C41 POWDER DEVELOPER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Distributor: Cinestill Inc.
100 Latona Road, Rochester, NY 14652
Product Name: **CS41 DEVELOPER POWDER**
Product Number: **10123**
Product Use: Powder Color Negative Film Processing, Photographic developer component
Customer Information Phone Number: 1-877-247-3456
CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300
Date Reviewed: 1/05/2019
Version: 3.0

2. HAZARDOUS IDENTIFICATION

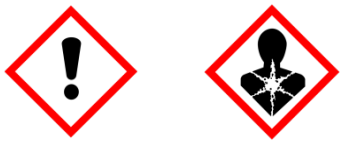
2.1 Classification of the substance or mixture

Health hazard

Acute toxicity, Oral (Category 4), H302
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Harmful if inhaled (Category 3), H332

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word: WARNING

Hazard statement(s)

H302	Harmful if swallowed
H317	May cause allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation

Precautionary statement(s)

P261	Avoid breathing mist, dust, spray
P264	Wash skin thoroughly after handling
P280	Wear protective gloves, eye protection
P301 + P312	IF SWALLOWED; call a POISON CENTER or doctor/physician if you feel unwell

P302 + P352 IF ON SKIN: Wash with plenty of soap
P304 + P340 IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P363 Wash contaminated clothing before reuse
P391 Collect spillage
P501 Dispose of contents to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	OHSA PEL	ACGIH TLV	Weight %
Sodium Carbonate	497-19-8	N.E.	N.E.	70-80
DTPA	67-43-6	N.E.	N.E.	5-10
CD4	25646-77-9	15 mg/m³ (dust)	10 mg/m³	5-10
Sodium Sulfite	7757-83-7	N.E.	N.E.	1-5
Hydroxylamine sulfate	10039-54-0	N.E.	N.E.	1-3

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Inhalation: If symptomatic, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: Do not induce vomiting. Only induce vomiting at the instruction of medical personnel. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Skin Contact: Flush skin with plenty of water and wash with a non-alkaline skin cleaner. Wash contaminated clothes before reuse. Get medical attention if irritation develops.

Aggravated Medical Conditions: Individuals who are under the care of a physician or have chronic ailments, should consult a physician before using this product.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Noncombustible. Use agent appropriate for surrounding fire.

5.2 Special Hazards arising from substance or mixture

Fire or excessive heat may cause production of hazardous decomposition products.
Combustion Products: Carbon dioxide, carbon monoxide, and sulfur.

5.3 Advise for firefighters

Wear self-contained breathing NIOSH/MSHA approved apparatus and protective clothing to prevent contact with skin and eyes. Fire or excessive heat may produce hazardous decomposition products. Use water to keep containers cool.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Review fire and explosion hazards and safety precautions before proceeding with cleanup. Use appropriate personal protective equipment. Avoid contact with skin and eyes. Stop the spillage. Dike the spill. Absorb spillage in inert material. Soak up with sawdust, sand, or other absorbent material. Remove non-usable solid material and/or contaminated soil for disposal in an approved and permitted landfill.

6.2 Environmental precautions

Prevent liquid from entering sewers, waterways or low areas. Discharge to sewer requires approval of permitting authority and may require pre-treatment. Contaminated surfaces should be cleaned using water.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Store in a cool, dry, well-ventilated area. Keep containers closed. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

7.2 Conditions for safe storage, including any incompatibles

Do not store with incompatible materials. Do not store with strong acids. All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Triple rinse before disposal. Dispose of in a licensed facility.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

See Section 3.

8.2 Exposure controls

Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal protective equipment

Eye Protection: Safety glasses with side shields (or goggles).

Respiratory Protection: When this product is used in the intended way, no respiratory protection is anticipated to be necessary. However, if use conditions generate decomposition vapors or fumes; use a NIOSH approved respirator with HEPA cartridges.

Skin protection: Latex, rubber, or neoprene waterproof gloves are recommended.

Body protection: Rubber or plastic apron.

