



Revision Date 11-Mar-2016

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier Product Name	RNA LOADING BUFFER, 2X	
Other means of identification Product Code(s) Synonyms	1B1606 No information available	
Recommended use of the chemical	and restrictions on use	
Recommended Use	For Further Manufacturing Use Only.	
Uses advised against	Not for Human or Animal Drug Use	
Details of the supplier of the safety	data sheet	
Company Address	Manufacturer Address	Distributor
VWR International, LLC	VWR Chemicals, LLC	AMRESCO INC.
Radnor Corporate Center	28600 Fountain Parkway	6681 Cochran Road
100 Matsonford Road	Solon, Ohio 44139	SOLON, OHIO 44139
Radnor, PA 19087-8660		·
Company Phone Number	1-800-829-2805	
E-mail Address	info@amresco-inc.com	
Emergency Telephone Number		

Emergency Telephone Number Emergency Telephone Number

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Chemtrec 1-800-424-9300

Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 2

Label elements

Emergency Overview

Danger

Hazard statements

H351 - Suspected of causing cancer H360 - May damage fertility or the unborn child

H371 - May cause damage to organs



Appearance Clear Dark blue to Dark

Physical State Liquid

Violet

Odor No information available

Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC) Not regulated Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Formamide	75-12-7	200-842-0	95-100	Not applicable

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Inhalation	Move to fresh air. If not breathing, give artificial respiration.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth.
Most important symptoms and effe	cts, both acute and delayed
Most Important Symptoms/Effects	No information available.
Indication of any immediate medica	I attention and special treatment needed
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical No information available.

Hazardous Combustion Products	Carbon oxides. Nitrogen oxides (NOx).
<u>Explosion Data</u> Sensitivity to Mechanical Impact Sensitivity to Static Discharge	
Protective Equipment and Precautic As in any fire, wear self-contained brea protective gear.	ons for Firefighters athing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full
	6. ACCIDENTAL RELEASE MEASURES
Personal precautions, protective eq	uipment and emergency procedures
Personal protection	Ensure adequate ventilation, especially in confined areas.
Environmental Precautions	
Environmental Precautions	See Section 12 for additional Ecological information.
Methods and material for containme	ent and cleaning up
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.
	7. HANDLING AND STORAGE
Precautions for Safe Handling	
Handling	Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage, including	ng any incompatibilities
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.
Incompatible Products	Acids. Bases. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Ch	emical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
	Formamide	TWA: 10 ppm	-	TWA: 10 ppm
	75-12-7			TWA: 15 mg/m ³

Appropriate engineering controls

Engineering	Measures
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Eyewash stations Ventilation systems.

Showers

Individual protection measures, such as personal protective equipment

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Eye/Face Protection	Safety glasses with side-shields. Avoid contact with eyes.
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

Information on basic physical and chemical properties

Physical State Appearance Color	Liquid Clear Dark blue to Dark Violet No information available	Odor Odor Threshold	No information available No information available
Property_	Values_	Remarks • Method	
pH	No information available		
Melting point/freezing point			
Boiling Point/Range	No information available		
Flash Point (High in °C)	No information available		
Evaporation Rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor Density	No information available		
Specific Gravity	No information available		
Water Solubility	No information available		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition Temperature	No information available		
Decomposition Temperature	No information available		
Kinematic viscosity	No information available		
Dynamic viscosity	No information available		
Explosive Properties	No information available		
Oxidizing Properties	No information available		
Other Information			
Softening Point	No information available		
Molecular Weight	No information available		
VOC Content	No information available		
Density	No information available		
Bulk Density	No information available		

10. STABILITY AND REACTIVITY

Reactivity No data available

<u>Chemical Stability</u> Stable under recommended storage conditions. <u>Possibility of Hazardous Reactions</u> None under normal processing. <u>Conditions to Avoid</u> Extremes of temperature and direct sunlight. <u>Incompatible Materials</u> Acids. Bases. Strong oxidizing agents. <u>Hazardous Decomposition Products</u> Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	There is no data available for this product.
Eye Contact	There is no data available for this product.
Skin Contact	There is no data available for this product.
Ingestion	There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Formamide	= 5577 mg/kg (Rat) > 5000 mg/kg	-	> 3900 ppm (Rat)6 h
75-12-7	(Rat)		

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Mutagenic Effects Carcinogenicity	No informatic No informatic No informatic	on available.		
Chemical Name	ACGIH	IARC	NTP	OSHA
Formamide 75-12-7	-	-	-	-
Reproductive Toxicity STOT - single exposure STOT - repeated exposure Chronic Toxicity Target Organ Effects Aspiration hazard	No information available. No information available. No information available. Suspected teratogen. Liver, Central nervous system (CNS), Blood, Kidneys. No information available.			

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Ecotoxicity

0.16% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Formamide	500: 96 h Desmodesmus	4600 - 9300: 96 h Leuciscus idus	500: 48 h Daphnia magna mg/L
75-12-7	subspicatus mg/L EC50 500: 72 h	mg/L LC50 static 9135: 96 h	EC50
	Desmodesmus subspicatus mg/L	Brachydanio rerio mg/L LC50 static	
	EC50		

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
Formamide	-0.82
75-12-7	

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging

Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Formamide	-	-	-	-
75-12-7				

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Formamide 75-12-7	-	-	-	-

Chemical Name	California Hazardous Waste Status
Formamide	-
75-12-7	

14. TRANSPORT INFORMATION

DOT	Not regulated
IATA	Not regulated

15. REGULATORY INFORMATION

Complies
Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

<u>SARA 313</u>

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.

Component	SARA 313 - Threshold Values %
Formamide	-
75-12-7 (95-100)	
SARA 311/312 Hazard Categories	

	<u> </u>	<u>/JIZ II</u>	azaru	Calegones	
Δ	cute	Health	Haza	rd	

Chronic Health Hazard		Chronic	Health	Hazard
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No Yes

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)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Formamide 75-12-7	-	-	-	-

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

Chemi	cal Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
-	namide	-	-	-
75	5-12-7			
LLO Otata Da				

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65	
Formamide - 75-12-7	-	

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Formamide	Х	Х	X
75-12-7			

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

Issuing Date	16-May-2013
Revision Date	11-Mar-2016
Revision Note	
No information available	
<u>Disclaimer</u>	

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet