Document:
 D-54091

 Version:
 D-54091-001

 Release date:
 Nov. 10, 2015

 Update date:
 Nov. 10, 2015

Printed on:

MATERIAL SAFETY DATA SHEET (SDS)

Applies to part numbers: R-03725-B10 R-03725-B50

Section 1

Product and company identification

Nov. 10, 2015

Product name: DMSO

Supplier: Advansta Inc.

Address: 1505 Adams Dr., Ste. B1

Menlo Park, CA 94025

Phone: 650-325-1980

Section 2 Composition/Information on Ingredients

Ingredient CAS # %

DMSO 67-68-5 ≥90%

Section 3 Hazards identification

EMERGENCY OVERVIEW:

Harmful if swallowed. May cause eye and skin irritation. May cause respiratory tract irritation. May be harmful if absorbed through skin. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

HMIS RATING	
HEALTH	1
FLAMMABILITY	1
REACTIVITY	0

NFPA RATING	
HEALTH	1
FLAMMABILITY	1
REACTIVITY	0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.

Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

 FLASH POINT
 89°C (192°F) closed cup

 AUTOIGNITION TEMP
 300-302°C (572-575°F)

FLAMMABILITY N/A

EXTINGUISHING MEDIA

Suitable: Water spray, carbon dioxide, foam and dry powder

Not suitable: Not known

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with

skin and eyes.

Section 6 - Accidental Release Measures

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.

Section 7 - Handling and Storage

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HANDLING

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated

exposure.

STORAGE

Suitable: Keep tightly closed. Store at room temperature.

Section 8 - Exposure Controls / PPE

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Respiratory protection not required. If desired, use multi-purpose respirator.

Hand: Protective gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES: Wash thoroughly after handling.

Section 9 - Physical and chemical properties

APPEARANCE PHYSICAL STATE: Clear liquid

Section 10 - Stability and Reactivity

STABILITY: Stable under recommended storage conditions

Materials to Avoid: Strong oxidizing agents, organic and inorganic acid chlorides, alkali metals, hydbromic

acid, acidic solutions of alkali bromides

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: Harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No known significant effects or critical hazards.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION:

Observe all federal, state, and local environmental regulations.

Within the present knowledge of the supplier, this product is not regarded as hazardous waste.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air.

<u>Section 15 - Regulatory Information</u>

OSHA Hazards: Target organ effect. Harmful by ingestion. Toxic by skin absorption. Irritant.

Section 16 Other information

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 Document:
 D-54081

 Version:
 D-54081-001

 Release date:
 July 28, 2015

 Update date:
 July 28, 2015

Printed on:

MATERIAL SAFETY DATA SHEET (SDS)

Applies to part numbers: R-03113-030

Section 1

Product and company

July 28, 2015

identification

Product name: Quenching Solution

Supplier: Advansta Inc.

Address: 1505 Adams Dr., Ste. B1

Menlo Park, CA 94025

Phone: 650-325-1980

Section 2 Composition/Information on Ingredients

 Ingredient
 CAS #
 %

 Ethanolamine
 141-43-5
 ≤10

 Water
 7732-18-5
 To 100%

Section 3 Hazards identification

EMERGENCY OVERVIEW:

Harmful if swallowed. May cause eye and skin irritation. May cause respiratory tract irritation. May be harmful if absorbed through skin. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

HMIS RATING	
HEALTH	3
FLAMMABILITY	2
REACTIVITY	0

NFPA RATING	
HEALTH	3
FLAMMABILITY	2
REACTIVITY	0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.

Assure adequate flushing by separating the eyelids with fingers. Call a physician.

<u>Section 5 - Fire Fighting Measures</u>

FLASH POINT 91°C (196°F) – closed cup

AUTOIGNITION TEMP 424°C (795°F)

FLAMMABILITY N/A

EXTINGUISHING MEDIA

Suitable: Water spray, dry chemical powder, chemical foam or alcohol-resistant foam.

Not suitable: Not known

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with

skin and eyes.

Section 6 - Accidental Release Measures

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.

Section 7 - Handling and Storage

HANDLING

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated

exposure.

STORAGE

Suitable: Keep tightly closed. Store at room temperature.

Section 8 - Exposure Controls / PPE

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Respiratory protection not required. If desired, use multi-purpose respirator.

Hand: Protective gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES: Wash thoroughly after handling.

Section 9 - Physical and chemical properties

APPEARANCE PHYSICAL STATE: Clear liquid

Section 10 - Stability and Reactivity

STABILITY: Stable under recommended storage conditions

Materials to Avoid: Strong oxidizing agents, acids, bases.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: Harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No known significant effects or critical hazards.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION:

Observe all federal, state, and local environmental regulations.

Within the present knowledge of the supplier, this product is not regarded as hazardous waste.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air.

Section 15 - Regulatory Information

OSHA Hazards: Target organ effect. Harmful by ingestion. Toxic by skin absorption. Irritant.

Section 16 Other information

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 Document:
 D-54083

 Version:
 D-54083-001

 Release date:
 July 28, 2015

 Update date:
 July 28, 2015

Printed on:

MATERIAL SAFETY DATA SHEET (SDS)

Applies to part numbers: R-03114-080

Section 1

Product and company

July 28, 2015

identification

Product name: Neutralization Buffer

Supplier: Advansta Inc.

Address: 1505 Adams Dr., Ste. B1

Menlo Park, CA 94025

Phone: 650-325-1980

Section 2 Composition/Information on Ingredients

 Ingredient
 CAS #
 %

 Tris
 77-86-1
 ≤15

 Water
 7732-18-5
 To 100%

Section 3 Hazards identification

EMERGENCY OVERVIEW:

Harmful if swallowed. May cause eye and skin irritation. May cause respiratory tract irritation. May be harmful if absorbed through skin. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

HMIS RATING	
HEALTH	1
FLAMMABILITY	0
REACTIVITY	0

NFPA RATING	
HEALTH	1
FLAMMABILITY	0
REACTIVITY	0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.

Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT N/A
AUTOIGNITION TEMP N/A
FLAMMABILITY N/A

EXTINGUISHING MEDIA

Suitable: Water spray, dry chemical powder, chemical foam or alcohol-resistant foam.

Not suitable: Not known

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with

skin and eyes.

Section 6 - Accidental Release Measures

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.

Section 7 - Handling and Storage

HANDLING

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated

exposure.

STORAGE

Suitable: Keep tightly closed. Store at room temperature.

Section 8 - Exposure Controls / PPE

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Respiratory protection not required. If desired, use multi-purpose respirator.

Hand: Protective gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES: Wash thoroughly after handling.

Section 9 - Physical and chemical properties

APPEARANCE PHYSICAL STATE: Clear liquid

Section 10 - Stability and Reactivity

STABILITY: Stable under recommended storage conditions

Materials to Avoid: Strong oxidizing agents, acids, bases.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: Harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No known significant effects or critical hazards.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION:

Observe all federal, state, and local environmental regulations.

Within the present knowledge of the supplier, this product is not regarded as hazardous waste.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air.

Section 15 - Regulatory Information

OSHA Hazards: Target organ effect. Harmful by ingestion. Toxic by skin absorption. Irritant.

Section 16 Other information

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 Document:
 D-54082

 Version:
 D-54082-001

 Release date:
 July 28, 2015

 Update date:
 July 28, 2015

Printed on:

MATERIAL SAFETY DATA SHEET (SDS)

Applies to part numbers: R-03112-250

Section 1

Product and company

July 28, 2015

identification

Product name: Antibody Labeling Buffer

Supplier: Advansta Inc.

Address: 1505 Adams Dr., Ste. B1

Menlo Park, CA 94025

Phone: 650-325-1980

Section 2 Composition/Information on Ingredients

 Ingredient
 CAS #
 %

 Proprietary Reagent
 -- ≤15

 Water
 7732-18-5
 To 100%

Section 3 Hazards identification

EMERGENCY OVERVIEW:

Harmful if swallowed. May cause eye and skin irritation. May cause respiratory tract irritation. May be harmful if absorbed through skin. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

HMIS RATING	
HEALTH	2
FLAMMABILITY	0
REACTIVITY	0

NFPA RATING	
HEALTH	2
FLAMMABILITY	0
REACTIVITY	0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.

Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT N/A
AUTOIGNITION TEMP N/A
FLAMMABILITY N/A

EXTINGUISHING MEDIA

Suitable: Water spray, dry chemical powder, chemical foam or alcohol-resistant foam.

Not suitable: Not known

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with

skin and eyes.

Section 6 - Accidental Release Measures

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.

Section 7 - Handling and Storage

HANDLING

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated

exposure.

STORAGE

Suitable: Keep tightly closed. Store at room temperature.

Section 8 - Exposure Controls / PPE

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Respiratory protection not required. If desired, use multi-purpose respirator.

Hand: Protective gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES: Wash thoroughly after handling.

Section 9 - Physical and chemical properties

APPEARANCE PHYSICAL STATE: Clear liquid

Section 10 - Stability and Reactivity

STABILITY: Stable under recommended storage conditions

Materials to Avoid: Strong oxidizing agents, acids, bases.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur.

<u>Section 11 - Toxicological Information</u>

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: Harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No known significant effects or critical hazards.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION:

Observe all federal, state, and local environmental regulations.

Within the present knowledge of the supplier, this product is not regarded as hazardous waste.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air.

Section 15 - Regulatory Information

OSHA Hazards: Target organ effect. Harmful by ingestion. Toxic by skin absorption. Irritant.

Section 16 Other information

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