APS-TK3502-Z

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 09.16.2014

Phenolphthalein Ind Soln,15mL

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: **Phenolphthalein Ind Soln,15mL**

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: **PH1605-AA**

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Emergency telephone number:

Aquaphoenix Scientific, Inc
Emer Ph: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:

Irritant
Eye Irritant 2
Specific target organ toxicity following single exposure, category 3

Flammable
Flammable liquids, category 3

Toxic
Acute toxicity (oral, dermal, inhalation), category 3

Eye Irritation 2.
Specific Target Organ Toxicity, Single Exposure 3.
Acute Toxicity 3 (oral).
Flammable Liquid 3.

Signal word: Danger

Hazard statements:

Flammable liquid and vapour.
Causes serious eye irritation.
Suspected of causing genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.

Precautionary statements:

Obtain special instructions before use.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces – No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash hands and forearms thoroughly after handling.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see Section 4).
In case of fire: Use media appropriate for extinction.
Store locked up.
Store in a well ventilated place. Keep cool.
Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulation.

Other Non-GHS Classification:

WHMIS

D2B 

B1 

NFPA/HMIS

NFPA SCALE (0-4)

Health	2
Flammability	1
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 67-56-1	Methanol	12.5 %
CAS 64-17-5	Ethanol	12.5 %
CAS 67-63-0	Isopropanol	25 %
CAS 77-09-8	Phenolphthalein	0.5 %
CAS 7732-18-5	Water (DI)	50 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Take affected persons out into the fresh air. Seek immediate medical advice. Provide oxygen treatment if affected person has difficulty breathing. In case of irregular breathing or respiratory arrest provide artificial respiration.

After skin contact:

Immediately remove any clothing soiled by the product. Flush with water for 15 minutes. Seek immediate medical attention or advice.

After eye contact:

Protect unharmed eye. Flush with water for 15 minutes. Seek immediate medical attention or advice.

After swallowing:

Do not induce vomiting; call for medical help immediately. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Have exposed individual drink sips of water or milk.

Most important symptoms and effects, both acute and delayed:

Headache. Acidosis. Disorientation. Unconsciousness. Coughing. Breathing difficulty. Dizziness. Gastric or intestinal disorders when ingested. Nausea in case of ingestion. Slight irritant effect on skin and mucous membranes. Irritant to eyes. Blindness.

Indication of any immediate medical attention and special treatment needed:

Contains methanol. Consult literature for specific antidotes. Medical supervision for at least 48 hours. Monitor circulation, possible shock treatment. If necessary oxygen respiration treatment. Note to physician: Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray.

Unsuitable extinguishing agents:

None.

Special hazards arising from the substance or mixture:

Formation of toxic gases is possible during heating or in case of fire.

Advice for firefighters:

Protective equipment:

Wear self-contained respiratory protective device. Wear fully protective suit.

Additional information (precautions):

Eliminate all ignition sources if safe to do so. Use large quantities of foam as it is partially destroyed by the product.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Avoid contact with skin and eyes, and clothing.

Environmental precautions:

Do not allow to enter sewers. Do not allow to enter surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to section 13. Used rags or other cleaning materials should be soaked with water and placed in a sealed container. Clean up spills immediately. Always obey local regulations. Wash hands after handling. Avoid contact with skin and eyes.

Reference to other sections:

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

Precautions for safe handling:

Prevent formation of aerosols. Avoid splashes or spray in enclosed areas. Use only in well ventilated areas. Rags, metal wools / cuttings / shavings and waste papers soaked with product must be placed in a sealed metal container rated for flammable waste. Keep ignition sources away - Do not smoke. Flammable gas-air mixtures may form in empty receptacles. Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for receptacles. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed receptacles. Keep container tightly sealed. Store away from combustible materials. Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection



Control Parameters:

67-63-0, :Isopropanol, ACGIH TLV: 983mg/m3.
67-63-0, :Isopropanol, OSHA PEL: 980mg/m3.
64-17-5, Ethanol, OSHA PEL: 1900mg/m3.
64-17-5, Ethanol, ACGIH TLV: 1880mg/m3.
67-56-1, Methanol, OSHA PEL: 200ppm.
67-56-1, Methanol, ACGIH TLV: 200ppm.

