1 Identification

- **Product identifier**
  - Trade name: CELLCHECK-400
- **Article number:** No other identifiers
- **Recommended use and restriction on use**
  - **Recommended use:** Diagnostic testing
  - **Restrictions on use:** No further relevant information available.
- **Details of the supplier of the Safety Data Sheet**
  - **Manufacturer/Supplier:**
    - SYSMEX AMERICA, Inc
    - 577 Aptakisic Road
    - Lincolnshire, IL 60069 USA
    - Phone: 847-996-4500
    - 1-800-3SYSMEX (1-800-379-7639)
  - **Emergency telephone number:**
    - ChemTel Inc.
    - (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - Skin Sens. 1 H317 May cause an allergic skin reaction.
  - Carc. 1B H350 May cause cancer. Route of exposure: Inhalation.
- **Additional information:**
  - There are no other hazards not otherwise classified that have been identified.
  - 0 percent of the mixture consists of ingredient(s) of unknown toxicity.
- **Label elements**
  - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - GHS07 GHS08
- **Signal word** Danger
- **Hazard-determining components of labeling:**
  - formaldehyde
- **Hazard statements**
  - H317 May cause an allergic skin reaction.
  - H350 May cause cancer. Route of exposure: Inhalation.

(Contd. on page 2)
Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200)

Trade name: CELLCHECK-400

· Precautionary statements
  P201 Obtain special instructions before use.
  P202 Do not handle until all safety precautions have been read and understood.
  P261 Avoid breathing mist, vapors, or spray.
  P280 Wear protective gloves/protective clothing/eye protection.
  P363 Wash contaminated clothing before reuse.
  P308+P313 IF exposed or concerned: Get medical advice/attention.
  P302+P352 If on skin: Wash with plenty of water.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

· Chemical characterization: Mixtures
  · Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7447-41-8 lithium chloride</td>
<td>1-5%</td>
</tr>
<tr>
<td>56-81-5 glycerol</td>
<td>1-5%</td>
</tr>
<tr>
<td>50-00-0 formaldehyde</td>
<td>&lt;1.0%</td>
</tr>
</tbody>
</table>

· Additional information:
  For the listed ingredient(s), the identity and exact percentage(s) are being withheld as a trade secret.

4 First-aid measures

· Description of first aid measures
  · General information: Immediately remove any clothing soiled by the product.
  · After inhalation: Supply fresh air; consult doctor in case of complaints.
  · After skin contact:
    Immediately remove any clothing soiled by the product.
    Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
  · After eye contact:
    Remove contact lenses if worn.
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  · After swallowing:
    Rinse out mouth and then drink plenty of water.
    Do not induce vomiting; immediately call for medical help.
  · Information for doctor:
    Most important symptoms and effects, both acute and delayed
    Headache
    Allergic reactions
    Slight irritant effect on skin and mucous membranes.
    Slight irritant effect on eyes.

(Contd. on page 3)
Trade name: CELLCHECK-400

Gastric or intestinal disorders when ingested. 
Nausea in case of ingestion.

**Danger**
May cause cancer. Route of exposure: Inhalation. 
May cause sensitisation by skin contact.

**Indication of any immediate medical attention and special treatment needed**
Medical supervision for at least 48 hours.
Treat skin and mucous membrane with antihistamine and corticoid preparations.
Contains formaldehyde. May produce an allergic reaction.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
  CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
  During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:**
  Wear self-contained respiratory protective device.
  Wear fully protective suit.
- **Additional information** No further relevant information available.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  Use respiratory protective device against the effects of fumes/dust/aerosol.
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation.
- **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 (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Send for recovery or disposal in suitable receptacles.
- **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
  Prevent formation of aerosols.
  Avoid splashes or spray in enclosed areas.
  Use only in well ventilated areas.
- Information about protection against explosions and fires: Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles:
  Avoid storage near extreme heat, ignition sources or open flame.
- Information about storage in one common storage facility:
  Store away from foodstuffs.
  Do not store together with oxidizing and acidic materials.
- Further information about storage conditions:
  Store in cool, dry conditions in well sealed receptacles.
  Keep containers 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 item 7.
- Control parameters
  - Components with limit values that require monitoring at the workplace:
    - 56-81-5 glycerol
      - PEL (USA) Long-term value: 15\(^*\) 5\(^*\)* mg/m\(^3\)
        - mist; *total dust **respirable fraction
      - TLV (USA) TLV withdrawn-insufficient data human occup. exp.
    - 50-00-0 formaldehyde
      - PEL (USA) Short-term value: 2 ppm
        - Long-term value: 0.75 ppm
        - see 29 CFR 1910.1048(c)
      - REL (USA) Long-term value: 0.016 ppm
        - Ceiling limit value: 0.1* ppm
        *15-min; See Pocket Guide App. A
      - TLV (USA) Ceiling limit value: 0.37 mg/m\(^3\), 0.3 ppm
        - DSEN; RSEN
  - Additional information: No further relevant information available.

