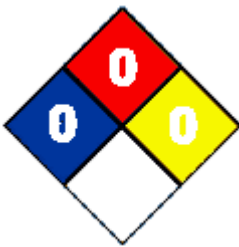



Material Safety Data Sheet

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td>0</td> </tr> <tr> <td>Fire Hazard</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table>	Health Hazard	0	Fire Hazard	0	Reactivity	0		
Health Hazard	0								
Fire Hazard	0								
Reactivity	0								

Issuing Date 27-Sep-2006

Revision Date

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name pDsRed-Monomer-Actin Vector

Product Code(s) 632479

Supplier Address

Clontech Laboratories, Inc.
1290 Terra Bella
Mountain View, CA 94043
TEL: 650-919-7452

2. HAZARDS IDENTIFICATION

Emergency Overview

The product contains no substances which at their given concentration are considered to be hazardous to health

Appearance White

Physical State Liquid, frozen.

Odor Odorless

Potential Health Effects

Acute Toxicity

Eyes

No known effect based on information supplied

Skin

No known effect based on information supplied

Inhalation

No known effect based on information supplied

Ingestion

No known effect based on information supplied

Chronic Effects

No known effect based on information supplied

Aggravated Medical Conditions

None known

Environmental Hazard

See Section 12 for additional Ecological information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Plasmid DNA	Not Applicable	60-100

4. FIRST AID MEASURES

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician
Skin Contact	Wash skin with soap and water
Inhalation	Move to fresh air
Ingestion	Clean mouth with water and afterwards drink plenty of water
Notes to Physician	Treat symptomatically. Materials have been screened to insure they are free of HIV and AIDS.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable
Flash Point	No data available
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Explosion Data	
Sensitivity to mechanical impact	None
Sensitivity to static discharge	None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

NFPA	Health Hazard 0	Flammability 0	Stability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 0	Flammability 0	Stability 0	Personal Precautions B

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing.
Methods for Containment	Prevent further leakage or spillage if safe to do so
Methods for Cleaning Up	Take up mechanically and collect in suitable container for disposal

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.
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Storage Keep in properly labeled containers. Keep container tightly closed. Keep away from heat. Store at -20 Celsius.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and Body protection Wear protective gloves/clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White	Odor	Odorless
Odor Threshold	No information available	Physical State	Liquid, frozen
pH	No information available		
Flash Point	No data available	Autoignition Temperature	Not applicable
Decomposition Temperature	No data available	Boiling Point/Range	No data available
Melting Point/Range	No data available		
Flammability Limits in Air	No data available	Explosion Limits	No data available
Specific Gravity	No data available	Solubility	No data available
Evaporation Rate	No data available	Vapor Pressure	No data available
Vapor Density	No data available	VOC Content	Not applicable
Partition Coefficient (n-octanol/water)	No data available		

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions

Conditions to Avoid Temperatures above -20°C.

Incompatible Products None known based on information supplied

Hazardous Decomposition Products None under normal use.

Hazardous Polymerization Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Reproductive Toxicity This product does not contain any known or suspected reproductive hazards

Target Organ Effects None known

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method This material, as supplied, is not a hazardous waste according to state and federal regulations (40 CFR 261)

Contaminated Packaging Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

RID Not regulated

14. TRANSPORT INFORMATION

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Exempt
DSL	Does not Comply
EINECS/ELINCS	Does not Comply
ENCS	Does not Comply
CHINA	Does not Comply
KECL	Does not Comply
PICCS	Does not Comply
AICS	Does not Comply

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

International Regulations

Mexico - Grade Minimum risk, Grade 0

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Non-controlled

16. OTHER INFORMATION**Issuing Date** 27-Sep-2006**Revision Date****Revision Note** No information available**Disclaimer**

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS