

Safety Data Sheet

MANUFACTURER

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Product Identification

Trade Name: PerKit™ Protein MMAE
Conjugation Kit
CAS No.: N/A
Molecular Weight: N/A
Chemical Formula: N/A

Part No.: CM11413, CM11413x3,

Composition/Information on Ingredients**Each kit includes:**

- 1) A 1.5 mL microcentrifuge tube containing less than 1 mg of MC-VC-PAB-MMAE solution (hazardous, limited amount)
- 2) A 1.5 mL microcentrifuge tube containing less than 10 mg of Reagent A (non-hazardous)
- 3) A 0.5 mL microcentrifuge tube containing less than 50 µL of Reagent B solution (hazardous, limited amount)
- 4) A tube containing 1 or 3 mL of solution A (non-hazardous)
- 5) A bottle containing 4 or 12 mL of buffer A (non-hazardous)
- 6) A bottle containing 12 or 36 mL of buffer B (non-hazardous)
- 7) A plastic bottle containing 20 or 60 mL of Storage Buffer (phosphate buffer saline) (non-hazardous)
- 8) A plastic bag containing centrifugal filter devices, desalting columns, and microcentrifuge tubes (non-hazardous)

Handling and Storage for Hazardous Chemicals

Handling for MC-VC-PAB-MMAE: See Attached Supplement

Transportation

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

MC-VC-PAB-MMAE Solution

1. Product and Company Identification

Product Name: MC-VC-PAB-MMAE Solution

Synonyms: MC-VC-PAB-MMAE solution; VcMMAE solution; Maleimidocaproyl-valine-citrulline-p-aminobenzoyloxycarbonyl-monomethyl auristatin E solution; Vedotin solution

Product No.: CM11001

Company: CellMosaic, Inc. 10A Roessler Road, Woburn, MA 01801

2. Hazards Identification

Classification of the substance or mixture



Acute Toxicity: Oral, Category 4

Skin Corrosion/Irritation, Category 2

Serious Eye Damage/Eye Irritation, Category 2

Specific Target Organ Toxicity (single exposure), Category 3

Label elements

Signal Word: WARNING!

Hazard Statements

H302 – Harmful if swallowed

H315 – Causes mild skin irritation

H319 - Causes serious eye irritation

H335- May cause respiratory irritation

Precaution Statements:

P261: Avoid breathing {dust/fume/gas/mist/vapors/spray}. P264: Wash {hands} thoroughly after handling.

P280: Wear {protective gloves/protective clothing/eye protection/face protection}.

GHS Response Phrases:

P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell. P330: Rinse mouth.

P332+313: If skin irritation occurs, get medical advice/attention. P337+313: If eye irritation persists, get medical advice/attention.

P362+364: Take off contaminated clothing and wash it before reuse.

GHS Storage and Disposal Phrases:

Please refer to Section 7 for Storage and Section 13 for Disposal information.

Adverse Human Health Effects and Symptoms:

Causes serious eye irritation.

Causes skin irritation.

Harmful if swallowed.

Material may be irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation or skin absorption.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

3. Composition and Information on Ingredients

Ingredient	CAS No.	Percent	Hazardous
MC-Val-Cit-PAB-MMAE	646502-53-6	0.1-1%	Yes
The specific chemical identities of the organic solvent is being held as a trade secret (Proprietary component)	N/A	99.0-99.9%	Yes

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.

5. Fire Fighting Measures

Flash Point: 90-100°C (194-212 °F)

Autoignition Temperature: >300 °C (572 °F)

Flammable Limits (% in air): Lower Limit 1.3-3.5 vol%, Upper Limit 40-60 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.

Specific Explosion Hazards: may produces poisonous gases. Wear rubber gloves, SCBA, and rubber suit

Fire Fighting Media: Foam, carbon dioxide, dry powder, and water spray.

NFPA

Health Rating: 2

Flammability Rating: 2

Instability: 0

Physical hazards N/A

6. Accidental Spill Measures

Avoid raising and breathing dust, and provide adequate ventilation. Absorb spilled liquid with sorbent pads, socks, or other inert material such as vermiculite, sand, or earth. Use spark-proof tools. Keep away from sources of ignition. Approach the spill from upwind and pick up absorbed material and transfer to a chemical waste container for disposal in accordance with local regulations. Always use proper personal protective equipment as described in **section 8**.