Respiratory protection: Local exhaust ventilation is recommended. Ventilation must be adequate to keep hazardous ingredients below their exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance And Odor: powder with no odor.
Solubility In Water: Complete
Boiling Point: Not applicable
Vapor Pressure: Not applicable
Specific Gravity: Not applicable
Melting Point: N.E.
Freezing Point: N.E.
Evaporation Rate: Not applicable
Vapor Density: Not applicable
Percent Volatile: 0
Ph: Not applicable
Molecular Weight: N.E.
Pounds Per Gallon: N.E.
V.O.C. = 0

10. STABILITY AND REACTIVITY

10.1 Reactivity
Stable

10.2 Chemical stability
Conditions To Avoid: None

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
High temperatures

10.5 Incompatible Materials
Strong acids, powdered aluminum

10.6 Decomposition Products
May produce oxides of sodium, sulfur, hydroxide, and carbon

11. TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Component information

Sodium Carbonate 497-19-8

Acute toxicity:
LD50 Oral – rat – 2800 mg/kg
Skin irritation: LD50 Dermal – rabbit > 2000 mg/kg

Eye irritation:
No data available
Respiratory or Skin Sensitization
LD50 Inhalation – guinea pig – 800 mg.m³
Carcinogenicity/mutagenicity: none

Diethylenetriaminepentaacetic acid 67-43-6

Acute toxicity:
LD50 Oral – rat – > 2,000 mg/kg
Dermal:
No data available
Inhalation:
No data available

Skin irritation:
Skin – rabbit
Result: No skin irritation
Eye irritation:
Eyes – rabbit
Result: Eye irritation
Respiratory or Skin Sensitization
Buehler Test – guinea pig
Dis not cause sensitization on laboratory animals
Carcinogenicity
None
Germ cell mutagenicity
No data available

CD-4 25646-77-9

Acute toxicity:
LD50 Oral – rat – 35 mg/kg
Dermal:
No data available
Inhalation:
No data available

Skin irritation:
No data available
Eye irritation:
No data available
Respiratory or Skin Sensitization
No data available

Carcinogenicity
No data available
Germ cell mutagenicity
No data available

Sodium Sulfite 7757-83-7

Acute toxicity:
Oral LD-50 (rat) 3,560 mg/kg
Inhalation LD-50 (rat) >5,500 mg/m³ - 4 h
Dermal: no data
Skin irritation:
Skin – rabbit
Result: No skin irritation
Eye irritation:
Skin – rabbit
Result: No skin irritation
Respiratory or Skin Sensitization
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
Carcinogenicity/mutagenicity: none

Hydroxylamine sulfate 10039-54-0

Acute toxicity:
LD50 Oral – rat – 642 mg/kg
Dermal:
LD50 Dermal – rabbit – >1,500 - <2,000 mg/kg
Inhalation:
No data available

Skin irritation:
Skin-rabbit
Result: Irritating to skin
Eye irritation:
Eyes – rabbit
Result: No eye irritation – 24h
Respiratory or Skin Sensitization
Maximisaton Test – guinea pig
Result: May cause sensitization by skin contact.
Carcinogenicity
Carcinogenicity – rat- Oral
Endocrine: Adrenal cortex hyperplasia
No suspected human carcinogens
Germ cell mutagenicity
Mouse
Result: negative

12. ECOLOGICAL INFORMATION

Component information

Sodium Carbonate 497-19-8

12.1 Toxicity
LC50 /96 hours: 300 mg/l (bluegill, sunfish)
EC50/48 hours: 200-227 mg/L (Ceriodaphnia)

12.2 Persistence and degradability
This product is completely biodegradable.

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

Diethylenetriaminepentaacetic acid 67-43-6

12.1 Toxicity

Toxicity to fish	LC50- Leuciscus idus (golden orfe) ->100 mg/l – 96h
Toxicity to daphnia	EC50 – Daphnia magna (Water flea) – 245 mg/l -48h

12.2 Persistence and degradability

Biodegradability	Biotic/Aerobic – Exposure time 28d Result: 20-60% - According to the results of test of biodegradability this product is not readily biodegradable. (CO@ Evolution Test)

12.3 Bioaccumulative potential
Indicative of bioaccumulation

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

12.5 Other adverse effects
No data available

CD-4 25646-77-9

Data is available on the adverse effects of this material on the environment. Neither COD nor BOD data are available... Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant in limited quantities. However, such treatment should be evaluated and proved for each specific biological system.

