br>RTECS: WC 4500000                                                                                   | Sodium Phosphate, dibasic<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335-H336 | ≤ 2.5% |

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Issue date 01/18/2016

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**Trade name: Chase Buffer Type A**

|                                     |                                           |        |
|-------------------------------------|-------------------------------------------|--------|
| CAS: 1310-73-2                      | Sodium Hydroxide<br>⚠ Skin Corr. 1A, H314 | ≤ 2.5% |
| None of the ingredients are listed. |                                           |        |

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

**16 Other Information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision:** 01/18/2016 / 5

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 ACGIH: American Conference of Governmental Industrial Hygienists  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 NIOSH: National Institute for Occupational Safety  
 OSHA: Occupational Safety & Health  
 TLV: Threshold Limit Value  
 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit  
 Acute Tox. 4: Acute toxicity, Hazard Category 4  
 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B  
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· **\* Data compared to the previous version altered.**

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/13/2016

**\* 1 Identification**

- **Product Identifier**
- **Trade name:** Gold Solution
- **Product Number:** 500605
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description** Scientific reagent
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**  
InBios International, Inc.  
562 1st Ave. South  
Suite 600  
Seattle, WA 98104  
Ph: 206-344-5821  
Fax: 206-344-5823
- **Emergency telephone number:**  
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300 or Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

**\* 2 Hazard(s) Identification**

- **Classification of the substance or mixture:**  
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.
- **Label elements:**
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:** Non-Regulated Material
- **Unknown acute toxicity:**  
0 % of the mixture consists of component(s) of unknown toxicity.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**
- |            |   |                |
|------------|---|----------------|
| HEALTH     | 0 | Health = 0     |
| FIRE       | 0 | Fire = 0       |
| REACTIVITY | 0 | Reactivity = 0 |
- **Hazard(s) not otherwise classified (HNOC):** None known

**3 Composition/Information on Ingredients**

- **Chemical characterization:** Mixtures
- **Description:** Reagent mixture
- **Dangerous Components:** Non-Regulated Material

(Contd. on page 2)



**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/13/2016

**Trade name: Gold Solution****4 First-Aid Measures**

- **Description of first aid measures:**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
No further relevant information available.

**5 Fire-Fighting Measures**

- **Extinguishing media:**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:**  
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

**6 Accidental Release Measures**

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of the collected material according to regulations.
- **Reference to other sections:**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and Storage**

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

**8 Exposure Controls/Personal Protection**

- **Additional information about design of technical systems:** No further data; see section 7.

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

Reviewed on 01/13/2016

**Trade name: Gold Solution****Control parameters:****Components with occupational exposure limits:****26628-22-8 Sodium Azide**

|     |                                                                                                               |
|-----|---------------------------------------------------------------------------------------------------------------|
| REL | Ceiling limit value: 0.3** mg/m <sup>3</sup> , 0.1* ppm<br>*as HN <sub>3</sub> ; **as NaN <sub>3</sub> ; Skin |
| TLV | Ceiling limit value: 0.29** mg/m <sup>3</sup> , 0.11* ppm<br>*as HN <sub>3</sub> vapor **as NaN <sub>3</sub>  |

**Additional information:** The lists that were valid during the creation of this SDS were used as basis.**Exposure controls:****Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:** Not required.**Protection of hands:** Not required.**Material of gloves:** Not required.**Penetration time of glove material:** Not applicable.**Eye protection:**

Goggles recommended during refilling.

**\* 9 Physical and Chemical Properties****Information on basic physical and chemical properties****General Information****Appearance:**

|                        |                 |
|------------------------|-----------------|
| <b>Form:</b>           | Liquid          |
| <b>Color:</b>          | Colorless       |
| <b>Odor:</b>           | Odorless        |
| <b>Odor threshold:</b> | Not determined. |

**pH-value @ 20 °C (68 °F):** 7**Change in condition**

|                                     |                 |
|-------------------------------------|-----------------|
| <b>Melting point/Melting range:</b> | Not determined. |
| <b>Boiling point/Boiling range:</b> | 100 °C (212 °F) |