(Contd. on page 5)
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.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

Engineering controls: No further relevant information available.

Breathing equipment:
Not required under normal conditions of use.
Use suitable respiratory protective device in case of insufficient ventilation.
Use suitable respiratory protective device when aerosol or mist is formed.
For spills, respiratory protection may be advisable.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Eye protection:

Safety glasses

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment No further relevant information available.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid
Color: Clear

Odor: Odorless

Odor threshold: Not determined.

pH-value: Neutral

(Contd. on page 6)
10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided**:
  No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
  Toxic fumes may be released if heated above the decomposition point.
  Reacts with strong acids and oxidizing agents.
- **Conditions to avoid**
  Store away from oxidizing agents.

(Contd. on page 7)
Trade name: CELLCHECK-400

- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**:
  - Carbon monoxide and carbon dioxide
  - Chlorine compounds

### 11 Toxicological information

#### Information on toxicological effects

- **Acute toxicity**:
  - **LD/LC50 values that are relevant for classification**:
    - 7447-41-8 lithium chloride
      - Oral LD50 526 mg/kg (rat)
    - 50-00-0 formaldehyde
      - Oral LD50 >200 mg/kg (rat)
  - **Primary irritant effect**:
    - **on the skin**: Slight irritant effect on skin and mucous membranes.
    - **on the eye**: Slight irritant effect on eyes.
  - **Sensitization**:
    - Sensitization possible through skin contact.
    - Contains formaldehyde. May produce an allergic reaction.

- **Additional toxicological information**:

  - **Carcinogenic categories**
    - **IARC (International Agency for Research on Cancer)**
      - None of the ingredients is listed.
    - **NTP (National Toxicology Program)**
      - 50-00-0 formaldehyde
        - K
    - **OSHA-Ca (Occupational Safety & Health Administration)**
      - 50-00-0 formaldehyde

- **Probable Routes of Exposure**
  - Ingestion.
  - Inhalation.
  - Eye contact.
  - Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity)**: May be harmful if inhaled.
- **Repeated Dose Toxicity**: Repeated exposures may result in skin and/or respiratory sensitivity.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**:
  - Carc. 1B
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** May cause cancer. Route of exposure: Inhalation.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT—single exposure: Based on available data, the classification criteria are not met.
- STOT—repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

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 product to reach ground water, water course or sewage system.
    - Danger to drinking water if even small quantities leak into the ground.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
    - Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
    - The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
  - 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, ADN, IMDG, IATA: Not Regulated
- UN proper shipping name
  - DOT, ADN, IMDG, IATA: Not Regulated
- Transport hazard class(es)
  - DOT, ADN, IMDG, IATA: Not Regulated
### Packing group
- DOT, IMDG, IATA: Not Regulated

### Environmental hazards:
- Marine pollutant: No
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

## 15 Regulatory information

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

#### United States (USA)

- **SARA**
  - **Section 355 (extremely hazardous substances):** 50-00-0 formaldehyde
  - **Section 313 (Specific toxic chemical listings):** None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act):** All ingredients are listed.

- **Proposition 65 (California)**
  - **Chemicals known to cause cancer:** 50-00-0 formaldehyde
  - **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 is listed.
  - **Chemicals known to cause developmental toxicity:** None of the ingredients is listed.

### Carcinogenic categories

- **EPA (Environmental Protection Agency)**
  - 50-00-0 formaldehyde: B1

- **IARC (International Agency for Research on Cancer)**
  - 50-00-0 formaldehyde: 1

- **TLV (Threshold Limit Value established by ACGIH)**
  - 50-00-0 formaldehyde: A2

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Trade name: CELLCHECK-400

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

50-00-0 Formaldehyde

Information about limitation of use:
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Date of preparation / last revision 07/10/2015 / -

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  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
  Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
  Carc. 1B: Carcinogenicity, Hazard Category 1B

- Sources
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