SAFETY DATA SHEET

Section 1: Identification

Product Identifier: Pre-coated ELISA Kit Assay (Product code containing #KE symbols)
Relevant Identified Uses of Substance or Mixture and Uses Advised Against:
Recommended Use: For Research Use Only
Uses Advised against: No information

Company:
Assay Genie
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For information about this SDS, please contact: techsupport@assaygenie.com

Section 2: Hazard(s) Identification

2.1. Hazard Classification
Not classified.

Signal Word(s):
None.

Hazard Statements:
None.

Pictograms:
None.

Precautionary Statements:
None.

Description of other hazards:
No data available.

Section 3: Composition/ Information on Ingredients

Chemical Name	Synonyms	[Weight] %	CAS#	EC#
Water	Water	78.39%	7732-18-5	231-791-2
Sodium chloride	Sodium chloride	14.16%	7647-14-5	231-598-3
Sucrose	Sucrose	2.28%	57-50-1	200-334-9
Poly(oxy-1,2-ethanediyl)α,-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Poly (ethylene glycol) - 4000	1.33%	25322-68-3	500-038-2
Potassium sodium tartrate	Potassium sodium tartrate tetrahydrate	1.07%	6381-59-5	613-385-0
Potassium chloride	Potassium chloride	0.81%	7447-40-7	231-211-8
Phosphoric acid, sodium salt, hydrate (1:2:12)	Disodium hydrogen phosphate	0.63%	10039-32-4	600-088-6
Glycerol	Glycerol	0.51%	56-81-5	200-289-5
Trisodium citrate	Sodium citrate	0.42%	68-04-2	200-675-3
2-Pyrrolidinone, 1-ethenyl-, homopolymer	PVP40	0.35%	9003-39-8	618-363-4
Potassium dihydrogenorthophosphate	Potassium dihydrogen phosphate	0.05%	7778-77-0	231-913-4

Section 4: First-Aid Measures

4.2. Skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

4.3. Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes.

4.4. Inhalation
Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

4.5. Swallowing/Ingestion
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.6. Most important symptoms/effects, acute and delated
No data available.

4.7. Indication of immediate medical attention and special treatment needed, if necessary
No data available.

Section 5: Fire-Fighting Measures

5.1. Suitable extinguishing agents
Use dry chemical, carbon dioxide or alcohol-resistant foam.

5.2. Specific hazards arising from the chemical
No data available.

5.3. Special protective equipment for firefighters
Wear self-contained breathing apparatus if necessary.

Section 6: Accidental Release Measures

6.1. Personal safety precautions
Ventilation. Collect leaking and spilled liquid in covered containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

6.2. Measures for environmental protection
Prevent further leakage or spillage if safe to do so. Do not let enter drains. Discharge into the environment must be avoided.

6.3. Measures for containment and cleaning
Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark- proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Section 7: Handling and Storage

7.1. Advice Handling
Handling in a well ventilated place. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2. Conditions for safe storage, including any incompatibilities
Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

Section 8: Exposure Controls/Personal Protection

8.1. Control parameters

- **Occupational Exposure limit values:** Pure CAS 56-81-5: MAK: (inhalable fraction): 200 mg/m3; peak limitation category: I(2); pregnancy risk group: C.
- **Biological limit values:** No data available.

8.2. Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Setup emergency exits and the risk- elimination area.

8.3. Body protection

Wear suitable protective clothing according to the concentration and amount of the substance at the workplace.

8.4. Breathing equipment

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

8.5. Protection of hands/skin

Protective gloves. Wash and dry hands.

8.6. Eye/face protection

Chemical safety goggles if needed.

8.7. Thermal hazards

No data available.

Section 9: Physical and Chemical Properties

9.1. Information about the physical and chemical properties of the product

- **Physical state:** Transparent liquid
- **Color:** Colorless
- **Odor:** Weak odor
- **Melting point/freezing point:** Pure CAS 7732-18-5: 0°C; pure CAS 7647-14-5: 801 °C. Atm. press.:1 atm.; pure CAS57-50-1: 190-192°C; pure CAS 6381-59-5:70-80°C; pure CAS 7447-40-7:770-773°C; pure CAS 10039- 32-4: 35°C; pure CAS 56-81-5: 18°C; pure CAS 68-04-2:>300°C; pure CAS 7778-77-0: 253°C.
- **Boiling point/initial boiling point:** Pure CAS 7732-18-5: 100°C(lit.); pure CAS 7647-14-5: 1465°C/1 atm(lit.); pure CAS 57-50-1: 697.1°C at 760 mmHg; pure CAS 6381-59-5: 399.3°C at 760 mmHg; pure CAS7447-40-7: 146°C; pure CAS 10039-32-4: 158°C at 760 mmHg; pure CAS 56-81-5: 290°C; pure CAS 7778- 77-0: > 449.85°C. Atm.press.:Pa
- **Flammability:** Non flammable
- **Lower and upper explosion flammability:** No data available
- **Flashpoint:** No data available
- **Auto-ignition temperature:** Pure CAS 56-81-5: 393°C

- **Decomposition temperature:** No data available
- **pH:** pure CAS7447-40-7: 7.Remarks:Temperature and concentration not reported.; pure CAS 68-04- 2: 8.4. Remarks: Ambient temperature.; pure CAS 7778-77-0:Be tween4,2 and 4,8 (1 % solution)
- **Kinematic viscosity:** pure CAS 56-81-5:dynamic viscosity (in mPa s) = 1 412. Temperature: 20°C.; dynamic viscosity (in mPa s) = 612. Temperature: 30.0°C.; dynamic viscosity (in mPa s) = 14.8. Temperature:100.0°C.
- **Solubility:** pure CAS 7647-14-5: In water: 317 g/L. Temperature: 20 °C. pH:>= 7 - <= 10. Remarks: At 1 vol%.;pure CAS 57-50-1: Solubility in water, g/100 ml at 25°C: 200 ;pure CAS 6381-59-5:In water: 630 g/L (20°C);pure CAS 7447-40-7: Solubility in water at 20°C: good ;pure CAS 10039-32-4: In water: 218 g/L (20°C); pure CAS 56-81-5: Solubility in water: miscible; pure CAS 68-04-2: Solubility in water, g/100 ml at 25°C: 42.5 ;pure CAS7778-77-0: Solubility in water, g/100ml: 22
- **Partition coefficient n-octanol/water:** Pure CAS 57-50-1: -3.67;pure CASb56-81-5: -1.76;pure CAS 68-04-2: log Pow = -1.72
- **Vapor pressure:** Pure CAS7732-18-5: 3 mmHg (37 °C);pure CAS 7647-14-5: 1 mmHg (865 °C);pure CAS 56-81-5: 0.01 Pa(25°C);pure CAS68-04-2: 0 Pa. Temperature:25°C. Remarks: Extrapolated.; pure CAS 7778-77-0: 4.5 fPa. Temperature:25 °C.
- **Density and/or relative density:** Pure CAS 7732-18-5: 1.000g/mL 3.98°C(lit.);pure CAS 7647-14-5:2.16. Temperature:25 °C.; pure CAS 57-50-1: 1.6 g/cm^3;pure CAS 6381-59-5: 1.79; pure CAS 7447-40-7: 1.98 g/cm^3;pure CAS 10039-32-4: 1.52g/cm^3;pure CAS 56-81-5: 1.26; pure CAS 68-04-2: 1.857. Temperature:20 °C.; pure CAS 7778-77-0:2.34 g/cm^3
- **Relative vapor density:** Pure CAS7732-18-5: : < 1 (vs air): pure CAS 56-81: 3.1 (vs air)
- **Particle characteristics:** Not applicable

Section 10: Stability and Reactivity

10.1. Information about the stability and reactivity

- **Reactivity:** No hazardous reactions if stored and handled as prescribed/indicated.
- **Chemical stability**: Stable under recommended storage conditions.
- **Conditions to avoid:** Avoid high temperatures and direct sunlight.
- **Incompatible materials:** No data available.
- **Possibility of hazardous reactions:** No hazardous reactions are known under conditions of normal use.
- **Hazardous decomposition products:** No hazardous decomposition products if stored and handled as prescribed/indicated.

Section 11: Toxicological Information

11.1. Acute Toxicity

- **Oral:** pure CAS 25322-68-3: LD50 - rat (female) →2 000 mg/kgbw.;pure CAS 7447-40-7: LD50 - rat (female) - ca. 3 020 mg/kgbw. Remarks: Death occurred in less than 2 hours after dosing due to respiratory failure and prostration was the most common pre-mortem clinical sign.; pure CAS 56-81-5: LD50 Rat oral 12.6 g/kg; pure CAS 68-04-2: LD50 - mouse (male/female) - 5 400 mg/kgbw. Remarks: Observation limited to 10 days.; pure CAS7778-77-0: LD50 Mouse oral 2820 mg/kgbw
- **Inhalation:** pure CAS 56-81-5: LC50 Rat inhalation > 570 mg/cu m/1 hr

- **Dermal:** pure CAS 25322-68-3: LD50 - rat (male/female) → 2 000 mg/kgbw.;pure CAS 68-04-2: LD50 - rat (male/female) → 2 000 mg/kgbw.;pure CAS 7778-77-0: LD50 - rat (male/female)→ 2 000 mg/kg bw.

11.2. Skin corrosion/irritation
No data available.

11.3. Serious eye damage/irritation
No data available.

11.4. Respiratory or skin sensitization
No data available.

11.5. Germ cell mutagenicity
No data available.

11.6. Carcinogenicity
No data available.

11.7. Reproductive toxicity
No data available.

11.8. STOT-single exposure
Pure CAS 57-50-1: May cause mechanical irritation.; pure CAS 7447-40-7: The substance is irritating to the eyes and respiratory tract. Ingestion of large amounts could cause effects on the cardiovascular system. This may result in cardiac dysrhythmia.; pure CAS 68-04-2: The substance is irritating to the eyes and respiratory tract.; pure CAS 7778-77-0: The substance is irritating to the eyes, skin and respiratory tract.

