

SDS Reference RA4536
Version No. C
Revision Date DECEMBER 2014
Origination Date JULY 21, 2009

Safety Data Sheet

Prepared for US/CN/EU Markets as International Trade



Product Name SEQUENCE ENRICHMENT DROPLET DESTABILIZER

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY / UNDERTAKING

Product Name SEQUENCE ENRICHMENT DROPLET DESTABILIZER (in 1.5-ml plastic vial)
Synonym (s) Droplet Destabilizer
Product Codes 30-00827
REACH Registration Number Not available
Chemical Family This product is a clear low viscosity liquid categorized as a fluorinated reagent. Non-Consumer/Commercial End Product. This finished product provides a laboratory-grade fluid with an as-designed, intended-use consisting of direct end-use application, such as operating the Sequence Enrichment platform and PCR thermocycling. The product has an end-use application in controlled, non-clinical/non-diagnostic laboratories where protection from extreme heat is desired (see, Sequence Enrichment Product Installation and Use Instructions that accompany the product).
Product Use/s This product is considered a Discrete Chemical or Substance that is regulated under US-OSHA; CN-WHMIS; UN-GHS; ISO; UK-CHIP; or EU Directives (67/548/EEC-Dangerous Substances, 98/24/EC-Chemical Agents at Work, and 1907/2006/EC-REACH), and an MSDS/SDS is required for this product considering that when used as recommended or intended, or under ordinary conditions, it may present a health and safety exposure or other hazard.
Company / Undertaking Identification RainDance Technologies, Inc. (USA)
749 Middlesex Turnpike, Billerica, MA 01821
Suppliers Imported to CN and EU by RainDance Technologies, Inc. Billerica, MA (USA)
Emergency Telephone North America: CHEMTREC 800-424-9300
EU: CHEMTREC (+1) 703-527-3887 (collect calls accepted, USA contact)
Non-emergency health/safety information North America: (978) 495-3300
EU: (+1) (978) 495-3300 (USA contact)
e-mail address customercare@raindancetech.com

2. HAZARDS IDENTIFICATION



3.3 — Serious eye damage/eye irritation, Hazard Category 2
3.8 — Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation
3.2 — Skin corrosion/irritation, Hazard Category 2

WARNING

Physical & Chemical: NOT CLASSIFIED UNDER GHS
Health: CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE RESPIRATORY IRRITATION.
CAUSES SKIN IRRITATION.
Environmental: NOT CLASSIFIED UNDER GHS
Further Information: NA

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3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical name</u>	<u>CAS-No</u>	<u>EINECS/ELINCS</u>	<u>Classification</u>	<u>Concentration %</u>
RDT 1000 Sequence Enrichment Droplet Destabilizer	Proprietary	Proprietary	Wng: H319, H335, H315	100
Further Information:	NA			

4. FIRST AID MEASURES

General information	NA
Inhalation	If inhaled, provide fresh air, warmth and rest. If necessary seek medical advice.
Skin contact	Clean areas of skin affected immediately with soap and plenty of water. If necessary seek medical advice.
Eye contact	In case of contact with eyes, rinse immediately with plenty of water until irritation subsides.
Ingestion	Allow the patient to vomit on his own accord. Give copious water to drink and if necessary seek medical advice.
Further information	NA

5. FIRE FIGHTING MEASURES

General hazard	THE PRODUCT WILL BURN IN A FIRE
Extinguishing media	To suit local surroundings (e.g. water spray, carbon dioxide, foam, chemical powder)
Extinguishing media not to be used	NA
Special exposure hazards	Decomposition products released in a fire, (e.g. oxides of carbon, hydrogen fluoride), should be considered toxic if inhaled.
Protective equipment	Wear self-contained breathing apparatus.
Further information	Avoid run-off water entering the drains (e.g. use barriers).

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up	Adhere to personal protective measures. Take up with absorbent material, e.g. sand, sawdust, into tightly closable containers. Label container and dispose of as prescribed.
Environmental considerations	Do not allow to get into waste water or waterways; if this occurs, inform the relevant water authority at once.
Further information	NA

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7. HANDLING AND STORAGE

Advice on safe handling Handle in accordance with good hygiene and safety practice.

