



Material Safety Data Sheet

Product Name: CellCor™ CD MSC (RUO)

Reviewed on: May, 2020

1. Identification of Substance/mixture and of the company/undertaking

1) Identification of the substance or mixture

Catalogue No. YSP001
Product name CellCor™ CD MSC (RUO)

2) Relevant identified uses of the substance or mixture and uses advised against

Identified uses This product is manufactured for use of cell culture (research use only)

3) Details of the supplier of the safety data sheet

Company Xcell Therapeutics Inc.
#1305, Hanwha Biz Metro B/D, 242 Digital-ro, Guro-gu, Seoul, 08394, Korea
+82 2 863 1311
Responsible Department Xcell Therapeutics Inc. R&D Institute

2. Hazards Identification

1) **Hazards-Risk Classification:** Not available

2) Label elements including precautionary statement

- Symbol: Not available
- Signal Word: Not available
- Hazard-Risk Statement: Harmful if swallowed
- Precautionary Statement:
Prevent: Protect from sunlight. Do not eat, drink or smoke when using this product
Response: Get medical advice/attention if you feel unwell
Storage: Protect from sunlight
Disposal: (According to the contents indicated on the relevant regulations) dispose of the product of container

3) **Other Hazard Risk which are not included in the classification criteria:** Not available



Material Safety Data Sheet

3. Composition/Information on Ingredients

- 1) **Principal Components:** Water (CAS number: 7732-18-5)
- 2) **Composition:** The subject formulation is a nutrient blend of amino acids, vitamins, organic and inorganic supplements and salts. With the exception of purified water, all ingredients are in concentrations of less than 5%. The concentrations of components of this formulation are considered a trade secret.

4. First aid measures

1) Description of first aid measures

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material is swallowed, call a physician immediately. Loosen tight clothing such as collar, tie, belt or waistband.
Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least minutes. Get medical attention. Repeated or prolonged exposure is not known to aggravate medical condition.
Skin Contact	Wash thoroughly with soap and water.

- 2) **Most important symptoms and effects, both acute and delayed:** We have no description of any toxic symptoms.
- 3) **Indication of any immediate medical attention and special treatment needed:** No information available

5. Fire-Fighting measures

1) Suitable extinguishing media

- Small Fire: Use DRY chemical powder
- Large Fire: Use water spray, fog or foam. Do not use water jet

2) **Special protective equipment:** If necessary, wear breathing apparatus covering whole face.

3) **Abnormal firing:** Possible to produce noxious decomposition gas by fire or high temperature

4) **General harmful danger:** None



Material Safety Data Sheet

6. Accidental release measures

- 1) **Personal Precautions:** Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- 2) **Small Spill and Leak:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.
- 3) **Large Spill and Leak:** Use a shovel to put the material into a convenient waste disposal container.

7. Handling and storage

- 1) **Precautions for Handling:** Refer to section 8 for appropriate personal protection. Avoid contact with eyes, skin or clothing. Product may cause allergic reaction in sensitized individuals. Do not pipet by mouth.
- 2) **Storage:** Keep container tightly closed. Store below -20°C

8. Exposure controls & personal protection

- 1) **Engineering Measures:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- 2) **Hygiene Measures:** Wash hands after handling compounds and before Eating, smoking, using lavatory, and at the end of day.
- 3) **Occupational Exposure Limit:** Not Available
- 4) **Personal Protective Equipment**
 - Skin & Body: Lab coat
 - Eyes: Safety glasses

9. Physical and chemical properties

- 1) **Appearance:** Clear / Yellow to light orange
- 2) **Upper/lower flammability or Explosive limits:** Not available
- 3) **Odour:** Typical
- 4) **Vapor Density/Pressure:** Not available



Material Safety Data Sheet

- 5) **pH:** 7.20 ± 0.30
- 6) **Relative density:** Not available
- 7) **Freezing point:** Not available
- 8) **Solubility:** Soluble in water
- 9) **Boiling point:** Not available
- 10) **Flash point:** Not available
- 11) **Evaporation rate:** Not available
- 12) **Flammability:** Not flammable
- 13) **Viscosity:** Not available

10. Stability and reactivity

- 1) **Reactivity:** Not available
- 2) **Chemical stability:** Stable under recommended storage and usage conditions
- 3) **Possible hazardous reactions:** Not available
- 4) **Conditions to be avoided**
 - Strong radiation can destroy biological activity
 - Detergent can destroy biological activity
 - Temperature above 50 degrees can destroy biological activity
- 5) **Hazardous Combustion:** Toxic fumes of Carbon Monoxide (CO) and Carbon Dioxide (CO₂)
- 6) **Decomposition Products:** Nitrogen Oxides (NO, NO₂), Sulfur oxides (SO, SO₂)

11. Toxicological information

- 1) **Carcinogenicity:** Not available
- 2) **Acute toxicity:** Not irritant on respiratory system and mucosa at high Concentration

12. Ecological Information

- 1) **Aquatic and terrestrial ecotoxicity:** Not available
- 2) **Persistence and degradability:** Not available
- 3) **Bioaccumulation potential:** Not available
- 4) **Mobility in soil:** Not available
- 5) **Other adverse effects:** Not available



Material Safety Data Sheet

13. Disposal considerations

- 1) **Appropriate Method of Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations
- 2) **Appropriate disposal containers:** No specific restrictions on waste container type

14. Transport information

Not classified as hazardous under transport regulations

15. Regulatory Information

Under investigation

16. Other Information

This MSDS refers to the Korea Industrial Safety Public Corporation Data. This document was written according to the article 41 of the Korean Industrial Safety Health Law. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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Material Safety Data Sheet

Product Name: CellCor™ CD MSC (GMP)

Reviewed on: May, 2020

1. Identification of Substance/mixture and of the company/undertaking

1) Identification of the substance or mixture

Catalogue No. YSP002
Product name CellCor™ CD MSC (GMP)

2) Relevant identified uses of the substance or mixture and uses advised against

Identified uses This product is manufactured for use of cell culture

3) Details of the supplier of the safety data sheet

Company Xcell Therapeutics Inc.
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Responsible Department Xcell Therapeutics Inc. R&D Institute

2. Hazards Identification

1) **Hazards-Risk Classification:** Not available

2) Label elements including precautionary statement

- Symbol: Not available
- Signal Word: Not available
- Hazard-Risk Statement: Harmful if swallowed
- Precautionary Statement:
Prevent: Protect from sunlight. Do not eat, drink or smoke when using this product
Response: Get medical advice/attention if you feel unwell
Storage: Protect from sunlight
Disposal: (According to the contents indicated on the relevant regulations) dispose of the product of container

3) **Other Hazard Risk which are not included in the classification criteria:** Not available



Material Safety Data Sheet

3. Composition/Information on Ingredients

- 1) **Principal Components:** Water (CAS number: 7732-18-5)
- 2) **Composition:** The subject formulation is a nutrient blend of amino acids, vitamins, organic and inorganic supplements and salts. With the exception of purified water, all ingredients are in concentrations of less than 5%. The concentrations of components of this formulation are considered a trade secret.

4. First aid measures

1) Description of first aid measures

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material is swallowed, call a physician immediately. Loosen tight clothing such as collar, tie, belt or waistband.
Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least minutes. Get medical attention. Repeated or prolonged exposure is not known to aggravate medical condition.
Skin Contact	Wash thoroughly with soap and water.

- 2) **Most important symptoms and effects, both acute and delayed:** We have no description of any toxic symptoms.
- 3) **Indication of any immediate medical attention and special treatment needed:** No information available

5. Fire-Fighting measures

1) Suitable extinguishing media

- Small Fire: Use DRY chemical powder
- Large Fire: Use water spray, fog or foam. Do not use water jet

2) **Special protective equipment:** If necessary, wear breathing apparatus covering whole face.

3) **Abnormal firing:** Possible to produce noxious decomposition gas by fire or high temperature

4) **General harmful danger:** None



Material Safety Data Sheet

6. Accidental release measures

- 1) **Personal Precautions:** Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- 2) **Small Spill and Leak:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.
- 3) **Large Spill and Leak:** Use a shovel to put the material into a convenient waste disposal container.

7. Handling and storage

- 1) **Precautions for Handling:** Refer to section 8 for appropriate personal protection. Avoid contact with eyes, skin or clothing. Product may cause allergic reaction in sensitized individuals. Do not pipet by mouth.
- 2) **Storage:** Keep container tightly closed. Store below -20°C

8. Exposure controls & personal protection

- 1) **Engineering Measures:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- 2) **Hygiene Measures:** Wash hands after handling compounds and before Eating, smoking, using lavatory, and at the end of day.
- 3) **Occupational Exposure Limit:** Not Available
- 4) **Personal Protective Equipment**
 - Skin & Body: Lab coat
 - Eyes: Safety glasses

9. Physical and chemical properties

- 1) **Appearance:** Clear / Yellow to light orange
- 2) **Upper/lower flammability or Explosive limits:** Not available
- 3) **Odour:** Typical
- 4) **Vapor Density/Pressure:** Not available



Material Safety Data Sheet

- 5) **pH:** 7.20 ± 0.30
- 6) **Relative density:** Not available
- 7) **Freezing point:** Not available
- 8) **Solubility:** Soluble in water
- 9) **Boiling point:** Not available
- 10) **Flash point:** Not available
- 11) **Evaporation rate:** Not available
- 12) **Flammability:** Not flammable
- 13) **Viscosity:** Not available

10. Stability and reactivity

- 1) **Reactivity:** Not available
- 2) **Chemical stability:** Stable under recommended storage and usage conditions
- 3) **Possible hazardous reactions:** Not available
- 4) **Conditions to be avoided**
 - Strong radiation can destroy biological activity
 - Detergent can destroy biological activity
 - Temperature above 50 degrees can destroy biological activity
- 5) **Hazardous Combustion:** Toxic fumes of Carbon Monoxide (CO) and Carbon Dioxide (CO₂)
- 6) **Decomposition Products:** Nitrogen Oxides (NO, NO₂), Sulfur oxides (SO, SO₂)

11. Toxicological information

- 1) **Carcinogenicity:** Not available
- 2) **Acute toxicity:** Not irritant on respiratory system and mucosa at high Concentration

12. Ecological Information

- 1) **Aquatic and terrestrial ecotoxicity:** Not available
- 2) **Persistence and degradability:** Not available
- 3) **Bioaccumulation potential:** Not available
- 4) **Mobility in soil:** Not available
- 5) **Other adverse effects:** Not available



Material Safety Data Sheet

13. Disposal considerations

- 1) **Appropriate Method of Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations
- 2) **Appropriate disposal containers:** No specific restrictions on waste container type

14. Transport information

Not classified as hazardous under transport regulations

15. Regulatory Information

Under investigation

16. Other Information

This MSDS refers to the Korea Industrial Safety Public Corporation Data. This document was written according to the article 41 of the Korean Industrial Safety Health Law. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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Material Safety Data Sheet

Product Name: CellCor™ SFD MSC (RUO)

Reviewed on: May, 2020

1. Identification of Substance/mixture and of the company/undertaking

1) Identification of the substance or mixture

Catalogue No. YSP009
Product name CellCor™ SFD MSC (RUO)

2) Relevant identified uses of the substance or mixture and uses advised against

Identified uses This product is manufactured for use of cell culture (research use only)

3) Details of the supplier of the safety data sheet

Company Xcell Therapeutics Inc.
#1305, Hanwha Biz Metro B/D, 242 Digital-ro, Guro-gu, Seoul, 08394, Korea
+82 2 863 1311
Responsible Department Xcell Therapeutics Inc. R&D Institute

2. Hazards Identification

1) **Hazards-Risk Classification:** Not available

2) Label elements including precautionary statement

- Symbol: Not available
- Signal Word: Not available
- Hazard-Risk Statement: Harmful if swallowed
- Precautionary Statement:
Prevent: Protect from sunlight. Do not eat, drink or smoke when using this product
Response: Get medical advice/attention if you feel unwell
Storage: Protect from sunlight
Disposal: (According to the contents indicated on the relevant regulations) dispose of the product of container

3) **Other Hazard Risk which are not included in the classification criteria:** Not available



Material Safety Data Sheet

3. Composition/Information on Ingredients

- 1) **Principal Components:** Water (CAS number: 7732-18-5)
- 2) **Composition:** The subject formulation is a nutrient blend of amino acids, vitamins, organic and inorganic supplements and salts. With the exception of purified water, all ingredients are in concentrations of less than 5%. The concentrations of components of this formulation are considered a trade secret.

4. First aid measures

1) Description of first aid measures

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material is swallowed, call a physician immediately. Loosen tight clothing such as collar, tie, belt or waistband.
Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least minutes. Get medical attention. Repeated or prolonged exposure is not known to aggravate medical condition.
Skin Contact	Wash thoroughly with soap and water.

- 2) **Most important symptoms and effects, both acute and delayed:** We have no description of any toxic symptoms.
- 3) **Indication of any immediate medical attention and special treatment needed:** No information available

5. Fire-Fighting measures

- 1) **Suitable extinguishing media**
 - Small Fire: Use DRY chemical powder
 - Large Fire: Use water spray, fog or foam. Do not use water jet
- 2) **Special protective equipment:** If necessary, wear breathing apparatus covering whole face.
- 3) **Abnormal firing:** Possible to produce noxious decomposition gas by fire or high temperature
- 4) **General harmful danger:** None



Material Safety Data Sheet

6. Accidental release measures

- 1) **Personal Precautions:** Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- 2) **Small Spill and Leak:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.
- 3) **Large Spill and Leak:** Use a shovel to put the material into a convenient waste disposal container.

7. Handling and storage

- 1) **Precautions for Handling:** Refer to section 8 for appropriate personal protection. Avoid contact with eyes, skin or clothing. Product may cause allergic reaction in sensitized individuals. Do not pipet by mouth.
- 2) **Storage:** Keep container tightly closed. Store below -20°C

8. Exposure controls & personal protection

- 1) **Engineering Measures:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- 2) **Hygiene Measures:** Wash hands after handling compounds and before Eating, smoking, using lavatory, and at the end of day.
- 3) **Occupational Exposure Limit:** Not Available
- 4) **Personal Protective Equipment**
 - Skin & Body: Lab coat
 - Eyes: Safety glasses

9. Physical and chemical properties

- 1) **Appearance:** Clear / Yellow to light orange
- 2) **Upper/lower flammability or Explosive limits:** Not available
- 3) **Odour:** Typical
- 4) **Vapor Density/Pressure:** Not available



Material Safety Data Sheet

- 5) **pH:** 7.20 ± 0.30
- 6) **Relative density:** Not available
- 7) **Freezing point:** Not available
- 8) **Solubility:** Soluble in water
- 9) **Boiling point:** Not available
- 10) **Flash point:** Not available
- 11) **Evaporation rate:** Not available
- 12) **Flammability:** Not flammable
- 13) **Viscosity:** Not available

10. Stability and reactivity

- 1) **Reactivity:** Not available
- 2) **Chemical stability:** Stable under recommended storage and usage conditions
- 3) **Possible hazardous reactions:** Not available
- 4) **Conditions to be avoided**
 - Strong radiation can destroy biological activity
 - Detergent can destroy biological activity
 - Temperature above 50 degrees can destroy biological activity
- 5) **Hazardous Combustion:** Toxic fumes of Carbon Monoxide (CO) and Carbon Dioxide (CO₂)
- 6) **Decomposition Products:** Nitrogen Oxides (NO, NO₂), Sulfur oxides (SO, SO₂)

11. Toxicological information

- 1) **Carcinogenicity:** Not available
- 2) **Acute toxicity:** Not irritant on respiratory system and mucosa at high Concentration

12. Ecological Information

- 1) **Aquatic and terrestrial ecotoxicity:** Not available
- 2) **Persistence and degradability:** Not available
- 3) **Bioaccumulation potential:** Not available
- 4) **Mobility in soil:** Not available
- 5) **Other adverse effects:** Not available



Material Safety Data Sheet

13. Disposal considerations

- 1) **Appropriate Method of Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations
- 2) **Appropriate disposal containers:** No specific restrictions on waste container type

14. Transport information

Not classified as hazardous under transport regulations

15. Regulatory Information

Under investigation

16. Other Information

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Material Safety Data Sheet

Product Name: CellCor™ SFD MSC (GMP)

Reviewed on: May, 2020

1. Identification of Substance/mixture and of the company/undertaking

1) Identification of the substance or mixture

Catalogue No. YSP010
Product name CellCor™ SFD MSC

2) Relevant identified uses of the substance or mixture and uses advised against

Identified uses This product is manufactured for use of cell culture

3) Details of the supplier of the safety data sheet

Company Xcell Therapeutics Inc.
#1305, Hanwha Biz Metro B/D, 242 Digital-ro, Guro-gu, Seoul, 08394, Korea
+82 2 863 1311
Responsible Department Xcell Therapeutics Inc. R&D Institute

2. Hazards Identification

1) **Hazards-Risk Classification:** Not available

2) Label elements including precautionary statement

- Symbol: Not available
- Signal Word: Not available
- Hazard-Risk Statement: Harmful if swallowed
- Precautionary Statement:
Prevent: Protect from sunlight. Do not eat, drink or smoke when using this product
Response: Get medical advice/attention if you feel unwell
Storage: Protect from sunlight
Disposal: (According to the contents indicated on the relevant regulations) dispose of the product of container

3) **Other Hazard Risk which are not included in the classification criteria:** Not available



Material Safety Data Sheet

3. Composition/Information on Ingredients

- 1) **Principal Components:** Water (CAS number: 7732-18-5)
- 2) **Composition:** The subject formulation is a nutrient blend of amino acids, vitamins, organic and inorganic supplements and salts. With the exception of purified water, all ingredients are in concentrations of less than 5%. The concentrations of components of this formulation are considered a trade secret.

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1) Description of first aid measures

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
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Skin Contact	Wash thoroughly with soap and water.

- 2) **Most important symptoms and effects, both acute and delayed:** We have no description of any toxic symptoms.
- 3) **Indication of any immediate medical attention and special treatment needed:** No information available

5. Fire-Fighting measures

1) Suitable extinguishing media

- Small Fire: Use DRY chemical powder
- Large Fire: Use water spray, fog or foam. Do not use water jet

2) **Special protective equipment:** If necessary, wear breathing apparatus covering whole face.

3) **Abnormal firing:** Possible to produce noxious decomposition gas by fire or high temperature

4) **General harmful danger:** None



Material Safety Data Sheet

6. Accidental release measures

- 1) **Personal Precautions:** Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
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7. Handling and storage

- 1) **Precautions for Handling:** Refer to section 8 for appropriate personal protection. Avoid contact with eyes, skin or clothing. Product may cause allergic reaction in sensitized individuals. Do not pipet by mouth.
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- 1) **Engineering Measures:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- 2) **Hygiene Measures:** Wash hands after handling compounds and before Eating, smoking, using lavatory, and at the end of day.
- 3) **Occupational Exposure Limit:** Not Available
- 4) **Personal Protective Equipment**
 - Skin & Body: Lab coat
 - Eyes: Safety glasses

9. Physical and chemical properties

- 1) **Appearance:** Clear / Yellow to light orange
- 2) **Upper/lower flammability or Explosive limits:** Not available
- 3) **Odour:** Typical
- 4) **Vapor Density/Pressure:** Not available



Material Safety Data Sheet

- 5) **pH:** 7.20 ± 0.30
- 6) **Relative density:** Not available
- 7) **Freezing point:** Not available
- 8) **Solubility:** Soluble in water
- 9) **Boiling point:** Not available
- 10) **Flash point:** Not available
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10. Stability and reactivity

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- 2) **Chemical stability:** Stable under recommended storage and usage conditions
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- 1) **Carcinogenicity:** Not available
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- 1) **Aquatic and terrestrial ecotoxicity:** Not available
- 2) **Persistence and degradability:** Not available
- 3) **Bioaccumulation potential:** Not available
- 4) **Mobility in soil:** Not available
- 5) **Other adverse effects:** Not available



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13. Disposal considerations

- 1) **Appropriate Method of Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations
- 2) **Appropriate disposal containers:** No specific restrictions on waste container type

14. Transport information

Not classified as hazardous under transport regulations

15. Regulatory Information

Under investigation

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