



# Armored RNA<sup>®</sup>, Armored RNA<sup>®</sup> Quant<sup>™</sup>, Custom Armored RNA<sup>®</sup>, Custom Armored RNA<sup>®</sup> Quant<sup>™</sup>, Armored DNA Quant<sup>™</sup>, Custom Armored DNA Quant<sup>™</sup>

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Revision Date: 06/15/2020 Date of Issue: 04/18/2016

Supersedes date: 02/04/2019

Version: 1.3

## SECTION 1: IDENTIFICATION

### Product Identifier

**Product Form:** Mixture

**Product Name:** Armored RNA<sup>®</sup>, Armored RNA<sup>®</sup> Quant<sup>™</sup>, Custom Armored RNA<sup>®</sup>, Custom Armored RNA<sup>®</sup> Quant<sup>™</sup>, Armored DNA Quant<sup>™</sup>, Custom Armored DNA Quant<sup>™</sup>

**Product Reference #:** 42000, 42004, 42006, 42008, 42010, 42012, 42024, 42030, 42032, 42040, 42041, 42042, 42044, 42050, 42090, 42091, 42101, 42102, 42103, 49610, 49650, 49659, 52000, 52003, 52030, 52031, 52036, Custom

### Recommended Use of the Chemical and Restrictions on Use

Lab Reagents.

### Name, Address, and Telephone of the Responsible Party

#### **Company**

Asuragen, Inc.

2150 Woodward Ave Suite 100

Austin, TX 78744

T: +1 512-681-5200

USA, Toll-free T: +1 877-777-1874

E-mail: support@asuragen.com

Web address: www.asuragen.com

### Emergency Telephone Number

**Emergency Number** : Tel: +1 -512-681-5200 US, Toll-free Tel: 1-877-777-1874

## SECTION 2: HAZARDS IDENTIFICATION

### Classification of the Substance or Mixture

#### **GHS-US Classification**

Not classified

### Label Elements

**GHS-US Labeling** No labeling applicable

### Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

**Unknown Acute Toxicity (GHS-US)** No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Mixture

Within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]: this mixture is not considered a hazard when used in a manner which is consistent with the labeled directions.

## SECTION 4: FIRST AID MEASURES

### Description of First-aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### Most Important Symptoms and Effects Both Acute and Delayed

# Armored RNA<sup>®</sup>, Armored RNA<sup>®</sup> Quant<sup>™</sup>, Custom Armored RNA<sup>®</sup>, Custom Armored RNA<sup>®</sup> Quant<sup>™</sup>, Armored DNA Quant<sup>™</sup>, Custom Armored DNA Quant<sup>™</sup>

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**General:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Inhalation:** Prolonged exposure may cause irritation.

**Skin Contact:** Prolonged exposure may cause skin irritation.

**Eye Contact:** May cause slight irritation to eyes.

**Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** None known.

## **Indication of Any Immediate Medical Attention and Special Treatment Needed**

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## **SECTION 5: FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

**Suitable Extinguishing Media:** Water spray, dry chemical, foam, carbon dioxide.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### **Special Hazards Arising From the Substance or Mixture**

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### **Advice for Firefighters**

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** None known.

### **Reference to Other Sections**

Refer to Section 9 for flammability properties.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures:** Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

#### **For Non-Emergency Personnel**

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### **For Emergency Personnel**

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

### **Environmental Precautions**

Prevent entry to sewers and public waters.

### **Methods and Materials for Containment and Cleaning Up**

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### **Reference to Other Sections**

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## **SECTION 7: HANDLING AND STORAGE**

### **Precautions for Safe Handling**

**Other Information:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### **Conditions for Safe Storage, Including Any Incompatibilities**

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Safety Data Sheet

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**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Products:** Strong acids, strong bases, strong oxidizers.

## **Specific End Use(s)**

Lab Reagents.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

### **Exposure Controls**

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Gloves. Protective clothing. Protective goggles.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear protective gloves.

**Eye Protection:** Chemical safety goggles.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Other Information:** When using, do not eat, drink or smoke

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on Basic Physical and Chemical Properties**

Physical State	: Liquid
Appearance	: Clear, colorless
Odor	: Not available
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available

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Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Relative Density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Not available
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available
Explosion Data - Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data - Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge.

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Hazardous reactions will not occur under normal conditions.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers.

**Hazardous Decomposition Products:** None known.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not classified

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** None known.

### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:** No data is available

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

**Ecology - General:** Not classified.

### Persistence and Degradability

Quantitative Armored RNA<sup>®</sup>--Quant BCR/ABL b3/a2, Quant BCR/ABL e1/a2, Quant BCR/ABL b2/a2, Quant HCV (Genotype 2b), Quant Enterovirus, Quant HIV; Qualitative Armored RNA<sup>®</sup>--HIV (Subtype B), Hepatitis C Virus (Genotype 1a, Genotype 1b, Genotype 2a/c, Genotype 2b, Genotype 3a), Hepatitis G Virus, Norwalk Virus (Genogroup I, Genogroup II), West Nile virus (HNY1999, NEN, Cap), Dengue Virus (Type I), Enterovirus, SARS (BNI-1, CoV-NC); Custom Armored RNA<sup>®</sup>, Custom Armored RNA<sup>®</sup>Quant<sup>™</sup>, Custom Armored DNA Quant<sup>™</sup>

Persistence and Degradability	Not established.
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### Bioaccumulative Potential

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Bioaccumulative Potential	Not established.
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**Mobility in Soil** Not available

## **Other Adverse Effects**

**Other Information:** Avoid release to the environment.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations

**Ecology - Waste Materials:** Avoid release to the environment.

## **SECTION 14: TRANSPORT INFORMATION**

**In Accordance with DOT** Not regulated for transport

**In Accordance with IMDG** Not regulated for transport

**In Accordance with IATA** Not regulated for transport

**In Accordance with TDG** Not regulated for transport

## **SECTION 15: REGULATORY INFORMATION**

### **US Federal Regulations**

No additional information is available

### **US State Regulations**

Neither this product nor its chemical components appear on any US state lists.

### **Canadian Regulations**

Quantitative Armored RNA<sup>®</sup>--Quant BCR/ABL b3/a2, Quant BCR/ABL e1/a2, Quant BCR/ABL b2/a2, Quant HCV (Genotype 2b), Quant Enterovirus, Quant HIV; Qualitative Armored RNA<sup>®</sup>--HIV (Subtype B), Hepatitis C Virus (Genotype 1a, Genotype 1b, Genotype 2a/c, Genotype 2b, Genotype 3a), Hepatitis G Virus, Norwalk Virus (Genogroup I, Genogroup II), West Nile virus (HNY1999, NEN, Cap), Dengue Virus (Type I), Enterovirus, SARS (BNI-1, CoV-NC); Custom Armored RNA<sup>®</sup>, Custom Armored RNA<sup>®</sup>Quant<sup>™</sup>, Custom Armored DNA Quant<sup>™</sup>

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## **SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION**

**Revision Date** : 02/04/2019

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

### **Party Responsible For The Preparation Of This Document**

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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

NA GHS SDS