# SAFETY DATA SHEET

According to Regulation (EU) No. 2020/878

## Signal Reagent 1+

| Version | Revision Date: | Date of last issue: 2026/01/01 |
|---|---|---|
| 4.0 | 2026/01/01 | Date of first issue: 2023/02/08 |

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name: Signal Reagent 1+

Product number: 530-001073-00, 530-001425-00, 530-001429-00, 530-002389-00, 530-002395-00

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Reagent

### 1.3 Details of the supplier of the safety data sheet

| | |
|---|---|
| Company 1 | WuHan MGI Tech Co.,Ltd |
| Address 1 | Building 24, Stage 3.1, BioLake Accelerator, No.388, 2nd Gaoxin Road, East Lake High-Tech Development Zone, 430075, Wuhan, P.R. China |
| Address 2 | No.66.7th Guanggu Road, East Lake High-TechDevelopment Zone, 430075, Wuhan, P.R. China |
| Zip code | 430075 |
| Web | www.mgi-tech.com |
| E-mail | MGI-service@mgi-tech.com |
| TEL. | +86 4000-688-114 |

| | |
|---|---|
| Company 2 | Qingdao MGI Tech Co.,Ltd |
| Address | Building 4, No.2, Hengyunshan Road, Qingdao Area, Pilot Free Trade Zone, Shandong, China |
| Zip code | 266555 |
| Web | www.mgi-tech.com |
| E-mail | MGI-service@mgi-tech.com |
| TEL. | +86 4000-688-114 |

| | |
|---|---|
| Company 3 | Shenzhen MGI Biological Electronic Technology Co., Ltd. |
| Address | 2/F, Building 11, Beishan Industrial Zone, No.146, Beishan Road, Yantian Street, Yantian District, Shenzhen, 518083, P.R. China |
| Zip code | 518083 |

| | |
|---|---|
| Web | https://en.mgi-tech.com |
| E-mail | MGI-service@mgi-tech.com |
| TEL. | +86 4000-688-114 |

**1.4 Details of the EU supplier for the Safety Data Sheet**

| | |
|---|---|
| Company | Latvia MGI Tech, SIA |
| Address | Lidostas parks, Marupes pag., Marupes nov., LV-2167, Latvia |
| Zip code | LV-2167 |
| Web | http://en.mgitech.cn |
| E-mail | mgi.lv@genomics.cn |
| TEL. | +371 67074475 |

**1.5 Emergency telephone number**

+86 4000-688-114

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 (CLP)**

Not a hazardous substance or mixture.

**Adverse physicochemical, human health and environment**

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

**Hazard pictograms:** No

**Signal word:** No

**Hazard statements：** No

**Precautionary statements：**

**Prevention：**

Not CLP prevention statements.

**Response：**

Not CLP response statements.

**Storage：**

Not CLP storage statements.

**Disposal：**

Not CLP disposal statements.

**EUH-statements:**

No CLP disposal statements.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent,bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

| ingredient | CAS-No. | EC No. | Concentration (% w/w) | Classification |
|---|---|---|---|---|
| Water | 7732-18-5 | 231-791-2 | 80%~90% | Not- Classified |
| 1,2-Propanediol | 57-55-6 | 200-338-0 | 5%~15% | Not- Classified |
| Sodium-L-ascorbate | 134-03-2 | 205-126-1 | 1%~5% | Not- Classified |
| Other components | - | - | ＜1.0% | Not- Classified |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

| | |
|---|---|
| General advice | Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable. |
| Skin contact | Take off contaminated clothing and shoes immediately. Wash off with plenty of soap and water for at least 15 minutes and consult a physician if feel uncomfortable. |
| Ingestion | Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. |
| Inhalation | Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately. |
| Protecting of first-aiders | Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination. |

### 4.2 Most important symptoms and effects, both acute and delayed

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

### 4.3 Indication of any immediate medical attention and special treatment needed

1.Treat symptomatically.
2.Symptoms may be delayed.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

| | |
|---|---|
| Suitable extinguishing media | Extinguish with water mist, alcohol-resistant foam, dry powder or carbon dioxide |
| Unsuitable extinguishing media | NO DATA |

### 5.2 Special hazards arising from the substance or mixture

Not considered a significant fire risk.

### 5.3 Advice for firefighters

1.As in any fire, wear self-contained breathing apparatus（MSHA/NIOSH approved or equivalent) and full protective gear.
2.Fight fire from a safe distance, with adequate cover.
3.Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

1.Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
2.Do not touch or walk through spilled material.
3.Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
4.Ensure adequate ventilation. Remove all sources of ignition.
5.Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
6.Use personal protective equipment. Avoid breathing vapours, mist or gas.

### 6.2 Environmental precautions

1.Prevent product from entering drains.
2.Prevent further leakage or spillage if safe to do so.
3.If there is pollution in the sewer or waterway, please report to the local authorities.

### 6.3 Methods and material for containment and cleaning up

*a lot of leaks:*
Use an inert absorbent material such as sand or soil to absorb spillage.
Collect spilled product and place it in a sealable container or bucket for disposal.
Clean contaminated areas and objects with plenty of water and detergent.
*Small amount of leakage:*
Absorbing materials such as sand or soil absorb spillage.
Collect spilled product and place it in a sealable container for disposal.
Clean contaminated areas and objects with water and detergent

### 6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid the formation of aerosols.
Do not breathe steam/dust.
Avoid contact - get special instructions before use.
Avoid contact with skin and eyes.
See section 8 for personal protection.
Smoking, eating and drinking areas should be prohibited during use.
Take precautions to prevent electrostatic discharge.
Provide adequate air exchange and/or exhaust in the workroom.
Dispose of rinse water in accordance with local and national regulations.
To prevent leakage or spillage, provide a suitable liquid retention system.

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

Store in a low-temperature environment ranging from -25 ℃ to -15 ℃.
Store in the original labeled container and keep the container closed when not in use.
Store the container upright, away from oxidizers, alkalis and food.
Check regularly for leaks.

### 7.3 Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

No additional information available.

### 8.2 Exposure controls

**Appropriate engineering controls**

Safety shower. Eyewash station. Ensure good ventilation of the work station.

**Personal protection equipment**

**Eye and face protection**

Safety glasses with side shields.

**Skin protection**

Wear suitable protective clothing.

**Hand protection**

Protective gloves.

**Respiratory protection**

[In case of inadequate ventilation] wear respiratory protection.

**Thermal hazard protection**

No information available.

**Environmental exposure controls**

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Appearance and shape: | Yellow liquid |
| odor: | No data |
| pH value: | No data |
| Melting point / freezing point: | No data |
| Boiling point: | No data |
| Flash point: | No data |
| Upper explosion limit: | No data |
| Lower explosion limit: | No data |
| Vapor Pressure: | No data |
| Vapor density | No data |
| density | No data |
| Solubility | Soluble in water |
| N-octanol/water partition coefficient | No data |
| Auto-ignition temperature | No data |
| Decomposition temperature | No data |

### 9.2 Other information

Information with regard to physical hazard classes

No additional information available

Other safety characteristics

No additional information

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Contact with incompatible substances can cause decomposition or other chemical reactions.

### 10.2 Chemical Stability

Stable under the recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled within normal conditions of use.

### 10.4. Conditions to avoid

Avoid extremes of temperature and direct sunlight.
Avoid contact with incompatible materials.

### 10.5 Incompatible materials

Alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide.

### 10.6 Hazardous decomposition products

Oxides of carbon and nitrogen, smoke and other toxic fumes

## SECTION 11: Toxicological information

### 11.1 Acute toxicity

**For Sodium ascorbate:**

Oral LD50(rats): 14 100 mg/kg bw

**For 1，2-propylene glycol:**

Oral LD50(rats): 22 000 mg/kg bw
Dermal LD50(rabbit): > 2 000 mg/kg bw
LC50(inhalation,4h): > 317 042 mg/m³ air

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Respiratory or skin allergies

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Based on available data, the classification criteria are not met

Specific target organ toxicity (single expos)

Based on available data, the classification criteria are not met.