**Flash point:** None**Flammability (solid, gaseous):** Not applicable.**Ignition temperature:** Not determined**Decomposition temperature:** Not determined.**Auto igniting:** Product is not self-igniting.**Danger of explosion:** Product does not present an explosion hazard.**Explosion limits:**

|               |                 |
|---------------|-----------------|
| <b>Lower:</b> | Not determined. |
| <b>Upper:</b> | Not determined. |

**Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)

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**Safety Data Sheet (SDS)**

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**Trade name: Gold Solution**

- **Density:**
  - Relative density:** Not determined.
  - Vapor density:** Not determined.
  - Evaporation rate:** Not determined.
- **Solubility in / Miscibility with:**
  - Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Solvent content:**
  - Organic solvents:** 0.0 %
  - Water:** 97.0 %
- **Solids content:** 1.9 %
- **Other information:** No further relevant information available.

**10 Stability and Reactivity**

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

**11 Toxicological Information**

- **Information on toxicological effects:**
- **Acute toxicity:**

**LD/LC50 values that are relevant for classification:****26628-22-8 Sodium Azide**

|        |      |                   |
|--------|------|-------------------|
| Oral   | LD50 | 27 mg/kg (rat)    |
| Dermal | LD50 | 20 mg/kg (rabbit) |

- **Primary irritant effect:**
- **On the skin:** No irritating effect.
- **On the eye:** No irritating effect.
- **Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations.  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

**Carcinogenic categories:****IARC (International Agency for Research on Cancer):**

|           |                   |   |
|-----------|-------------------|---|
| 7647-01-0 | Hydrochloric acid | 3 |
|-----------|-------------------|---|

**NTP (National Toxicology Program):**

None of the ingredients are listed.

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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**Trade name: Gold Solution****· OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

**12 Ecological Information**

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

**13 Disposal Considerations**

- **Waste treatment methods:**
- **Recommendation:**  
Smaller quantities can be disposed of with household waste.  
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport Information**

- **UN-Number:**
- **DOT, ADN, IMDG, IATA** Non-Regulated Material
- **ADR** Non-Regulated Material  
Not Regulated
- **UN proper shipping name:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

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**Trade name: Gold Solution****\*15 Regulatory Information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

- **Section 355 (extremely hazardous substances):**

7647-01-0 Hydrochloric acid

26628-22-8 Sodium Azide

- **Section 313 (Specific toxic chemical listings):**

7647-01-0 Hydrochloric acid

26628-22-8 Sodium Azide

- **TSCA (Toxic Substances Control Act):**

7647-01-0 Hydrochloric acid

7647-14-5 Sodium Chloride

7558-79-4 Sodium Phosphate, dibasic

9005-64-5 Polysorbate 20

26628-22-8 Sodium Azide

1310-73-2 Sodium Hydroxide

1303-96-4 Borates, tetra, sodium salts, Anhydrous

7732-18-5 Water, distilled water, deionized water

- **California Proposition 65:**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

- **Carcinogenic categories:**

- **EPA (Environmental Protection Agency):**

1303-96-4 Borates, tetra, sodium salts, Anhydrous

I (oral)

- **TLV (Threshold Limit Value established by ACGIH):**

7647-01-0 Hydrochloric acid

A4

26628-22-8 Sodium Azide

A4

1303-96-4 Borates, tetra, sodium salts, Anhydrous

A4

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

None of the ingredients are listed.

- **GHS label elements** Non-Regulated Material

- **Hazard pictograms:** Non-Regulated Material

- **Signal word:** Non-Regulated Material

- **Hazard statements:** Non-Regulated Material

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**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/18/2016

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**Trade name: Gold Solution****· National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

**· State Right to Know:**

|                                     |                                                              |       |
|-------------------------------------|--------------------------------------------------------------|-------|
| CAS: 7647-01-0                      | Hydrochloric acid                                            | <0.5% |
| RTECS: MW 9620000                   | ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H332; STOT SE 3, H335 |       |
| None of the ingredients are listed. |                                                              |       |

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

**16 Other Information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

**· Date of preparation / last revision:** 01/18/2016 / 3

**· Abbreviations and acronyms:**

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 NIOSH: National Institute for Occupational Safety  
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 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit

**· \* Data compared to the previous version altered.**

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