Safety Data Sheet

MANUFACTURER

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General Information

Trade Name: PerKit™ Protein SM Acid Conjugation Kit
Part No. Covered by this SDS: CM52408

Product Content

1) A column containing 1 mL cross-linked dextran gel (non-hazardous) and 1 mL of 0.02% aqueous sodium azide (non-hazardous).
2) A 0.5 mL microcentrifuge tube containing less than 10 mg of Reagent A in Solution A
3) A 0.5 mL microcentrifuge tube containing less than 10 mg of Reagent B (non-hazardous).
4) A 1.5 mL microcentrifuge tube containing 0.5 mL of Solution A.
5) A plastic bottle containing 8 mL of Reaction Buffer (non-hazardous).
6) A plastic bottle containing 20 mL of Storage Buffer (phosphate buffer saline) (non-hazardous).
7) A 1.5 mL microcentrifuge tube containing 0.5 mL of ADC Stabilizing PBS Buffer (non-hazardous).
8) A plastic bag containing six microcentrifuge tubes and 2 centrifuge filter devices (non-hazardous).

Handling and Storage for Hazardous Chemicals

Handling for **Solution A**: See attached supplement information.

Other Information

Sodium azide is present in the mixture below 1%, is not considered hazardous, as defined in 29 CFR 1910.1200 (OSHA Hazard Communication Standard). Therefore, a Material Safety Data Sheet is not required. We recommend treating all chemicals with caution.

Transportation

None of the components in the kit is regulated for transportation.

Supplemental information starts from next page.

Solution A

SECTION 1. Identification of the substance/mixtures and of the company/undertaking

1.1 Product identifiers

Product Name: Solution A
Product No.: CM01008

1.2 Detail of the supplier of the safety data sheet

Company: CellMosaic, Inc. 10A Roessler Road, Woburn, MA 01801, Phone: +1 781-463-0002

SECTION 2. Hazards Identification

2.1. Classification of the substance or mixture

Flammable liquids	GHS Category 4
Eye Irritation	GHS Category 2A
Reproductive Toxicity	GHS Category 1B

2.2. GHS Label elements, including precautionary statements.

Signal Word: WARNING!
Hazard Statement(s):
H227 - Combustible liquid and vapor.
H312+ H322 – Harmful in contact with skin or if inhaled.
H319 - Causes serios eye irritation.
H360 – May damage fertility or the unborn child.
Precautionary Statement(s):
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352+P312 – If on skin or hair: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

SECTION 3. Composition and Information on Ingredients

Ingredient	CAS No.	Percent	Hazardous
The specific chemical identity of the organic solvent is being held as a trade secret (Proprietary component)	N/A	99-100%	Yes

SECTION 4. First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Ingestion: If swallowed, DO NOT INDUCE VOMITING without medical advice. Rinse mouth with water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin Contact: Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention.
Eye Contact: Check for and remove contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention.
Notes to Physician: Treat symptomatically and supportively.

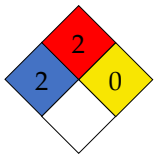
SECTION 5. Fire Fighting Measures

5.1. Flammability

Combustible liquid and vapor. (GHS Category 4).
Flash Point: 90-100°C (194-212 °F).
Autoignition Temperature: >200 °C (392 °F).
Flammable Limits: Lower Limit 1 1.3 vol%, Upper Limit -9.5 vol%.
Products of Combustion: May decompose into irritating and highly toxic gases under fire conditions (nitrogen oxides, carbon monoxide, carbon dioxide).
Specific Fire Hazards: As in any fire, always wear self-contained breathing apparatus in pressure-demand (MSA/NIOSH approved or equivalent), and full protective gear. Use water spray to keep fire exposed containers cool. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products.
Specific Explosion Hazards: No information available.
Fire Fighting Media: Use dry chemical, carbon dioxide, water spray, or appropriate foam.

5.2. NFPA

Health Rating: 2
Flammability Rating: 2
Reactivity: 0
Specific Hazard: N/A



SECTION 6. Accidental Release Measures

Absorb spilled liquid with sorbent pads, socks, or other inert material such as vermiculite, sand, or earth. Use spark-proof tools. Provide ventilation to the affected area and remove all ignition sources. Approach the spill from upwind and pick up absorbed material and place it in a suitable container. Always use proper personal protective equipment as described in section 8.

