

MATERIAL SAFETY DATA SHEET**1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY****PRODUCT NAME:** HemoCue® HbA1c 501 Analyzer**SUPPLIER/MANUFACTURER'S NAME:**

Name: OSANG Healthcare Co., Ltd.

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Korea Telephone number: +82-31-460-0443 / Fax Number: +82-31-460-0403

PREPARATION DATE: Feb. 26, 2020 **REVISION:** 4**2. HAZARDS IDENTIFICATION****Not Applicable:** Solid Detecting Analyzer**3. Composition/Information on Ingredients**

Chemical name	Each composition's MSDS
Acrylonitrile-Butadine-Styrene (ABS)	Attachment #1 MSDS
Poly Methyl Methacrylate (PMMA)	Attachment #2 MSDS
Liquid Crystal Display(LCD)	Atrachment #3 MSDS Attachment #4 Report
Printed Circuit Board(PCB)	Attachment #5 MSDS_Copper Clad Laminate(FR-4) Attachment #6 Report_Copper Clad Laminate(FR-4) Attachment #7 MSDS_Solder resist Attachment #8 Report_Solder resist Attachment #9 MSDS_Solder resist Attachment #10 Report_Solder resist Attachment #11 MSDS_Copper Anode(c12220) Attachment #12 Report_Copper Anode(c12220)
Polycarbonate(PC)	Attachment #13 MSDS_PC Resin Attachment #14 MSDS_PC Glass

4 FIRST AID MEASURES

4.1 Eye contact

- Call a POISON CENTER/doctor if you feel unwell.
- If eye irritation persists : 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.

4.2. Skin contact

- Call a POISON CENTER/doctor if you feel unwell.
- If skin irritation occurs : Get medical advice/attention.
- Take off contaminated clothing and wash it before reuse.
- Wash with water and soap.

4.3. Inhalation

- Call a POISON CENTER/doctor if you feel unwell.
- If experiencing respiratory symptoms : Call a POISON CENTER/doctor.
- IF INHALED : remove person to fresh air and keep comfortable for breathing.

4.4. Ingestion

- Call a POISON CENTER/doctor if you feel unwell.
- Rinse the mouth.

4.5. Indication of immediate medical attention and special treatment needed

- Notify to medical team or managers, and do appropriate measures.

5. FIRE FIGHTING MEASURES

5.1. Suitable and unsuitable extinguishing media

- Small/normal fire : Alcohol-resistant foam, dry chemical, carbon dioxide, dry sand
- Large fire : Water spray/fog, fire fighting foam
- Extinguishment by smothering : Dry sand or soil
- Unsuitable extinguishing media : High-pressure water

5.2. Specific hazards arising from the chemical

- Irritation gases may be occurred in fire-emergency.

5.3. Special precautions for fire-fighters

- Rescuers need to note the personal protective equipment.
- Leave the area and extinguish fire in safe range.
- Avoid release to the environment.
- If not danger, remove containers.

- Extinguish fire in maximum range or use automatic fire apparatus.
- Cool containers exposed to fire with water.
- Leave from tanks if high-sounds or discolorations are found in power-operated relief valve.

5.4. Special protective equipment for fire-fighters

- Chemical resisted equipment for fire-fighter.

6. ACCIDENTAL RELEASE MEASURES.

6.1. Personal precautions, protective equipment and emergency procedures

- Cleaning up immediately, and follow the precaution.
- Remove all ignition sources.
- If not danger, stop to leak.
- If no protective equipment, do not touch exposure material and container.
- Notice the avoid conditions and materials.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Isolate from exposed area.
- Ground/Bond container and receiving equipment.
- Ventilated exposed area.

6.2. Environmental precautions

- Do not let products flow in waterway, drain basement, and sealed room.
- Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

- After absorbed exposed materials, clean up with cleaner and water.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Notice precautions of MSDS / Label after empty container.
- Do not contact with skin for a long time.
- Notice the avoid conditions and materials.
- Do not handle until all safety precautions have been read and understood.
- Notice the engineering management and personal protection.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wash hand thoroughly after handling.

- Do not eat, drink or smoke when using this product.
- Handle and store in outdoor or well-ventilated place.
- Avoid high-temperature.