Storage conditions Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry.

Further information NA

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit values	OSHA	Permissible Exposure Limit (PEL/TWA)	Not established
	ACGIH	Threshold Limit Value (TLV)	Not established
	Quebec	Permissible Exposure Value (PEV)	Not established
	Ontario	Occupational Exposure Level (OEL)	Not established
	Netherlands	Maximaal Aanvaarde Concentratie (MAC)	Not established
	Germany	Maximale Arbeitsplatzkonzentrationen (MAK)	Not established
	United Kingdom	Workplace Exposure Limit (WEL)	Not established

Engineering controls Ensure adequate ventilation of working area.

Personal protection Observe normal standards for handling chemicals.
Do not breathe vapour.
Avoid eye and skin contact.
Wash hands before breaks and after work.
Wear personal protective equipment appropriate to the task (see below).

Eye protection Safety goggles.

Skin protection Impervious gloves.

Respiratory protection Respirator or air fed visor (if ventilation is insufficient).

Other personal protection Protective overalls.

Environmental exposure controls NA

Further Information Personal protective equipment (PPE) should be selected as appropriate to the nature and aggressiveness of the identified hazard(s). PPE should be regularly inspected for such things as soundness against leaks, bad fitting and possible chemical penetration. Recommended safe user periods should never be exceeded.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical form	Liquid
Color	Colorless
Odor	Mild
Molecular weight	Not applicable
Molecular formula	Not applicable
pH	Not determined
Boiling pt / range	88 - 95°C (190 – 203°F)

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9. PHYSICAL & CHEMICAL PROPERTIES

Melting pt / range	Not available
General Flammability	COMBUSTIBLE
Flash point	92°C (198°F)
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Relative Density	1.65
Explosive properties	Not available
Oxidizing properties	Not available
Vapor pressure	Not available
Vapor Density	Not available
Relative Evaporation Rate (n-Butyl Acetate = 1)	Not available
Viscosity	Not available
Water solubility	Miscible
Partition coefficient (log P or log K n-octanol / water)	Not available
Additional information	NA

10. STABILITY & REACTIVITY

Stability	Stable under normal conditions of handling.
Conditions to avoid	Data not supplied.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Data not supplied.
Further information	NA

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11. TOXICOLOGICAL INFORMATION

Acute toxicity	No data available.
Acute irritation/corrosivity	No data available.
Sensitization	No sensitizing effects known.
Repeated dose toxicity	No data available.
CMR effects	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA and ACGIH.
Further information	Consideration should be given to section 15 of this safety data sheet, noting any identified hazards for this product and route of entry whereby harm could be caused to body tissues and organs.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data available.
Mobility	No data available.
Persistence and degradability	No data available.
Bioaccumulative potential	No data available.
Result of PBT assessment	No data available.
Other adverse effects	Do not allow to get into waste water or waterways; if this occurs, inform the relevant water authority at once. Consideration should be given to any environmental or health hazards indicated in section 2, and the physical properties indicated in section 9, of this safety data sheet, in the light of any possible damage to wildlife or to the environment in land, water, air or upper atmosphere.
Water Hazard Class	WGK = 1

13. DISPOSAL CONSIDERATIONS

Advice on disposal	In accordance with national and local authority regulations.
Contaminated packaging	Treat empty containers in the same way as the product or if possible wash out thoroughly and recycle.
European Waste Catalogue Number	EWC = 07 07 99
Further information	This product contains fluorochemicals and it must be incinerated in an industrial or commercial facility in the presence of a combustible material. Combustion products will include HF. The incineration facility must be capable of handling halogenated – particularly fluorinated – materials. Refer to the RDT1000 Sequence Enrichment User Manual for additional information.

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14. TRANSPORT INFORMATION

United Nations number The product is not classified for transport
Proper shipping name NA
Class NA
Subsidiary risk/s NA
Packing group NA
Marine pollutant The product is not a Marine Pollutant per IMDG
Emergency action code NA
Hazard Identification Number NA
Further information NA

15. REGULATORY INFORMATION

Classification & labelling The product is categorized in accordance with the Classification, Labelling & Packaging Regulation ((EC) No 1272/2008).



