

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Liquid Plant Nutrient
PRODUCT USE: Hydroponic plant nutrient
SYNONYMS: --
CAS NUMBER: Not applicable to blends.

COMPANY IDENTIFICATION: AeroGrow International, Inc.
 6075 Longbow Dr. Suite 200
 Boulder, CO 80301 USA
 800-476-9669 or 1-303-444-7755 (For product information) 1-202-483-7616 (For emergencies - Chemtrec)

2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS: AeroGrow liquid nutrient is a specially formulated mixture of plant nutrition minerals and chemicals that are combined in proportions to assure optimum plant nutrition. The product is an aqueous, inorganic, nitrate solution. The chemical identity of the compounds and exact proportions used in the mixture are a trade secret; however, they are derived from: ammonium nitrate, potassium nitrate, potassium phosphate, calcium nitrate and magnesium.

Chemical Name	Amount	CAS #	Hazardous	OSHA PEL (ppm)	ACGIH TLV (ppm)
Calcium Nitrate	up to 60%	15245-12-2	no	N/A	N/A
Ammonium Nitrate	up to 10%	6484-52-2	yes	N/A	N/A
Magnesium Sulfate	up to 60%	7487-88-9	no	N/A	N/A
Potassium Nitrate	up to 60%	7757-79-1	no	N/A	N/A
Mono Potassium Phosphate	up to 60%	7778-77-0	yes	15	5

CALIFORNIA PROP 65: This product does not contain any ingredients, above the safe harbor limits, which are known to the state of California to cause cancer, birth defects, or other reproductive harm.

HAZARDS DISCLOSURE: This product contains no known hazardous materials in reportable levels as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. As defined under Sara 311 and 312, this product contains no known hazardous materials.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

KEEP AWAY FROM CHILDREN. KEEP AWAY FROM PETS. DO NOT INGEST. Wash hands after use. This product as supplied and used as recommended is not a "hazardous chemical" as regulated under the OSHA communication Standard 29CFR 1910.1200.

HMIS/NFPA Rating: Health - 2, Flammability - 1, Reactivity – 0, Personal Protection Index - A NFPA/HMIS
Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: N/A.

INHALATION: Some of the chemicals used in AeroGrow Liquid Nutrient, when inhaled in a powder form, are known to be irritants to the upper respiratory tract. In aqueous solution risk is negligible. As long as these chemicals remain in aqueous solution and do not become aerosolized, they are not an inhalation hazard.

INGESTION: Large quantities can produce gastrointestinal irritation and vomiting.

SKIN CONTACT: Contact may cause irritation or rash, particularly with moist skin.

EYE CONTACT: A moderate eye irritant. Redness, tearing, possible abrasion can occur.

CHRONIC EXPOSURE: No information found.

AGGRAVATION OF PRE-EXISTING CONDITIONS: Persons with impaired kidney function may be more susceptible to the effects of the substance.

4. FIRST AID MEASURES

INHALATION FIRST AID: If a respiratory problem develops from dust or vapors. Remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility. This is considered a highly unlikely event.

SKIN CONTACT FIRST AID: If rash or irritation develops get medical attention. This is considered an unlikely event.

EYE CONTACT FIRST AID: If dust/vapors comes into contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately. This is considered an unlikely event.

INGESTION FIRST AID: In the event of an overdose, do not induce vomiting. Loosen tight clothing, such as collar, tie, belt and waistband. Give large amounts of water. Never give anything by mouth to an unconscious person. Get medical attention.

STATEMENT OF PRACTICAL TREATMENT: Always have plenty of water available for first aid. Get medical attention if any symptoms develop or persist.

5. FIRE FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION: Not combustible. However some components are powerful oxidizers, and can initiate and intensify combustion of flammable materials.

FLASH POINT: Unknown.

AUTO IGNITION TEMPERATURE: Unknown.

FLAMMABLE LIMITS IN AIR, % by Volume: Not applicable

FIRE FIGHTING EQUIPMENT: Because fire may produce toxic thermal decomposition products, wear a self contained breathing apparatus (SCBA) with a full face piece.

EXTINGUISHING MEDIA: Water, dry chemical, alcohol foam, or carbon dioxide. Water spray may be used to keep exposed material cool.