Sodium Sulfite 7757-83-7

12.1 Toxicity

Toxicity to fish	LC50- Gambusia affinis (Mosquito fish) -660 mg/l – 96h

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

12.5 Other adverse effects
None

Hydroxylamine sulfate 10039-54-0

12.1 Toxicity

Toxicity to fish mortality	LC50- Pimephales promelas (fathead minnow) -7.2 mg/l – 96h
Toxicity to daphnia	EC50 – Daphnia magna (Water flea) – 1.62 mg/l -48h
Toxicity to algae	EC50 – Desmondesmus subspicatus- 0.72 mg/l -72h
Toxicity to bacteria	Respiration inhibition ED50 – Sludge Treatment – 54 mg/l – 180 min

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

14. TRANSPORT INFORMATION

DOT (US)
Not regulated

15. REGULATORY INFORMATION

SARA 302 Components
The following components are subject to reporting: None

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313: None

SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

California Prop 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA
All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SCAQMD Rule 443.1

Photochemically Reactive: No
Maximum Grams of VOC per Liter: 0 gm/L g/L
Vapor Pressure: N.E. mm Hg@ 20 Degrees C

16. OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3.

H302	Harmful if swallowed
H317	May cause allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation

HMIS RATING

Health: 2
Flammability: 0
Reactivity: 0

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for the injuries from the use of the product described herein.

C-41 BLIX A POWDER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Distributor: Cinestill Inc.
100 Latona Road, Rochester, NY 14652
Product Name: **CS41 BLIX PART A POWDER**
Product Number: **10123**
Product Use: Powder Color Negative Film Processing, Photographic fixer component
Customer Information Phone Number: 1-877-247-3456
CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300
Date Reviewed: 1/05/2019
Version: 3.0

2. HAZARDOUS IDENTIFICATION

2.1 Classification of the substance or mixture

Health hazard

Causes eye irritation (Category 2B), H320
Causes skin irritation (Category 2), H314

2.2 GHS Label elements, including precautionary statements

Pictogram Not a Hazardous mixture

Signal Word: Not a Hazardous mixture

Hazard statement(s)

H314 Causes skin irritation
H320 Causes eye irritation
H335 May cause respiratory irritation

Precautionary statement(s)
P261 Avoid breathing mist
P264 Wash skin thoroughly after handling
P280 Wear protective gloves, eye protection
P302 + P352 IF ON SKIN: Wash with plenty of soap
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	OHSA PEL	ACGIH TLV	Weight %
Ammonium Thiosulfate	7783-18-8	N.E.	N.E.	90-95
Sodium Carbonate	497-19-8	N.E.	N.E.	3-5

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Inhalation: If symptomatic, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: Rinse mouth with water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Skin Contact: Flush skin with plenty of water and wash with a non-alkaline skin cleaner. Wash contaminated clothes before reuse. Get medical attention if irritation develops.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use agent appropriate for surrounding fire.

5.2 Special Hazards arising from substance or mixture

Fire or excessive heat may cause production of hazardous decomposition products.
Combustion Products: Carbon dioxide, carbon monoxide, and oxides of sulfur and nitrogen.

5.3 Advise for firefighters

Wear self-contained breathing NIOSH/MSHA approved apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Review fire and explosion hazards and safety precautions before proceeding with cleanup. Use appropriate personal protective equipment. Avoid contact with skin and eyes. Stop the spillage. Sweep up. For working solution, dike the spill. For small amounts less than one gallon flush to the sewer with large amounts of water. For larger spills, prevent liquid from entering sewers, waterways or low areas. Absorb spillage in inert material. Soak up with sawdust, sand, or other absorbent material. Remove non-usable solid material and/or contaminated soil for disposal in an approved and permitted landfill.