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated above. All electrical equipment should comply with the National Electric Code. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Take precautionary measures against static discharges. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases/vapors may be released.

Respiratory protection:

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

Protection of skin: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection: Safety glasses.

General hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Slight pink liquid	**Explosion limit lower**: **Explosion limit upper**:	Product does not present Explosion hazard Not Determined
Odor:	Mild alcohol	**Vapor pressure at 20°C**:	33mmHg @ 20C
Odor threshold:	Not determined	**Vapor density**:	2.1
pH-value:	Slightly Acidic	**Relative density**:	Not determined
Melting/Freezing point:	- 88C	**Solubilities**:	Soluble in water.
Boiling point/Boiling range:	Approx 82C	**Partition coefficient (n-octanol/water)**:	Not determined
Flash point (closed cup):	Not determined	**Auto/Self-ignition temperature**:	Product is not self-igniting
Evaporation rate:	2.88	**Decomposition temperature**:	Not determined
Flammability (solid, gaseous):	Not determined	**Viscosity**:	a. Kinematic: Not Determined b. Dynamic: Not determined
Density at 20°C:	slightly heavier than water		

SECTION 10: Stability and reactivity

Reactivity:

Not determined.

Chemical stability:

No decomposition if used and stored according to specifications.

Possible hazardous reactions:

Flammable. Toxic fumes may be released if heated above the decomposition point. Reacts violently with oxidizing agents.

Conditions to avoid:

Keep ignition sources away - Do not smoke. Store away from oxidizing agents. Excess heat.

Incompatible materials:

Strong acids. Strong bases. Oxidizers, aldehydes, heat, sparks, open flame, metallic oxides.

Hazardous decomposition products:

Carbon oxides (CO, CO2). Acrid and irritating fumes, including toxic oxides of carbon will heat to combustion.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

5840 mg/kg (Isopropanol) LD50 rat:

1 g/kg (Phenolphthalein) LD50rat

7060mg/kg (Ethanol) LD50-rat

5628mg/kg (Methanol) LD50 rat

Inhalation:

83.2 mg/L (Methanol) LC50 rat

72.6 mg/L (Isopropanol) LC50 rat

Chronic Toxicity:

Oral:

No testing available

Dermal:

No testing available

Inhalation:

No testing available

Corrosion Irritation:

Dermal:

No testing available

Ocular:

No testing available

Sensitization:

Not classified.

Numerical Measures:

ATE: 50ppm

Carcinogenicity:

NTP: 1, 3
IARC Group: 2B

Mutagenicity: No additional information.
Reproductive Toxicity: No additional information.

SECTION 12: Ecological information

Ecotoxicity: No additional information.
Persistence and degradability:

biodegradable.

Bioaccumulative potential:

No further relevant information available.

Mobility in soil:

No further relevant information available.

Other adverse effects:

No further relevant information available.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product. Handle empty containers with care because residual vapors are flammable. Avoid release to the environment. Absorb and containerize for disposal.

SECTION 14: Transport information

US DOT

UN Number:
ADR, ADN, DOT, IMDG, IATA UN1993

Limited Quantity Exception: None

Bulk:
RQ (if applicable): None
Proper shipping Name: Flammable Liquids , N.O.S., (Isopropanol).
Hazard Class: 3
Packing Group: III.
Marine Pollutant (if applicable): No additional information.
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: Flammable Liquids , N.O.S., (Isopropanol).
Hazard Class: 3
Packing Group: III.
Marine Pollutant (if applicable): No additional information.
Comments: None


SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

67-56-1 Methanol.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

77-09-8 Phenolphthalein.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

64-17-5 Ethanol.
67-56-1 Methanol.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

64-17-5 Ethanol.