11.9. STOT-repeated exposure
Pure CAS 57-50-1: The substance may have effects on the teeth. This may result in dental caries. Repeated or prolonged contact with skin may cause dermatitis.

11.10. Aspiration hazard
pure CAS 25322-68-3: A nuisance-causing concentration of airborne particles can be reached quickly when dispersed.; pure CAS7447-40- 7: Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly when dispersed, especially if powdered.; pure CAS 56-81-5: Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly on spraying.; pure CAS 68-04-2: Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly when dispersed.; pure CAS 7778-77-0: A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

Section 12: Ecological Information

12.1. Ecotoxicity

- **Toxicity to fish**: pure CAS 7647-14-5: LC50 - Lepomis macrochirus - 5 840 mg/L - 96 h.; pure CAS 25322-68-3: LC50 - Poecilia reticulata →100 mg/L - 96 h.; pure CAS 7447-40-7: LC50 - Pimephales promelas - 880 mg/L - 96 h.; pure CAS 56-81-5: LC50 - Oncorhynchus mykiss (previous name: Salmogairdneri) - 54 000 mg/L - 96 h.; pure CAS 68-04-2: LC50 - Leuciscusidus melanotus- 440 mg/L - 48 h.; pure CAS 7778-77-0: LC50 - Oncorhynchus mykiss (previous name: Salmo gairdneri) → 100 mg/L - 96 h. Remarks:Potassium.
- **Toxicity to daphnia and other aquatic invertebrates**: pure CAS 7647-14-5: LC50 - Daphnia magna - 874 mg/L - 48. Remarks: Complete immobilization and no response to gentle agitation.; pure CAS 25322-68-3: LC50 - Daphnia magna - 9 096.488 mg/L - 24 h.;pure CAS 7447-40-7: EC50 - see below →= 440 - <= 880 mg/L - 48 h.; pure CAS 56-81-5: LC50 - Daphnia magna - 1 955 mg/L - 48 h.; pure CAS 68-04-2: LC50 - Daphnia magna - 1 535 mg/L - 24 h.; pure CAS 7778-77-0: EC50 - Daphnia → 100 mg/L - 48 h. Remarks: Phosphate.
- **Toxicity to algae**: pure CAS 7647-14-5: EC50 - Nitzschia sp. - 2 430 mg/L - 120 h.;pure CAS 25322-68-3: EC50 - Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrumcapricornutum)- 15.915 mg/L - 72 h.;pureCAS7447-40-7:EC50 - Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) → 100 mg/L - 72 h.;pure CAS 56-81-5: EC3 - Scenedesmus quadricauda → 10 000 mg/L - 8 d.;pure CAS 68-04-2: Toxicity Threshold - Scenedesmus quadricauda - 640 mg/L - 8 d.;pure CAS 7778-77-0: EC50 - Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) → 100 mg/L - 72 h.
- **Toxicity to microorganisms**: pure CAS 7647-14-5: NOEC- activated sludge - 5 000 - 8 000 mg/L. Remarks: Respiration rate.; pure CAS 25322-68-3: IGC50- Tetrahymena pyriformis - 770.636 mg/L - 48 h.; pure CAS 7447-40-7: EC50 - activated sludge, domestic → 1 000 mg/L - 3 h. Remarks: Respiration rate.; pure CAS 56-81-5: Toxicity Threshold - Pseudomonas putida → 10 000 mg/L - 16 h.; pure CAS 68-04-2: TT - Pseudomonas putida → 10 000 mg/L - 16 h.; pure CAS 7778-77-0: EC50 - activated sludge of a predominantly domestic sewage → 1 000 mg/L - 3 h. Remarks: Respiration rate.

12.2. Mobility

No data available.

12.3. Biodegradation

AEROBIC: Glycerin, present at 100 mg/L, reached 63% of its theoretical BOD in 2 weeks using an activated sludge inoculum at 30 mg/L in the Japanese MITI test(1).Biodegradation rate constants of0.258/day and 0.200/ day in respirometry test systems employing activated sludge have also been reported, corresponding to 68% and 78% degradation, respectively(2)

12.4. Bioaccumulation

An estimated BCF of3 was calculated in fish for glycerin(SRC),using a log Kow of-1.76(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

12.6. Other adverse effects

No data available.

Section 13: Disposal Considerations

13.1. Waste disposal methods
The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

13.2. Contaminated packaging
Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

Section 14: Transport Information

- **ADR/RID:** Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.
- **IATA Class:** Non-Hazardous for Air Transport.
- **IMO Class: :** Not available

Section 15: Regulatory Information

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Section 16: Other Information

This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guild only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislation. The absence of warning must not, under and circumstance be taken to mean that no hazard exists.

Last reviewed: 07/2025

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

****End Of MSDS****