FIRE & EXPLOSION HAZARDS: Combustion/fires produce black smoke consisting primarily of carbon dioxide, carbon monoxide, and oxides of nitrogen. Fire hazards increase in the presence of ignition sources or high concentrations of dust from work sites. Can accelerate burning

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Physical form requires no obvious personal protective equipment when cleaning up spills. Wear a dust mask if particulate count exceeds limits, and gloves as appropriate.

SPILL/LEAK PROCEDURES: Wipe up with absorbent towels or mop.

ENVIRONMENTAL PRECAUTIONS: Not applicable.

REGULATORY REQUIREMENTS: Follow applicable OSHA regulations

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Avoid ingestion, skin contact, eye contact, and inhalation.

RECOMMENDED STORAGE CONDITIONS: Keep stored in a cool, dry, ventilated area. Protect against physical damage. Observe all warnings and precautions listed for the product.

SHELF LIFE: See Label on packaging.

HANDLING (PERSONNEL): Handle in accordance with good hygiene and safety procedures. Wash thoroughly after handling.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ADMINISTRATIVE CONTROLS: Avoid breathing mist.

AIRBORNE EXPOSURE LIMITS: See Section 2 above.

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH APPROVED): For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

SKIN PROTECTION: Wear protective gloves and clean body-covering clothing.

EYE PROTECTION: Use chemical safety goggles and/or full face shield where splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Aqueous solution

WATER SOLUBILITY: Soluble

VAPOR PRESSURE: Unknown

MELTING POINT: N/A

VISCOSITY: Unknown

pH: 3.0

FLASH POINT: Unknown

APPEARANCE AND ODOR: Brown liquid with organic odor

OTHER SOLUBILITIES: Unknown

BOILING POINT: Unknown

FREEZING POINT: 30° F

SPECIFIC GRAVITY: unknown, >1

AUTO IGNITION TEMPERATURE: Unknown

10. STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage. Unstable at extreme temperatures.

POLYMERIZATION: Hazardous polymerization does not occur.

CONDITIONS TO AVOID: No information found.

INCOMPATIBILITY WITH OTHER MATERIALS: Bromine trifluoride; potassium permanganate plus sulfuric acid. Contains chemicals that are strong oxidizing agents that react with strong alkalis to liberate ammonia. May also react vigorously with reducing materials, oil, and organic solvents.

DECOMPOSITION: At extreme temperatures, CO or phosphorous oxide may be evolved.

11. TOXICOLOGICAL INFORMATION

TOXICITY: There are no toxicological data for this material. Adverse health effects are not known nor are expected under normal use.

SENSITIZATION: Not known to occur with this material.

LONG TERM TOXICITY: Adverse health effects are not known nor are expected under normal use.

12. ECOLOGICAL INFORMATION

EXOTOXICITY: Unknown

ENVIRONMENTAL TOXICITY: No information found.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Whatever cannot be saved for recovery or recycling should be handled as a non hazardous waste and sent to an approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of material in accordance with federal, state and local requirements.

CONTAMINATED MATERIALS: Wash contaminated clothing before reuse.

14. TRANSPORTATION INFORMATION

Domestic (Land, D.O.T.), International (Water, I.M.O.), International (Air, I.C.A.O.)

PRODUCT LABEL: Plant Nutrient - aqueous solution.

UN NUMBER: Non-Regulated material

PACKAGE CLASS: N/A

D.O.T. HAZARD CLASS: N/A

D.O.T. PROPER SHIPPING NAME: Not regulated

PACKING GROUP: N/A

PRODUCT RQ (LBS): None

15. REGULATORY INFORMATION

Chemical Inventory Status - Part 1

Ingredient	<u>TSCA</u>	<u>EC</u>	<u>Japan</u>	<u>Australia</u>
Calcium Nitrate	YES	YES	YES	YES
Ammonium Nitrate	YES	YES	YES	YES
Magnesium Nitrate	YES	YES	YES	YES
Magnesium Sulfate	YES	YES	YES	YES
Mono Potassium Phosphate	YES	YES	YES	YES
Potassium Nitrate	YES	YES	YES	YES