Canadian NPRI Ingredient Disclosure list (limit 1%):

67-56-1 Methanol.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.of this material.

GHS Full Text Phrases:
Acute Tox. 4 (Oral) Acute toxicity (oral) Category 4.
H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
Carc. 1B Carcinogenicity Category 1B.
Eye Irrit. 2A Serious eye damage/eye irritation Category 2A.
Eye Irrit. 2B Serious eye damage/eye irritation Category 2B.
Flam. Liq. 3 Flammable liquids Category 3.
Muta. 2 Germ cell mutagenicity Category 2.
Repr. 2 Reproductive toxicity Category 2.
Skin Irrit. 2 skin corrosion/irritation Category 2.
STOT SE 3 Specific target organ toxicity (single exposure) Category 3.

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.
DNEL Derived No-Effect Level (REACH).
PNEC Predicted No-Effect Concentration (REACH).
DOT US Department of Transportation.
IATA International Air Transportation Association.
GHS Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH American Conference of Governmental Industrial Hygienists.
CAS Chemical Abstracts Service (division of the American Chemical Society).
NFPA National Fire Protection Association (USA).
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).

Effective date: 09.16.2014
Last updated: 07.20.2015

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: **Sulfite Titrant Low**

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: **PI8056-B**

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Emergency telephone number:

Aquaphoenix Scientific, Inc
Emer Ph: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:

Skin Irrit. 3.

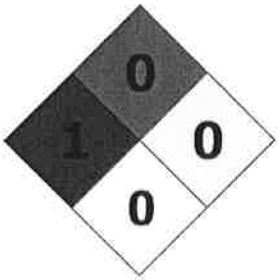
Signal word: Warning

Hazard statements:
Causes mild skin irritation.

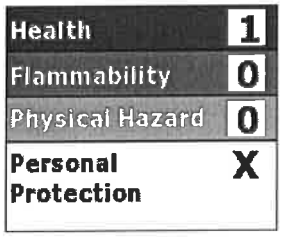
Precautionary statements:
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
If skin irritation occurs: Get medical advice/attention.

Other Non-GHS Classification:

WHMIS
None
NFPA/HMIS



NFPA SCALE (0-4)



HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 7681-11-0	Potassium Iodide	1 %
CAS 7732-18-5	water, Purified	98.735 %
CAS 7758-05-6	potassium Iodate	0.065 %
CAS 1310-58-3	Potassium Hydroxide	0.1 %
CAS 144-55-8	Sodium Bicarbonate	0.1 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

After skin contact:

Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13. Small quantities may be flushed to drains with plenty of water.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Wash hands after handling. Follow good hygiene procedures when handling chemical materials. Use only in well ventilated areas. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly sealed. Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection

Control Parameters:	7681-11-0, Potassium Iodide, ACS, ACGIH NIOSH 0.01 mg/m3.
Appropriate Engineering controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use under a fume hood.
Respiratory protection:	Use suitable respiratory protective device when high concentrations are present. For spills, respiratory protection may be advisable. Normal ventilation is adequate.
Protection of skin:	The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Eye protection:	Safety glasses with side shields or goggles.

General hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, colorless liquid	**Explosion limit lower**: **Explosion limit upper**:	Not determined Not determined
Odor:	Odorless	**Vapor pressure at 20°C**:	Not Determined
Odor threshold:	Not determined	**Vapor density**:	Not determined
pH-value:	Not Determined	**Relative density**:	Approx 1
Melting/Freezing point:	Approx 0°C	**Solubilities**:	Soluble in water.
Boiling point/Boiling range:	Approx 100°C	**Partition coefficient (n-octanol/water)**:	Not determined
Flash point (closed cup):	Not Determined	**Auto/Self-ignition temperature**:	Not determined
Evaporation rate:	Not determined	**Decomposition temperature**:	Not determined
Flammability (solid, gaseous):	Not determined	**Viscosity**:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

No decomposition if used and stored according to specifications.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

exposure to light. Incompatible Materials.