3.3 — Serious eye damage/eye irritation, Hazard Category 2
3.8 — Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation
3.2 — Skin corrosion/irritation, Hazard Category 2

WARNING

Hazard statements	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
	H315	Causes skin irritation
Precautionary statements	P264	Wash thoroughly after handling.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337+P313	If eye irritation persists: Get medical advice/attention.
	P261	Avoid breathing mist/vapours/spray.
	P271	Use only outdoors or in a well-ventilated area.
	P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P403+P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
	P501	Dispose of contents/container in accordance with national regulation.
	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P332+P313	If skin irritation occurs: Get medical advice/attention.
	P362	Take off contaminated clothing and wash before reuse.

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Federal Regulations (US)

TSCA Section 8b – Inventory Status:

All chemicals comprising this product are either exempt or listed on the TSCA Inventory.

TSCA Section 12b – Export Notification:

The finished product contains the following chemicals subject to TSCA Section 12b export notification.

Chemical	CAS #
None	NA

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT)

Chemicals present in the product which could require reporting under the statute:

Chemical	CAS # (RQ)	Sec. 302 EDS
None	NA (NA)	No

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

Section 313

The finished product contains the following chemicals listed in this regulation:

Chemical	CAS #	% Wt
None	NA	NA

Section 311/312 HAZARD CATEGORIES

Fire Hazard: NA / Pressure Hazard: NA / Reactivity Hazard: NA / Other: NA
Immediate Hazard: NA / Delayed Hazard: NA

State Regulations (US)

California Proposition 65

The following chemicals identified to exist in the finished product as distributed into commerce are known to the State of California to cause cancer, birth defects, or other reproductive harm:

Chemical	CAS #	% Wt
None	NA	NA

International Regulations (Non-US)

Canadian Domestic Substance List (DSL)

All ingredients remaining in the finished product as distributed into commerce are exempt from, or included on, the Domestic Substances List.

WHMIS Classifications

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 Controlled Products Regulations.

NPRI and Ontario Regulation 127/01

This product contains the following chemicals subject to the reporting requirements of Canada NPRI +/-or Ont. Reg. 127/01:

Chemical	CAS #	% Wt
None	NA	NA

European Inventory of Existing Commercial Chemical Substances (EINECS)

All ingredients remaining in the finished product as distributed into commerce are exempt from, or included on, the European Inventory of Existing Commercial Chemical Substances.

16. OTHER INFORMATION

General summary

Safety Data Sheet based on information and data supplied by the manufacturer.

Further information

This product may be regulated under additional regulations and laws not identified above, such as for uses other than described or as-designed/as-intended by the manufacturer, or for distribution in specific domestic destinations. Distribution into Quebec to follow Canadian Controlled Product Regulations (CPR) 24(1) and 24(2). Distribution into the EU to follow applicable Directives to the Registration of Ingredients for Import as of Intended-Use, and actual Import/Export of the product as-sold.

H319 Causes serious eye irritation.

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16. OTHER INFORMATION

Key to Hazard Statements in Section 3
H335 May cause respiratory irritation.
H315 Causes skin irritation

Sources of data
Manufacturer's Safety Data Sheet, European Waste Catalogue.
European Chemicals Bureau (EINECS and ELINCS)

International Agency for Research on Cancer (1987), *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Overall Evaluations of Carcinogenicity: An updating of IARC Monographs Volumes 1-42, Supplement 7*, Lyon, France.

Ontario Ministry of Labour Regulation 654/86. Regulations Respecting Exposure to Chemical or Biological Agents.

RTECS – Registry of Toxic Effects of Chemical Substances, NIOSH - National Institute for Occupational Safety and Health.

EU Classification (67/548/EEC)



IRRITANT

Risk phrases
R36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN

Preparation Information

Date of issue	December 2, 2014	Supercedes	Prior Versions
Date of Translation from English	----	Translator	HA/DG
LCN	50-01044		

Disclaimer

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Data sheet prepared by Environmental Science Limited.

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