Chemical Inventory Status - Part 2

Ingredient	<u>Korea</u>	<u>DSL</u>	<u>CANADA</u> <u>NDSL</u>	<u>Phil.</u>
Calcium Nitrate	YES	YES	NO	YES
Ammonium Nitrate	YES	YES	NO	YES
Magnesium Sulfate	YES	YES	NO	YES
Mono Potassium Phosphate	YES	YES	NO	YES
Potassium Nitrate	YES	YES	NO	YES

Federal, State & International Regulations - Part 1

Ingredient	<u>-SARA 302-</u> <u>RQ</u>	<u>TPQ</u>	<u>List</u>	<u>-SARA 313-</u> <u>Chemical Catalog</u>
Calcium Nitrate	NO	NO	NO	NO
Ammonium Nitrate	NO	NO	NO	Nitrate Compound
Magnesium Sulfate	NO	NO	NO	NO
Mono Potassium Phosphate	NO	NO	NO	NO
Potassium Nitrate	NO	NO	NO	NO

Federal, State & International Regulations - Part 2

Ingredient	<u>CERCLA</u>	<u>-RCRA-</u> <u>261.33</u>	<u>-TSCA-</u> <u>8(d)</u>
Calcium Nitrate	NO	NO	NO
Ammonium Nitrate	NO	NO	NO
Magnesium Sulfate	NO	NO	NO
Mono Potassium Phosphate	NO	NO	NO
Potassium Nitrate	NO	NO	NO

Chemical Weapons Convention: No **SCA 12(b):** No **CDTA:** No
SARA 311/312: ACUTE: YES CHRONIC: YES FIRE: No PRESSURE: No **REACTIVITY:** Yes (Pure / Solid)
AUSTRALIAN HAZCHEM CODE: None allocated.
POISON SCHEDULE: None allocated.

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA). This material or all of its components are listed on the Canadian Domestic Substances List (DSL). This material or all of its components are listed (or considered as having been notified) on the European Inventory of Existing Chemical Substances (EINECS). Other inventory lists: ENCS (Japan), Korea, Australia, China (Draft), PICCS (Philippines), Japan (ENCS)

16. OTHER INFORMATION

Label Warning :Do not eat. Keep away from children and pets.

First Aid: If swallowed, do not induce vomiting. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. If irritation develops call a physician. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.

Prepared By: Mica Gross, Laboratory Manager, Engineering Department

Part Number: N/A

Environmental Health and Safety Department Approval Date:

ADDITIONAL INFORMATION: The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process. This Material Safety Data Sheet (MSDS) has been reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-1998.) This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of AeroGrow International, Inc. The data on this sheet are related only to the specific material designated herein. AeroGrow International, Inc. assumes no legal responsibility for use or reliance upon these data.

END OF MSDS

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PRODUCT USE: Hydroponic plant nutrient
SYNONYMS: --
CAS NUMBER: Not applicable to blends.

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 6075 Longbow Dr. Suite 200
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Chemical Name	Amount	CAS #	Hazardous	OSHA PEL (ppm)	ACGIH TLV (ppm)
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Potassium Nitrate	up to 60%	7757-79-1	no	N/A	N/A
Mono Potassium Phosphate	up to 60%	7778-77-0	yes	15	5

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3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

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HMIS/NFPA Rating: Health - 2, Flammability - 1, Reactivity – 0, Personal Protection Index - A NFPA/HMIS
Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: N/A.

INHALATION: Some of the chemicals used in AeroGrow Liquid Nutrient, when inhaled in a powder form, are known to be irritants to the upper respiratory tract. In aqueous solution risk is negligible. As long as these chemicals remain in aqueous solution and do not become aerosolized, they are not an inhalation hazard.

INGESTION: Large quantities can produce gastrointestinal irritation and vomiting.

SKIN CONTACT: Contact may cause irritation or rash, particularly with moist skin.

EYE CONTACT: A moderate eye irritant. Redness, tearing, possible abrasion can occur.

CHRONIC EXPOSURE: No information found.

AGGRAVATION OF PRE-EXISTING CONDITIONS: Persons with impaired kidney function may be more susceptible to the effects of the substance.

4. FIRST AID MEASURES

INHALATION FIRST AID: If a respiratory problem develops from dust or vapors. Remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility. This is considered a highly unlikely event.