SECTION 7. Handling and Storage

Precautions: Always use proper personal protective equipment as described in section 8. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Remove contaminated clothing and wash before reuse. Empty containers contain product residue (liquid and vapor) and can be dangerous. Use with adequate ventilation. Avoid breathing vapor or mist.
Storage: Store away from ignition sources. Keep in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

SECTION 8. Exposure Controls/Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities for storing or using the material should be equipped with eyewash station and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Personal Protective Equipment: Wear protective chemical goggles or other appropriate eye protection. Use butyl rubber gloves and protective clothing to prevent skin exposure. A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever possible. Always use a NIOSH or European Standard EN 149 approved respirators when necessary.
Exposure Limits: None established.

SECTION 9. Physical and Chemical Properties

Physical State and Appearance: Clear, Colorless liquid.
Odor: No information available.
Solubility: Soluble in water.
Specific Gravity: No information available.
pH: Slightly basic 7-8 (100 g/L H_2O).

Boiling Point: No information available.
Freezing/Melting Point: No information available.
Flash Point: 64 °C (147 °F) closed cup.
Vapor Density (Air=1): N/A.
Vapor Pressure: N/A.
Evaporation Rate (Butyl acetate =1): No information available.
Partition coefficient; n-octanol/water: No information available.
Autoignition Temperature: No information available.
Decomposition Temperature: No information available.
Viscosity: N/A.
Molecular Formula: N/A.
Molecular Weight: N/A.

SECTION 10. Stability and Reactivity

Stability: Stable at room temperature in closed container under normal handling and storage conditions.
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.
Incompatibilities with Various Substances: Strong oxidizing agents, strong acids.
Conditions to Avoid: Ignition sources, excess heat.

SECTION 11. Toxicological Information

Routes of Entry: Inhalation, skin absorption, skin contact.
Acute Exposure Hazards:
INHALATION HAZARD: Causes respiratory tract irritation. May cause headache. Material has a very low vapor pressure at room temperature, so inhalation exposures are not expected unless material is heated or misted.
INGESTION HAZARD: Ingestion may cause gastrointestinal irritation with nausea, vomiting, and diarrhea.
SKIN CONTACT HAZARD: May cause skin irritation. May be harmful if absorbed through the skin. Not expected to cause an allergic reaction. Because of the high permeability rate in human skin, prolonged contact should be avoided.
EYE CONTACT HAZARD: May cause eye irritation. May cause temporary corneal clouding.
Chronic Exposure Hazards: Prolonged or repeated exposure may cause dermatitis. Adverse reproductive effects have been reported in animals. Testicular effects were noted in rates after repeated, high-dose oral and inhalation exposures (BASF). Human occupational exposure has been associated with chronic eye irritation, headaches, and irritant contact dermatitis. Airborne concentrations of > 49 ppm are intolerable (REPROTEXT).
Animal Toxicity:
Draize test, rabbit, eye: <150 mg Moderate/
Oral, mouse: LD50 <5200 mg/kg.
Oral, rat: LD50 <4000 mg/kg.
Skin, rabbit: LD50 < 10 g/kg.
Sensitization test, guinea pig: negative; patch test (humans): negative (Merck).
Carcinogenicity: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65
Epidemiology: No information available.
Reproductive Effects: May damage the unborn children.
Mutagenicity: Possible effects observed.
Neurotoxicity: No information available.
Other Studies: No information available.

SECTION 12. Ecological Information

Environmental Fate: No information available.
Physical: No information available.

Environmental Toxicity:
Daphnia: EC50 >500 mg/L, 48H.
Fish: Gold orfe: LC50 >500 mg/L, 96H.
Bacteria: EC50, >1995 mg/L, 30 min.
Algae: ErC50, >500mg/L, 72H.

SECTION 13. Disposal Considerations

Material that cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Processing, use or contamination of this product may change the waste management options. Waste generators must decide if discarded material is hazardous waste. State and local disposal regulations may differ from federal disposal definitions found in 40 CFR 261.3. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14. Transport Information

Not regulated for transportation.

SECTION 15. Regulatory Information

SARA 302 Components:
This material does not contain any components with a section 302 EHS TPQ.
SARA 313 Components:
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards:
Fire Hazard, Acute Health Hazard, Chronic Health Hazard.

SECTION 16. Other Information

References: This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and WHMIS Controlled Products Regulation,
Chemical Abstract databases, Superfund Amendments and Reauthorization Act (SARA) and other similar compound's SDS.
Other Special Considerations: Not available.

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Product Use: Laboratory Reagent

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