6.2 Environmental precautions

Prevent liquid from entering sewers, waterways or low areas. Discharge to sewer requires approval of permitting authority and may require pre-treatment. Contaminated surfaces should be cleaned using water.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Store in a cool, dry, well-ventilated area. Keep containers closed. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

7.2 Conditions for safe storage, including any incompatibles

Do not store with incompatible materials. Keep away from acids, alkalis and oxidizers. All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Triple rinse before disposal. Dispose of in a licensed facility.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

See Section 3.

8.2 Exposure controls

Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal protective equipment

Eye Protection: Safety glasses with side shields (or goggles).

Respiratory Protection: When this product is used in the intended way, no respiratory protection is anticipated to be necessary.

Skin protection: Latex, rubber, or neoprene waterproof gloves are recommended.

Body protection: Rubber or plastic apron.

Respiratory protection: Local exhaust ventilation is recommended. Ventilation must be adequate to keep hazardous ingredients below their exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance And Odor: Yellow powder, no odor.
Solubility In Water: Complete
Boiling Point: Not applicable
Flash Point: Nonflammable
Flash Point Method: Not applicable
Auto ignition: Not applicable
LEL: Not applicable
UEL: Not applicable
Vapor Pressure: Not applicable
Ph: Not applicable
Specific Gravity: Not applicable
Melting Point: Not applicable
Freezing Point: Not applicable
Evaporation Rate: Not applicable
Vapor Density: Not applicable
Percent Volatile: Not applicable
Molecular Weight: Not applicable
Pounds Per Gallon: Not applicable

V.O.C is 0.

10. STABILITY AND REACTIVITY

10.1 Reactivity
Stable

10.2 Chemical stability
Conditions To Avoid: Heat

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible Materials
Strong acids and alkali

10.6 Decomposition Products
Strong acids will liberate sulfur dioxide, strong bases of sodium peroxide will liberate ammonia fumes.

11. TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Component information

Ammonium thiosulfate 7783-18-8

Acute toxicity:
Oral: LD50 (rats): 2,890 mg/kg
Dermal: No data
Inhalation: No data

Skin irritation: Rabbit
Non irritant
Eye irritation: Rabbit
No eye irritation (OECD Test Guideline 405).
Carcinogenicity/mutagenicity: none

Sodium Carbonate 497-19-8

Acute toxicity:
LD50 Oral – rat – 2800 mg/kg
Skin irritation: LD50 Dermal – rabbit > 2000 mg/kg
Eye irritation:
No data available
Respiratory or Skin Sensitization
LD50 Inhalation – guinea pig – 800 mg.m³
Carcinogenicity/mutagenicity: none

12. ECOLOGICAL INFORMATION

Component information

Ammonium thiosulfate 7783-18-8

12.1 Toxicity

Toxicity to fish	LC0-Lepomis macrochirus (bluegill) - 510 mg/l – 96h
Toxicity to daphnia and other aquatic invertebrates	LC50 – Daphnia magna (Water flea) – 230 mg/l – 21d
Toxicity to algae	EC50 – Pseudokirchneriella subcapitata - > 100 mg/l – 72 h (OECD Test Guideline 201).
Toxicity to bacteria	Respiration inhibition EC50 – Sludge Treatment - > 1,000 mg/l – 3h (OECD Test Guideline 201).

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

Sodium Carbonate 497-19-8

12.1 Toxicity
LC50 /96 hours: 300 mg/l (bluegill, sunfish)
EC50/48 hours: 200-227 mg/L (Ceriodaphnia)

12.2 Persistence and degradability
This product is completely biodegradable.

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

14. TRANSPORT INFORMATION

DOT (US)
Not regulated

15. REGULATORY INFORMATION

SARA 302 Components
The following components are subject to reporting levels established by SARA Title III, Section 302:
None

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:
None

SARA 311/312 Hazards
None

California Prop 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA
All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SCAQMD Rule 443.1

Photochemically Reactive: No
Maximum Grams of VOC per Liter: 0 g/L
Vapor Pressure: 18 mm Hg@ 20 Degrees C
In working solution

16. OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3.

H314	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H317	May cause allergic skin reaction (Category 1)

HMIS RATING

Health: 0
Flammability: 0
Reactivity: 0
Protective: C

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for the injuries from the use of the product described herein.

C-41 BLIX B POWDER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Distributor: Cinestill Inc.
100 Latona Road, Rochester, NY 14652
Product Name: **CS41 BLIX PART B POWDER**
Product Number: **10123**
Product Use: Powder Color Negative Film Processing, Photographic fixer component
Customer Information Phone Number: 1-877-247-3456
CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300
Date Reviewed: 01/04/2019
Version: 3.0

2. HAZARDOUS IDENTIFICATION

2.1 Classification of the substance or mixture

Health hazard

1. Causes eye irritation (Category 2B), H320
2. May cause respiratory irritation H335
3. Causes skin irritation (Category 2), H314
4. Specific organ toxcity Oral (Category 2), Kidney, H373
5. Acute aquatic toxicity (Category 1), H400

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word: WARNING

Hazard statement(s)

H314	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H373	Specific organ toxcity - Oral (Kidney
H400	Acute aquatic toxicity

Precautionary statement(s)

P261	Avoid breathing mist
P264	Wash skin thoroughly after handling
P273	Avoid release into the environment

P280 Wear protective gloves, eye protection
P302 + P352 IF ON SKIN: Wash with plenty of soap
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	OHSA PEL	ACGIH TLV	Weight %
Ferric Sodium EDTA	MIXTURE	N.E.	N.E.	60-70
Sodium Sulfite	7757-83-7	N.E.	N.E.	15-20
PDTA	1939-36-2	N.E.	N.E.	10-15

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Inhalation: If symptomatic, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: Rinse mouth with water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Skin Contact: Flush skin with plenty of water and wash with a non-alkaline skin cleaner. Wash contaminated clothes before reuse. Get medical attention if irritation develops.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use agent appropriate for surrounding fire.

5.2 Special Hazards arising from substance or mixture

Fire or excessive heat may cause production of hazardous decomposition products.
Combustion Products: Carbon dioxide, carbon monoxide, and oxides of sulfur and nitrogen.

5.3 Advise for firefighters

Wear self-contained breathing NIOSH/MSHA approved apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Review fire and explosion hazards and safety precautions before proceeding with cleanup. Use appropriate personal protective equipment. Avoid contact with skin and eyes. Stop the spillage. Sweep up. For working solution, dike the spill. For small amounts less than one gallon flush to the sewer with large amounts of water. For larger spills, prevent liquid from entering sewers, waterways or low areas. Absorb spillage in inert material. Soak up with sawdust, sand, or other absorbent material. Remove non-usable solid material and/or contaminated soil for disposal in an approved and permitted landfill.

6.2 Environmental precautions

Prevent liquid from entering sewers, waterways or low areas. Discharge to sewer requires approval of permitting authority and may require pre-treatment. Contaminated surfaces should be cleaned using water.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Store in a cool, dry, well-ventilated area. Keep containers closed. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

7.2 Conditions for safe storage, including any incompatibles

Do not store with incompatible materials. Keep away from acids, alkalis and oxidizers. All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Triple rinse before disposal. Dispose of in a licensed facility.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

See Section 3.

8.2 Exposure controls

Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal protective equipment

Eye Protection: Safety glasses with side shields (or goggles).

Respiratory Protection: When this product is used in the intended way, no respiratory protection is anticipated to be necessary.

Skin protection: Latex, rubber, or neoprene waterproof gloves are recommended.

Body protection: Rubber or plastic apron.

Respiratory protection: Local exhaust ventilation is recommended. Ventilation must be adequate to keep hazardous ingredients below their exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance And Odor: Yellow powder, no odor.
Solubility In Water: Complete
Boiling Point: Not applicable
Flash Point: Nonflammable
Ph: Not applicable
Specific Gravity: Not applicable
Melting Point: Not applicable

Molecular Weight: Not applicable
Pounds Per Gallon: Not applicable
V.O.C is 0.

