

Kit #318S Soil Nutrient and Fertilizers

1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Nitrate Indicator
Alternative names: Nitrate test powder.
Product Number: 318S-B02E, 19-12EA, A19-12, C19-12

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268

1.4 Emergency telephone number:

Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Specific target organ toxicity-repeated exposure, ingestion (Category 2), CNS, H373

Aquatic Acute (Category 2), H401

Aquatic Chronic (Category 2), H411

2.2 Label elements, including precautionary statements

Signal word: Warning

Hazards statements: H373-May cause damage to organs: lungs, CNS, liver, blood through repeated inhalation and ingestion. Pictogram:

H401-Toxic to aquatic life, H411- Toxic to aquatic life with long lasting effects

Precautionary statements: P264 - Wash skin thoroughly after handling, P280 - Wear protective gloves, eye protection. P260- Avoid breathing dust.

P273—Avoid release to the environment.P301+P312+330-IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

2.3 Hazards not otherwise classified: None.



3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: N/A

3.2 Mixture: yes

| Chemical Name | Product identifier | % | GHS-US classification |
|--------------------------|--------------------|--------|---|
| Barium sulfate | CAS#7727-43-7 | 50-64% | Aquatic Acute 3, H402; Aquatic Chronic 3, H402 |
| Proprietary ingredient 2 | Trade Secret | 1-3% | STOT RE 2, H373 |
| Proprietary ingredient 3 | Trade Secret | 0.5-1% | Eye Irrit. 2A, H319, Skin Irrit. 2, H315, STOT SE 2, H335 |
| Proprietary ingredient 4 | Trade Secret | 20-30% | Not classified |
| Proprietary ingredient 5 | Trade Secret | 0.5-1% | Not classified |
| Proprietary ingredient 6 | Trade Secret | 1-1.5% | Aquatic Acute 1, H400, Aquatic Chronic 1, H410 |

3.3 Chemicals where a trade secret is claimed: Any concentration shown as a range is to protect confidentiality, or is it due to batch variation.

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Not available.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Sweep up without generating dust and place for disposal. Reuse if not contaminated. Wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing dust. Use under the hood, or with adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: Not available.

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.

Appearance: Beige powder.

Odor: Not available

pH: Not available

Vapor Pressure (mm Hg): Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Flash point: Not available

Autoignition: Not available

Boiling point: Not available

Melting point: Not available

Freezing point: Not available

Decomposition temp: Not available

Solubility: Not available.

Specific gravity (H₂O = 1): Not available

Percent volatile (%): Not available

Molecular formula: Not available

Molecular weight: Not available

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Not available

Incompatibilities: Not available.

Hazardous decomposition: Not available.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: May cause eye irritation. Skin: Not expected to cause skin irritation. Inhalation: May cause respiratory track irritation. Prolonged or repeated inhalation of large amounts may cause an increased incidence of coughing and bronchitis shown in manufacturing settings. Ingestion: May cause digestive track irritation. Prolonged and repeated ingestion may affect CNS. It may also affect kidney, liver, blood.

Toxicological data

Acute oral toxicity ORAL LD₅₀: Not available

Acute vapor toxicity Not available

DERMAL LD₅₀: Not available

Carcinogenicity:

California prop 65: Not classified

12. ECOLOGICAL INFORMATION

EC50 Daphnia magna 32 mg/l, 48h (barium sulfate)

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: 1564

Shipping name: Barium compounds, n.o.s (barium sulfate)

Hazard Class: 6.1

Packing group: III

Exceptions: Ltd Qty. 5kg

15. REGULATORY INFORMATION

TSCA-listed.

16. OTHER INFORMATION

Disclaimer:

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1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Potting Soil
Alternative names: Organic matter.
Product Number: TS001, 35-OMX1, CS-S213E, CS-212E, SO029, 318S-B03E, C1-1-28E, CH-2-17xx, WH-1-12xx, PR-003, 60-MGMX1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet

Company: Lab-Aids, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Not classified

2.2 Label elements, including precautionary statements

Signal word: Not classified
Hazards statements: Not classified
Precautionary statements: Not classified

Pictogram: Not classified

2.3 Hazards not otherwise classified: none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: N/A

3.2 Mixture: Animal product

| Chemical Name | Product identifier | % | GHS-US classification |
|----------------|--------------------|------|-----------------------|
| Not applicable | CAS# N/A | 100% | Not classified |

3.3 Chemicals where a trade secret is claimed: None

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention if necessary.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Not available.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Recover for use if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Use with adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Keep container in cool, well-ventilated area. Store in closed container in a dry area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: Not available

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.

Appearance: Brown organic material.

Odor: Not available

pH: Not available

Vapor Pressure (mm Hg): Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: N/A

Flash point: N/A

Autoignition: N/A

Boiling point: Not available

Melting point: Not available

Freezing point: Not available

Decomposition temp: Not available

Solubility: Partially soluble in water

Specific gravity (H₂O = 1): N/A

Percent volatile (%): Not available

Molecular formula: N/A

Molecular weight: N/A

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Not available.

Incompatibilities: Not available.

Hazardous decomposition: Not available.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eye: Not expected to cause any acute effects. Skin: Not expected to cause any acute effects. Inhalation: Forced inhalation may lead to the respiratory aspiration. Ingestion: There might be a hazard associated with digestion of organic material due to presence of bacterial environment.

