

Safety Data Sheet

Section 1: Identification

Product identifier

Product Name: MARK Substrate

Product Code: RP20244

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

Recommended use: Hazard Communication & Compliance

Details of the supplier of the safety data sheet

Manufacturer: GenScript
860 Centennial Ave.
Piscataway, NJ 08854 United States

www.genscript.com

product@genscript.com

Telephone (General): 1-732-885-9188

Emergency telephone number

Manufacturer: 1-877-436-7274

Section 2: Hazards identification

According to OSHA 29 CFR 1910.1200 HCS

Emergency Overview: Lyophilized solid. Toxicological properties of components have not been fully investigated.

Health Effects: Not classified

Inhalation: Not known to present an inhalation hazard under normal use.

Skin: May cause skin irritation

Eyes: May cause serious eye irritation

Ingestion: May be harmful if swallowed.

Chronic Effects/Target Organ Effects: None known.

Medical Conditions Aggravated By Exposure: None known.

Environmental Effects: None known.

Section 3 - Composition/Information on Ingredients

Chemical characterization: Substances

Description: Chemical synthesized peptide

Section 4: First-Aid Measures

Inhalation	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.
Skin	Immediately wash with plenty of water and soap and rinse thoroughly. Seek immediate medical advice.
Eye	Rinse opened eye for several minutes under running water. Remove contact lenses, if present and easy to do. Continue rinsing. Then consult a doctor.
Swallowing	Seek immediate medical treatment.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Carbon dioxide (CO₂), extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special protective equipment for firefighters

Standard procedure for chemical fires.

Section 6 - Accidental Release Measures

Personal Precautions	Always wear recommended Personal Protective Equipment. Use personal protection equipment. Keep unprotected persons away. Ensure adequate ventilation.
Methods for cleaning up	Soak up with inert absorbent material.
Environmental precautions	Do not allow material to be released to the environment without proper governmental permit.
Methods and material for containment and cleaning up	Pick up mechanically.
Prevention of secondary hazards	No special measures required.

Section 7 - Handling and Storage

Handling: Always wear recommended Personal Protective Equipment. No special handling advices are necessary. Keep container tightly sealed.

Storage: Store in freezer(-20°C). Store away from oxidizing agents. Protect from heat. Keep container tightly sealed.

Specific end use(s): For R&D/experimental use only

Section 8 - Exposure Controls/Personal Protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure Controls

Personal protective equipment

General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriated working environment.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves. Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Penetration time of glove material (in minutes): Not determined.

Eye Protection: Chemical goggles or safety glasses.

Body Protection: Protective work clothing.

Section 9 - Physical and Chemical Properties

General information

Form	Lyophilized solid
Appearance	White or off-white color
Odor	No data available
Odor Threshold	No data available
Boiling point / boiling range	No data available
Melting point / melting range	No data available
Flash point:	No data available
Autoignition Temperature	No data available

Oxidizing properties	No data available
Water solubility	No data available
Explosion limit	Not determined
Evaporation rate	No data available
Partition coefficient(n-octanol/water)	Not determined
Viscosity dynamic	No data available
Viscosity kinematic	No data available

Section 10: Stability and Reactivity

Reactivity	No additional information available
Chemical stability	Stable under recommended storage conditions
Possibility of hazardous reactions	Not dangerous reactions known.
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

Section 11 - Toxicological Information

Information on toxicological effects

Acute Toxicity: The Registry of Toxic Effects of Chemical Substance (RTECS) contains acute toxicity data for components in this product.

LD/LC50 values that are relevant for classification: No data

Principle Routes of Exposure Potential Health Effects

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed.

Carcinogenic effects	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA, or ACGIH.
Mutagenic effects	No effects known.
Reproductive toxicity	No effects known.
Sensitization	No sensitizing effects known.
Additional toxicological information	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Section 12 - Ecological Information

Aquatic toxicity	No further relevant information available.
Mobility in soil	No further relevant information available.
Bioaccumulative potential	No further relevant information available.
Persistence and degradability	No further relevant information available.
General notes	<p>Do not allow material to be released to the environment without proper governmental permits.</p> <p>Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.</p> <p>Avoid transfer into the environment.</p>
Results of PBT and vPvB assessment	Not applicable

Section 13 - Disposal Considerations

Waste treatment methods

Recommendation: Consult state, local or national regulations to ensure proper disposal.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

Section 14 - Transport Information

UN-Number / DOT, ADN, IMDG, IATA	Not applicable
UN proper shipping name / DOT, ADN, IMDG, IATA	Not applicable

Transport hazard class(es) / DOT, ADR, AND, IMDG, IATA Class	Not applicable
Packing group / DOT, IMDG, IATA	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
Transport/Additional information:	
DOT	Not applicable
Marine Pollutant (DOT):	
UN "Model Regulation"	Not applicable

Section 15 - Regulatory Information

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

GHS label element: Not applicable

Hazard pictograms: Not applicable

Signal word: Not applicable

Hazard statements: Not applicable

National regulations: This product is not listed in the US. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.

SARA Section 313 (specific toxic chemical listings): Substance is not listed.

California Proposition 65

Prop 65 - Chemical known to cause cancer: Substance is not listed.

Prop 65 - Developmental toxicity: Substance is not listed.

Prop 65 - Developmental toxicity, female: Substance is not listed.

Prop 65 - Developmental toxicity, male: Substance is not listed.

Information about limitation of use: For use only by technically qualified individuals

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the marker and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use): Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16 - Other Information

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