10. STABILITY AND REACTIVITY

10.1 Reactivity
Stable

10.2 Chemical stability
Conditions To Avoid: Heat

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible Materials
Strong acids and alkali

10.6 Decomposition Products
Strong acids will liberate sulfur dioxide, strong bases of sodium peroxide will liberate ammonia fumes.

11. TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Component information

Ferric Sodium EDTA 15708-5

Acute toxicity:

Oral:	LD50 (rats): > 2,000 mg/kg
Dermal:	LD50 (rats): > 2,000 mg/kg
Inhalation:	LD50 (rats): > 2.75 mg/l – 4h

Skin irritation: Rabbit
Nonirritant – 4h
Eye irritation: Rabbit
No eye irritation (OECD Test Guideline 405).
Respiratory or skin sensitisation: Mouse
Does not cause skin sensitization
Germ cell mutagenicity: Ames test
S. typhimurium
Result: negative
Carcinogenicity/mutagenicity: none

Sodium Sulfite 7757-83-7

Acute toxicity:
Oral LD-50 (rat) 3,560 mg/kg
Inhalation LD-50 (rat) >5,500 mg/m³ - 4 h
Dermal: no data
Skin irritation:
Skin – rabbit
Result: No skin irritation
Eye irritation:
Skin – rabbit
Result: No skin irritation
Respiratory or Skin Sensitization
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
Carcinogenicity/mutagenicity: none

PDTA 1939-36-2

Acute toxicity:
Not available
Skin irritation: LD50 Dermal – rabbit > 2000 mg/kg
Eye irritation:
This product is a mild irritant to rabbit eyes.
Ingestion:
Acute LD50 (rat) 3400 mg/kg
Respiratory or Skin Sensitization
Not a skin sensitizer (guinea pig)
Carcinogenicity/mutagenicity: IARC, NTP, ACGIH, and OSHA do not classify this material as a carcinogen or suspect carcinogen. However, nitrotriascetic acid (NTA) and its salts were determined to be “possibly carcinogenic to humans” (Group 2B) by IARC, a compound which “may reasonably be anticipated to be a carcinogen” by NTP and a “select carcinogen” by OSHA. PDTA was found to be non-mutagenic.

12. ECOLOGICAL INFORMATION

Component information

Ferric Sodium EDTA 15708-5

12.1 Toxicity

Toxicity to fish	LC0-Brachydanio rerio (zebra fish) - >180 mg/l – 96h
Toxicity to daphnia and	EC50 – Daphnia magna (Water flea) > 88 mg/l –48h
Toxicity to bacteria	EC10 = 17 mg/l (Bringmann-Kuhl Test)
	EC10 = 205 mg/l (Robra Test)

12.2 Biodegration
This product is not readily biodegradable.

12.3 Bioaccumulative potential
The potential for bioconcentation is low.

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

Sodium Sulfite 7757-83-7

12.1 Toxicity

Toxicity to fish	LC50- Gambusia affinis (Mosquito fish) -660 mg/l – 96h

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

12.5 Other adverse effects
None

PDTA 1939-36-2

12.1 Toxicity

LC50 /96 hours:	>100 mg/l Oncorhynchus mykiss (rainbow trout)
EC50/48 hours:	100.9 mg/L Daphnia magna (Water flea)
Toxicity to bacteria	Growth inhibition NOEC – Sludge treatment – 640 mg/l – 3h

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

14. TRANSPORT INFORMATION

DOT (US)
Not regulated

15. REGULATORY INFORMATION

SARA 302 Components
The following components are subject to reporting levels established by SARA Title III, Section 302:
None

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:
None

SARA 311/312 Hazards
None

California Prop 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA
All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SCAQMD Rule 443.1

Photochemically Reactive: No
Maximum Grams of VOC per Liter: 0 g/L
Vapor Pressure: 18 mm Hg@ 20 Degrees C
In working solution

16. OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3.

H314	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H373	Specific organ toxcity - Oral (Kidney
H400	Acute aquatic toxicity

HMIS RATING

Health: 1
Flammability: 0
Reactivity: 0
Protective: C

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for the injuries from the use of the product described herein.