ORL-RAT LD₅₀: Not available

IHL-RAT LD₅₀: Not available

SKN-RABBIT LD₅₀: Not available

Carcinogenicity:

California prop 65: Not classified

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A

Shipping name: Not regulated

Hazard Class: N/A

Packing group: N/A

Exceptions: N/A

15. REGULATORY INFORMATION

Not available

16. OTHER INFORMATION

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1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Fertilizer Solution
Alternative names: Fertilizer water solution.
Product Number: 318S-B01E, CS-211E.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Not classified

2.2 Label elements, including precautionary statements

Signal word: Not classified
Hazards statements: Not classified
Precautionary statements: Not classified

Pictogram: Not classified

2.3 Hazards not otherwise classified: none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture

| Chemical Name | Product identifier | % | GHS-US classification |
|-------------------|--------------------|------|--|
| Water | CAS# 7732-18-5 | >99% | Not classified |
| Potassium Nitrate | CAS#7757-79-1 | 0.2% | Ox. Solid 3, H272; Skin Corr. 2, H315; Eye Irrit. 2A, H319 |
| Ammonium Nitrate | CAS#6484-52-2 | 0.2% | Ox. Solid 3, H272; Skin Corr. 2, H315; Eye Irrit. 2A, H319 |

3.3 Chemicals where a trade secret is claimed: None

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Nonflammable liquid

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Not available.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Mop up the area.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Wash hands thoroughly after handling.

7.2 Storage: Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: Not classified

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.

Appearance: Bluish-green.

Odor: Not available

pH: Not available

Vapor Pressure (mm Hg): Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: N/A

Flash point: N/A

Autoignition: N/A

Boiling point: ≈100°C

Melting point: Not available

Freezing point: Not available

Decomposition temp: Not available

Solubility: Not available

Specific gravity (H₂O = 1): ≈1 at 20°C

Percent volatile (%): 100%

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Not available.

Incompatibilities: Not available

Hazardous decomposition: Not available.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: May cause mild eye irritation . Skin: Not expected to cause any acute effects. Inhalation: Not expected to cause irritation to the respiratory tract and mucous membrane. Ingestion: Not available.

Toxicological data

Acute oral toxicity ORAL LD₅₀: Not available

Acute vapor toxicity IHL-LC₅₀: Not available

DERMAL LD₅₀: Not available

Carcinogenicity:

California prop 65: Not classified

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A

Shipping name: N/A

Hazard Class: N/A

Packing group: N/A

Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA-listed.

16. OTHER INFORMATION

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1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Nitrogen Extract Solution
Alternative names: Hydrochloric Acid, 0.2M, Hydrochloric acid water solution.
Product Number: SS-1B19xx, CS-S210E

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268

1.4 Emergency telephone number

Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Corrosive to metals (Category 1), H290
Skin Corr. (Category 1A) H314
Eye Dam. (Category 1) H318



Pictogram:

2.2 Label elements, including precautionary statements

Signal word: Danger

Hazards statements: H290 - May be corrosive to metals, H314- Causes severe skin burns and eye damage. H318- Causes serious eye damage.

Precautionary statements: P280 - Wear protective gloves, eye protection, P264 - Wash exposed skin thoroughly after handling.

2.3 Hazards not otherwise classified: none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture:

| Chemical Name | Product identifier | % | GHS-US classification |
|-------------------|--------------------|--------|---|
| Water | CAS# 7732-18-5 | 99.33% | Not classified |
| Hydrochloric acid | CAS# 7647-01-0 | 0.67% | Acute Tox. 4, H302; Skin Corr. 1A H314; Eye Dam. 1, H318; STOT SE 3, H335 |

3.3 Chemicals where a trade secret is claimed: none

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek immediate medical attention.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation or burns develop.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Not flammable

Suitable extinguishing media: Use water spray, alcohol-resistant foam, or TriClass, dry chemical extinguisher.

5.2 Special hazard arising from the substance or mixture: Thermal decompositions generates corrosive vapors.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Contain the spill with an inert absorbent material and deposit in a sealed container. Dispose of in accordance with you local regulations. Small spills neutralize with acid neutralizer, or sodium hydroxide solution and mop up the area. Ventilate and wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing vapor. Use hood or with adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Acid cabinet. Keep container tightly closed in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: TWA: 2 ppm (hydrochloric acid)

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.

Appearance: Colorless to slightly yellow.

Odor: Pungent

pH: <2

Vapor Pressure (mm Hg): Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Flash point: 537.2 °C (hydrochloric acid)

Autoignition: Not available

Flammability: Not available

Boiling point: 37.08°C estimated (hydrochloric acid)

Melting point: -114.22°C (-173.6° F)

Freezing point: 3.33°C (38° F)

Decomposition temp: Not available

Solubility: Miscible in water

Specific gravity (H₂O = 1): 1.18 g/cm³ @ 25°C (hydrochloric acid)

Percent volatile (%): 66% estimated (hydrochloric acid)

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Incompatible materials.

Incompatibilities: Alkali metals, metals, organic materials, strong oxidizing agents, amines.

Hazardous decomposition: Not available.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eye: Causes severe eye burns and eye damage. Skin: Causes severe skin burns. Inhalation: May cause respiratory track irritation. Ingestion: Swallowing hydrochloric acid can cause immediate pain and burns of the mouth, throat, esophagus and gastrointestinal tract.

Acute oral toxicity ORAL LD₅₀: 900mg/kg [Rabbit], as hydrochloric acid

Acute vapor toxicity IHL-LC₅₀: 3124ppm [Rat]/1h, as hydrochloric acid

DERMAL LD₅₀: 1449mg/kg [Mouse], as hydrochloric acid

Carcinogenicity:

California prop 65: None

12. ECOLOGICAL INFORMATION

LC50 (Gambusia affinis) 96 hours: 282 mg/l (hydrochloric acid)

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: 1789

Shipping name: Hydrochloric acid

Hazard Class: 8

Packing group: PG III

Exceptions: Ltd Qty. ≤5L

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-595-7). WHMIS (Canada): CLASS E: Corrosive liquid. DSEL (EEC) R34-Causes burns.

16. OTHER INFORMATION

Disclaimer:

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