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.

8. Exposure Controls/Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities 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 compatible chemical-resistant gloves and protective clothing to prevent skin exposure. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Work/Hygienic/Maintenance Practices: Do not take internally.

Exposure Limits: None established.

9. Physical and Chemical Properties

Physical State and Appearance: Clear, Colorless liquid

Odor: No information available

Solubility: soluble.

Specific Gravity: ~1.09 at RT

pH: slightly basic 8-9 (50/50 in H₂O)

Boiling Point: No information available

Freezing/Melting Point: No information available

Flash Point: 90-100°C (194-212 °F)

Autoignition Temperature: >300 °C (572 °F)

Flammable Limits (% in air): Lower Limit 1.3-3.5 vol%, Upper Limit 40-60 vol%.

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

Decomposition Temperature: No information available

Viscosity: N/A

Molecular Formula: N/A

Molecular Weight: N/A

10. Stability and Reactivity

Stability: Stable at room temperature in closed container under normal handling and storage conditions.

Hazardous Decomposition Products: sulfur dioxides, nitrogen oxides, carbon oxides

Hazardous Polymerization: Will not occur.

Incompatibilities with Various Substances: Organic and inorganic acid chlorides, strong oxidizing agents, alkali metals, hydrobromic acid, acidic solutions of alkali bromides

Conditions to Avoid: prolonged heating above 143 °C (293 °F)

11. Toxicological Information

Information on Toxicological Effects: the toxicological effects of this product has not been thoroughly studied.

12. Ecological Information

Toxicity: Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available

Mobility in Soil: No information available

Results of PBT and vPvB: No information available

Other adverse effects: No information available

13. Disposal Considerations

Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Land Transport (US DOT):

Proper Shipping Name: Not dangerous goods.
DOT Hazard Class (<100 gallons per container): not regulated
I.D. Number: None
Packing Group: None
Label(s): None

Land Transport (European ADR/RID): unregulated
Air Transport (ICAO/IATA): unregulated.
TDG (Canada) Status: unregulated
Additional Transport Information: Transport in accordance with local, state, and federal regulations.

15. Regulatory Information

Material(s) known to the State of California to cause cancer: None
Material(s) known to the State of California to cause adverse reproductive effects: None
Massachusetts Substance List: None
New Jersey Workplace Hazardous Substance List: None
Pennsylvania Hazardous Substance List: None
WHMIS (Canada) Ingredient Disclosure List: Listed
WHMIS9 (Canada) Status: Regulated
WHMIS (Canada) Hazard Classification: B/3 – Combustible Liquid
IARC - International Agency for Research on Cancer Carcinogenicity Classification (components present at 0.1% or more): Not Listed
ACGIH - American Conference of Governmental Industrial Hygienists: Not Listed
NTP - National Toxicology Program: Not listed
Reporting requirements of Section 313 or Title III of the superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372: None
CEPA/DSL - Canadian Environmental Protection Act/ Domestic Substances List: Listed.
EINECS - European Inventory of Existing Commercial Chemical Substances: No. 200-664-3
AICS/NICNAS - Australian Inventory of Chemical Substances/National Industrial Chemical notification and Assessment Scheme: This product is listed on AICS.
Japanese Handbook of Existing and New Chemical Substances: Listed.
EC Classification and User Label Information (Council Directive 67/548/EEC and 1999/45/EC):
Hazard Symbols and Risk Phrases – None Required
ICH (International Council on Harmonization): Class III – Solvent with low toxic potential
TSCA-US Toxic Substances Control Act: this product is listed on the TSCA inventory.
SARA Section 311 and 312 hazard classification(s): fire hazard
DSCL (EEC):
Hazard Symbols: Xi, T
Risk Phrases: R36/37/38 – Irritating to eyes, respiratory system, skin; R22 – Harmful if swallowed.
Safety Phrases: S26 – In case of contact with eyes, rinse with plenty of water and seek medical advice; S36/37 – Wear suitable protective clothing and gloves.

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, SARA. Other similar compound's SDS.

Other Special Considerations: Not available

Created: June 2, 2020

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Revision Information: Version 1

Product Use: Laboratory Reagent.

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