SKIN CONTACT FIRST AID: If rash or irritation develops get medical attention. This is considered an unlikely event.

EYE CONTACT FIRST AID: If dust/vapors comes into contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately. This is considered an unlikely event.

INGESTION FIRST AID: In the event of an overdose, do not induce vomiting. Loosen tight clothing, such as collar, tie, belt and waistband. Give large amounts of water. Never give anything by mouth to an unconscious person. Get medical attention.

STATEMENT OF PRACTICAL TREATMENT: Always have plenty of water available for first aid. Get medical attention if any symptoms develop or persist.

5. FIRE FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION: Not combustible. However some components are powerful oxidizers, and can initiate and intensify combustion of flammable materials.

FLASH POINT: Unknown.

AUTO IGNITION TEMPERATURE: Unknown.

FLAMMABLE LIMITS IN AIR, % by Volume: Not applicable

FIRE FIGHTING EQUIPMENT: Because fire may produce toxic thermal decomposition products, wear a self contained breathing apparatus (SCBA) with a full face piece.

EXTINGUISHING MEDIA: Water, dry chemical, alcohol foam, or carbon dioxide. Water spray may be used to keep exposed material cool.

FIRE & EXPLOSION HAZARDS: Combustion/fires produce black smoke consisting primarily of carbon dioxide, carbon monoxide, and oxides of nitrogen. Fire hazards increase in the presence of ignition sources or high concentrations of dust from work sites. Can accelerate burning

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Physical form requires no obvious personal protective equipment when cleaning up spills. Wear a dust mask if particulate count exceeds limits, and gloves as appropriate.

SPILL/LEAK PROCEDURES: Wipe up with absorbent towels or mop.

ENVIRONMENTAL PRECAUTIONS: Not applicable.

REGULATORY REQUIREMENTS: Follow applicable OSHA regulations

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Avoid ingestion, skin contact, eye contact, and inhalation.

RECOMMENDED STORAGE CONDITIONS: Keep stored in a cool, dry, ventilated area. Protect against physical damage. Observe all warnings and precautions listed for the product.

SHELF LIFE: See Label on packaging.

HANDLING (PERSONNEL): Handle in accordance with good hygiene and safety procedures. Wash thoroughly after handling.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ADMINISTRATIVE CONTROLS: Avoid breathing mist.

AIRBORNE EXPOSURE LIMITS: See Section 2 above.

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH APPROVED): For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

SKIN PROTECTION: Wear protective gloves and clean body-covering clothing.

EYE PROTECTION: Use chemical safety goggles and/or full face shield where splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Aqueous solution

WATER SOLUBILITY: Soluble

VAPOR PRESSURE: Unknown

MELTING POINT: N/A

VISCOSITY: Unknown

pH: 3.0

FLASH POINT: Unknown

APPEARANCE AND ODOR: Brown liquid with organic odor

OTHER SOLUBILITIES: Unknown

BOILING POINT: Unknown

FREEZING POINT: 30° F

SPECIFIC GRAVITY: unknown, >1

AUTO IGNITION TEMPERATURE: Unknown

10. STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage. Unstable at extreme temperatures.

POLYMERIZATION: Hazardous polymerization does not occur.

CONDITIONS TO AVOID: No information found.

INCOMPATIBILITY WITH OTHER MATERIALS: Bromine trifluoride; potassium permanganate plus sulfuric acid. Contains chemicals that are strong oxidizing agents that react with strong alkalis to liberate ammonia. May also react vigorously with reducing materials, oil, and organic solvents.

DECOMPOSITION: At extreme temperatures, CO or phosphorous oxide may be evolved.

11. TOXICOLOGICAL INFORMATION

TOXICITY: There are no toxicological data for this material. Adverse health effects are not known nor are expected under normal use.

SENSITIZATION: Not known to occur with this material.

LONG TERM TOXICITY: Adverse health effects are not known nor are expected under normal use.

12. ECOLOGICAL INFORMATION

EXOTOXICITY: Unknown

ENVIRONMENTAL TOXICITY: No information found.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Whatever cannot be saved for recovery or recycling should be handled as a non hazardous waste and sent to an approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of material in accordance with federal, state and local requirements.

CONTAMINATED MATERIALS: Wash contaminated clothing before reuse.

14. TRANSPORTATION INFORMATION

Domestic (Land, D.O.T.), International (Water, I.M.O.), International (Air, I.C.A.O.)

PRODUCT LABEL: Plant Nutrient - aqueous solution.

UN NUMBER: Non-Regulated material

PACKAGE CLASS: N/A

D.O.T. HAZARD CLASS: N/A

D.O.T. PROPER SHIPPING NAME: Not regulated

PACKING GROUP: N/A

PRODUCT RQ (LBS): None

15. REGULATORY INFORMATION

Chemical Inventory Status - Part 1

Ingredient	<u>TSCA</u>	<u>EC</u>	<u>Japan</u>	<u>Australia</u>
Calcium Nitrate	YES	YES	YES	YES
Ammonium Nitrate	YES	YES	YES	YES
Magnesium Nitrate	YES	YES	YES	YES
Magnesium Sulfate	YES	YES	YES	YES
Mono Potassium Phosphate	YES	YES	YES	YES
Potassium Nitrate	YES	YES	YES	YES

Chemical Inventory Status - Part 2

Ingredient	<u>Korea</u>	<u>DSL</u>	<u>CANADA</u> <u>NDSL</u>	<u>Phil.</u>
Calcium Nitrate	YES	YES	NO	YES
Ammonium Nitrate	YES	YES	NO	YES
Magnesium Sulfate	YES	YES	NO	YES
Mono Potassium Phosphate	YES	YES	NO	YES
Potassium Nitrate	YES	YES	NO	YES

Federal, State & International Regulations - Part 1

Ingredient	<u>-SARA 302-</u> <u>RQ</u>	<u>TPQ</u>	<u>List</u>	<u>-SARA 313-</u> <u>Chemical Catalog</u>
Calcium Nitrate	NO	NO	NO	NO
Ammonium Nitrate	NO	NO	NO	Nitrate Compound
Magnesium Sulfate	NO	NO	NO	NO
Mono Potassium Phosphate	NO	NO	NO	NO
Potassium Nitrate	NO	NO	NO	NO

Federal, State & International Regulations - Part 2

Ingredient	<u>CERCLA</u>	<u>-RCRA-</u> <u>261.33</u>	<u>-TSCA-</u> <u>8(d)</u>
Calcium Nitrate	NO	NO	NO
Ammonium Nitrate	NO	NO	NO
Magnesium Sulfate	NO	NO	NO
Mono Potassium Phosphate	NO	NO	NO
Potassium Nitrate	NO	NO	NO

Chemical Weapons Convention: No **SCA 12(b):** No **CDTA:** No
SARA 311/312: ACUTE: YES CHRONIC: YES FIRE: No PRESSURE: No **REACTIVITY:** Yes (Pure / Solid)
AUSTRALIAN HAZCHEM CODE: None allocated.
POISON SCHEDULE: None allocated.

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA). This material or all of its components are listed on the Canadian Domestic Substances List (DSL). This material or all of its components are listed (or considered as having been notified) on the European Inventory of Existing Chemical Substances (EINECS). Other inventory lists: ENCS (Japan), Korea, Australia, China (Draft), PICCS (Philippines), Japan (ENCS)

16. OTHER INFORMATION

Label Warning :Do not eat. Keep away from children and pets.

First Aid: If swallowed, do not induce vomiting. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. If irritation develops call a physician. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.

Prepared By: Mica Gross, Laboratory Manager, Engineering Department

Part Number: N/A

Environmental Health and Safety Department Approval Date:

ADDITIONAL INFORMATION: The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process. This Material Safety Data Sheet (MSDS) has been reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-1998.) This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of AeroGrow International, Inc. The data on this sheet are related only to the specific material designated herein. AeroGrow International, Inc. assumes no legal responsibility for use or reliance upon these data.

END OF MSDS



Material Safety Data Sheet

MSDS Code: EBO1309055-M106

Compact Fluorescent Lamp

Date of Issue: September 12, 2013

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1. Identification Of Substance

Product Details

Product Name: Compact Fluorescent Lamp
Model No. : Grow bulb 3U-26W
Product Use: Lighting
Manufacturer/Supplier By: Changshu Xinhang Illumination Electronics Co., Ltd.
Guanzhi Village, Dongbang Town, Changshu, Jiangsu, China
Tel: +86-512-52090698
Emergency Tel: +86-(0)18915652858
Fax: +86-512-52090697

2. Composition/Data On Components

COMPONENT	CAS #	% by wt.
Silicon dioxide	14808-60-7	<95%
Copper	7440-50-8	<2%
Phosphor Powder (as Nuisance Dust)	/	1%
Yttrium Oxide (as Yttrium)	1314-36-9	<0.5%
Barium Magnesium Aluminate	63774-55-0	<0.1%
Cerium Magnesium Aluminate	67452-72-7	<0.1%
Indium	7440-74-6	<0.15%
Bismuth	7440-69-9	<0.15%
Mercury	7439-97-6	<0.025%

3. Hazards Identification

Hazard description:

THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE NOT BROKEN OR DAMAGED. No adverse effects are expected from occasional exposure to broken lamps. As a matter of good practice, avoid prolonged or frequent exposure to broken lamps unless there is adequate ventilation. The major hazard from broken lamps is the possibility of being cut by the broken glass.



Material Safety Data Sheet

MSDS Code: EBO1309055-M106

Compact Fluorescent Lamp

Date of Issue: September 12, 2013

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4. First aid Measures

Inhalation: No specific treatment is necessary since this material is not likely to be hazardous by inhalation.

Ingestion: No specific treatment is necessary since this material is not likely to be hazardous by ingestion. If this product is accidentally ingested, seek medical attention.

5. Fire Fighting Measures

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water fog.

Special Fire-Fighting Procedures: As in any fire, firefighters should wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

6. Accidental Release Measures

Take the usual precautions for getting rid of broken glass. Place materials in closed containers to avoid generating dust. A Toxicity Characteristic Leaching Procedure (TCLP) was conducted on these products showing the mercury content in these lamps is not considered hazardous waste. For field disposal, the lead in the soldering is considered hazardous waste and must be disposed of by applicable federal, state and local regulations.

7. Handling And Storage

Handling: No special handling is required. Use in accordance with product literature.

Storage: Store at room temperature.

8. Exposure Controls And Personal Protection

Respiratory protection: No special controls or personal protection required under conditions of intended use.

Skin protection: No special controls or personal protection required under conditions of intended use.

Eye protection: No special controls or personal protection required under conditions of intended use.

Additional protective clothing & equipment: N/A



Material Safety Data Sheet

MSDS Code: EBO1309055-M106

Compact Fluorescent Lamp

Date of Issue: September 12, 2013

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9. Physical And Chemical Properties

General Information

Form:	Solid
Color:	White
Odor:	Odorless
Boiling Point:	Not Applicable
Melting Point:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density:	Not Applicable
Solubility In Water:	Not Applicable
Specific Gravity (H ₂ O = 1):	Not Applicable
pH:	Not Applicable
Freezing Point:	Not Applicable
Molecular Weight:	Mixture, Not Applicable

10. Stability And Reactivity

Chemical Stability: This material is chemically stable under normal storage and handling conditions.

Incompatible materials and conditions to avoid:

None.

Hazardous Polymerization: Is not known to occur.

Hazardous decomposition: None identified.

11. Toxicological Information

Acute toxicity

Primary irritant effect

On the skin: No irritation

On the eye: No irritation

Sensitization: No sensitizing effects known.



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12. Ecological Information

General notes: Do not allow material to be released to the environment without proper governmental permits.

13. Disposal Considerations

Product-Recommendation: Consult state, local or national regulations to ensure proper disposal.

Uncleaned

packagings-Recommendation: Disposal must be made according to official regulations.

14. Transport Information

Not a hazardous material for transportation.

DOT regulations:

Hazard class: None

Land transport ADR/RID (cross-border)

ADR/RID class: None

Maritime transport IMDG:

IMDG Class: None

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

Transport/Additional information: There are no unreasonable risks (health, safety, or property), that this product would pose when transported in commerce.

15. Regulations

Product related hazard

information: Observe the general safety regulations when handling chemicals

National regulations: All components of this product are listed in the EU Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

Information about limitation of

use: For use only by technically qualified individuals.



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16. Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

DISCLAIMER OF LIABILITY

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