Specific target organ system toxicity (repeated exposure)

Based on available data, the classification criteria are not met

Aspiration hazard

Based on available data, the classification criteria are not met

**11.2 Information on other hazards**

11.2.1 Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties :

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

11.2.2 Other information

Potential adverse human health effects and symptoms :

No additional information available.

## SECTION 12: Ecological information

### 12.1 Toxicity

**For Sodium ascorbate:**

| | |
|---|---|
| Fish LC50(96h): | 1020 mg/L |
| Aquatic invertebrates EC50(48h): | 74 mg/L |
| algae and cyanobacteria EC50 (120h): | >74mg/L |

**For 1，2-propylene glycol:**

| | |
|---|---|
| Fish LC50(96h): | 40 613 mg/L |
| Aquatic invertebrates EC50(48h): | 18 340 mg/L |
| algae and cyanobacteria EC50 (120h): | 19 000mg/L |

### 12.2 Persistence and degradability

No data available

### 12.3 Potential bioaccumulation

No data available

### 12.4 Soil migration

No data available

### 12.5 Results of PBT and vPvB assessment

| Component | Cas No. | Results of PBT and vPvB assessment （according to (EC) No 2015/830) |
|---|---|---|
| Water | 7732-18-5 | not PBT/vPvB |
| 1,2-Propanediol | 57-55-6 | not PBT/vPvB |
| Sodium-L-ascorbate | 134-03-2 | not PBT/vPvB |

### 12.6 Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties:

The substance is not included in the list established in accordance with Article 59(1) of REACH for

having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

**12.7. Other adverse effects**

No additional information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

| | |
|---|---|
| Waste chemicals | Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal. |
| Contaminated packaging | Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible. |
| Disposal recommendations | Refer to section waste chemicals and contaminated packaging. |

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number or ID number** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.2. UN proper shipping name** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.3. Transport hazard class(es)** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.4. Packing group** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.5. Environmental hazards** | | | | |
| Dangerous for the environment: No | Dangerous for the environment: No<br><br>Marine pollutant: No | Dangerous for the environment: No | Dangerous for the environment: No | Dangerous for the environment: No |
| No supplementary information available | | | | |

### 14.6. Special precautions for user

**Overland transport**

Not regulated

**Transport by sea**

Not regulated

**Air transport**

Not regulated

**Inland waterway transport**

Not regulated

**Rail transport**

Not regulated

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

## SECTION 15: Regulatory information

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

| |
|---|
| *Regulation (EU) No. 2020/878：* |
| *Regulation (EC) No. 1907/2006:* |
| *Guidance on the compilation of SDS 2015.11* |
| *EU regulation No. 2015/830* |

### 15.2 Chemical safety assessment

Please note that waste disposal should also comply with local regulations.

No chemical safety assessment has been carried out.

## SECTION 16: Other information

**Abbreviations and acronyms**

| | |
|---|---|
| DSL/NDSL | Canadian Domestic Substances List/Non-Domestic Substances List |
| EINECS/ELINCS | European Inventory of Existing Commercial chemical Substances/European List of Notified Chemical Substances |
| ENCS | Japanese Existing and New Chemical Substances |
| IECSC | Chinese Inventory of Existing Chemical Substances |
| KECL | Korea Existing Chemicals List |
| PICCS | The Philippine Inventory of Chemicals and Chemical Substances |
| AICS | The Australian Inventory of Chemical Substances |

**Abbreviations and acronyms**

ED: Endocrine disruptor

**Full text of H- and EUH-statements**

No information available.

**Safety Data Sheet (SDS), EU**

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

**END OF SDS.**