7.2 Protective equipment

- Chemical resisted respiratory protection, eye protection, protective gloves.

7.3. Conditions for safe storage, including any incompatibilities

- Do not eat, drink or smoke when using this product.
- Notice the avoid conditions and materials.
- Keep container tightly closed in well-ventilated area.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No

Smoking.

- Store in a well-ventilated place. Keep cool.

7.4 Storage temperature

- 2~32°C (Keep out of reach of children. Keep in a dry, cool place. Protect from heat and direct sunlight.)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No data available

8.2. Appropriate engineering controls

- Keep air level under exposure standard with the engineering management such as process isolation and local ventilation.
- Keep air pollution under exposure standard when occur fume or mist in handle.
- Washing/shower system.

8.3. Individual protection measures (personal protective equipment)

- Respiratory protection No data available
- Eye protection Chemical resisted eye protection
- Hand protection Chemical resisted hand protection
- Skin and body protection No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: Not Applicable.

- **SPECIFIC GRAVITY (H₂O = 1):** Not Applicable.

- **VAPOR PRESSURE (mmHg):** Not Applicable.
- **PERCENT VOLATILE BY VOLUME (%):** Not Applicable.
- **VAPOR DENSITY (AIR = 1):** Not Applicable.
- **EVAPORATION RATE (Butyl Acetate = 1):** Not Applicable.
- **SOLUBILITY IN WATER:** Some components are soluble.
- **REACTIVITY IN WATER:** Not determined.
- **APPEARANCE AND ODOR:** Suspension solution, No odor.

10. STABILITY AND REACTIVITY

STABILITY: Stable.

CONDITIONS TO AVOID: Not determined.

INCOMPATIBILITY (MATERIALS TO AVOID): Not determined.

HAZARDOUS DECOMPOSITION PRODUCTS: Not determined.

HAZARDOUS POLYMERIZATION: Will Not Occur.

ICONDITIONS TO AVOID: Not determined.

11. TOXICOLOGICAL INFORMATION

ROUTE OF EXPOSURE:

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

SENSITIZATION: Sensitization: Prolonged or repeated exposure may cause allergic

12. Ecological Information

12.1. Ecotoxicity : No data available

12.2. Persistence and degradability : No data available

12.3. Bioaccumulative potential : No data available

12.4. Mobility in soil : No data available

12.5. Other adverse effects : No data available

13. DISPOSAL CONSIDERATIONS

STEPS TO BE TAKEN IN CASE MATERIAL IS LEAKED OR SPILLED:

Not applicable.

WASTE DISPOSAL METHOD:

Unused cartridges should be disposed of as regular waste in accordance with Federal, State, and Local codes.

Used cartridges, i.e. cartridges tested as intended in diagnostic procedures with human biological samples, must be treated as potentially infectious and disposed of as biohazard waste in accordance with Federal, State, and Local codes.

14. TRANSPORT INFORMATION

Land Transport (DOT):

Proper Shipping Name: None. This substance is considered to be non-hazardous for transport.

Air Transport(IATA/ICAO): Non-hazardous for air transport.

Marine Transport(IATA/ICAO): Non-hazardous for marine transport.

15. REGULATORY INFORMATION

Regulation under Toxic Chemical Control Law (TCCL) in Korea: Not regulated.

Regulation under the Industry Safety and Health Law (ISHL) in Korea: Not regulated.

INTERNATIONAL CHEMICAL CONTROL LAWS:**US CLASSIFICATION AND LABEL TEXT**

US Statements: Caution : Avoid contact and inhalation.

UNITED STATES REGULATORY INFORMATION

SARA Listed : No

CANADA REGULATORY INFORMATION

WHMIS Classification : This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL : No

NDSL : No

16. OTHER INFORMATION

This above information is believed to be correct but does not propose to be all inclusive

■ Product Name: **HemoCue® HbA1c 501 Analyzer**

and shall be used only as a guide. OSANG Healthcare Co., Ltd.

shall not be held liable for any damage resulting from handling or from contact with the above product. Each individual should make a determination as to the suitability of the information for their particular purpose(s). Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this MSDS. The user is responsible for full compliance.