Incompatible materials:

Strong acids. Strong bases. Strong oxidizers.

Hazardous decomposition products:

Hydrogen iodide. Iodine gas. May include oxides of iodine.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

POTASSIUM IODIDE (7681-11-0) LD50 Rat: 285 mg/kg

Chronic Toxicity: No additional information.

Corrosion Irritation:

Dermal:

7681-11-0 Rabbit: causes irritation

Ocular:

7681-11-0 Rabbit: causes irritation

Sensitization: No additional information.
Numerical Measures: No additional information.
Carcinogenicity: No additional information.
Mutagenicity: No additional information.
Reproductive Toxicity: No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Crustacea LC50 Zebra mussel (Dreissena polymorpha) 220 - 313 mg/l, 24 hours: 7681-11-0

Fish LC50 - Oncorhynchus mykiss (rainbow trout) - 2,190 mg/l - 96 h: 7681-11-0

Persistence and degradability: No additional information.
Bioaccumulative potential:

Not Bioaccumulative.

Mobility in soil: No additional information.
Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product. Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction.

SECTION 14: Transport information

US DOT

UN Number:
ADR, ADN, DOT, IMDG, IATA — Not Regulated.

Limited Quantity Exception: — None

Bulk:
RQ (if applicable): None
Proper shipping Name: Not Regulated.
Hazard Class: None
Packing Group: Not Regulated.
Marine Pollutant (if applicable): No additional information.
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: Not Regulated.
Hazard Class: None
Packing Group: Not Regulated.
Marine Pollutant (if applicable): No additional information.
Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.
PNEC Predicted No-Effect Concentration (REACH).
CFR Code of Federal Regulations (USA).
SARA Superfund Amendments and Reauthorization Act (USA).
RCRA Resource Conservation and Recovery Act (USA).
TSCA Toxic Substances Control Act (USA).
NPRI National Pollutant Release Inventory (Canada).
DOT US Department of Transportation.
IATA International Air Transport Association.
GHS Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH American Conference of Governmental Industrial Hygienists.
CAS Chemical Abstracts Service (division of the American Chemical Society).
NFPA National Fire Protection Association (USA).
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).
DNEL Derived No-Effect Level (REACH).

Effective date: 12.16.2014
Last updated: 06.02.2015

Sulfite Titrant High

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: **Sulfite Titrant High**

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: **PI8063-B**

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Emergency telephone number:

Aquaphoenix Scientific, Inc
Emer Ph: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:

Skin Irrit. 3.

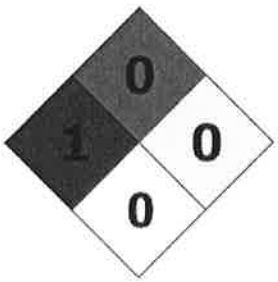
Signal word: Warning

Hazard statements:
Causes mild skin irritation.

Precautionary statements:
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
If skin irritation occurs: Get medical advice/attention.

Other Non-GHS Classification:

WHMIS
None
NFPA/HMIS



NFPA SCALE (0-4)

HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 7681-11-0	Potassium Iodide	1.2 %
CAS 7732-18-5	water, Purified	98.274 %
CAS 7758-05-6	potassium Iodate	0.326 %
CAS 1310-58-3	Potassium Hydroxide	0.1 %
CAS 144-55-8	Sodium Bicarbonate	0.1 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

After skin contact:

Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13. Small quantities may be flushed to drains with plenty of water.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Wash hands after handling. Follow good hygiene procedures when handling chemical materials. Use only in well ventilated areas. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly sealed. Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection

Control Parameters:	7681-11-0, Potassium Iodide, ACS, ACGIH NIOSH 0.01 mg/m3.
Appropriate Engineering controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use under a fume hood.
Respiratory protection:	Use suitable respiratory protective device when high concentrations are present. For spills, respiratory protection may be advisable. Normal ventilation is adequate.
Protection of skin:	The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Eye protection:	Safety glasses with side shields or goggles.

General hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, colorless liquid	**Explosion limit lower**: **Explosion limit upper**:	Not determined Not determined
Odor:	Odorless	**Vapor pressure at 20°C**:	Not Determined
Odor threshold:	Not determined	**Vapor density**:	Not determined
pH-value:	Not Determined	**Relative density**:	Approx 1
Melting/Freezing point:	Approx 0°C	**Solubilities**:	Soluble in water.
Boiling point/Boiling range:	Approx 100°C	**Partition coefficient (n-octanol/water)**:	Not determined
Flash point (closed cup):	Not Determined	**Auto/Self-ignition temperature**:	Not determined
Evaporation rate:	Not determined	**Decomposition temperature**:	Not determined
Flammability (solid, gaseous):	Not determined	**Viscosity**:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

No decomposition if used and stored according to specifications.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

exposure to light. Incompatible Materials.

Incompatible materials:

Strong acids. Strong bases. Strong oxidizers.

Hazardous decomposition products:

Hydrogen iodide. Iodine gas. May include oxides of iodine.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

POTASSIUM IODIDE (7681-11-0) LD50 Rat: 285 mg/kg

Chronic Toxicity: No additional information.

Corrosion Irritation:

Dermal:

7681-11-0 Rabbit: causes irritation

Ocular:

7681-11-0 Rabbit: causes irritation

Sensitization: No additional information.
Numerical Measures: No additional information.
Carcinogenicity: No additional information.
Mutagenicity: No additional information.
Reproductive Toxicity: No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Crustacea LC50 Zebra mussel (Dreissena polymorpha) 220 - 313 mg/l, 24 hours: 7681-11-0

Fish LC50 - Oncorhynchus mykiss (rainbow trout) - 2,190 mg/l - 96 h: 7681-11-0

Persistence and degradability: No additional information.
Bioaccumulative potential:

Not Bioaccumulative.

Mobility in soil: No additional information.
Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product. Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction.

SECTION 14: Transport information

US DOT

UN Number:
ADR, ADN, DOT, IMDG, IATA — Not Regulated.

Limited Quantity Exception: — None

Bulk:
RQ (if applicable): None
Proper shipping Name: Not Regulated.
Hazard Class: None
Packing Group: Not Regulated.
Marine Pollutant (if applicable): No additional information.
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: Not Regulated.
Hazard Class: None
Packing Group: Not Regulated.
Marine Pollutant (if applicable): No additional information.
Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.
PNEC Predicted No-Effect Concentration (REACH).
CFR Code of Federal Regulations (USA).
SARA Superfund Amendments and Reauthorization Act (USA).
RCRA Resource Conservation and Recovery Act (USA).
TSCA Toxic Substances Control Act (USA).
NPRI National Pollutant Release Inventory (Canada).
DOT US Department of Transportation.
IATA International Air Transport Association.
GHS Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH American Conference of Governmental Industrial Hygienists.
CAS Chemical Abstracts Service (division of the American Chemical Society).
NFPA National Fire Protection Association (USA).
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).
DNEL Derived No-Effect Level (REACH).

Effective date: 12.16.2014
Last updated: 06.02.2015

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: **Starch Acid Powder**

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: **ST5205-H**

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Emergency telephone number:

Aquaphoenix Scientific, Inc
Emer Ph: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:

Irritant
Skin irritation, category 2
Eye irritation, category 2A

Environmentally Damaging
Chronic hazards to the aquatic environment, category 3

May form combustible dust concentrations in air.
Skin irrit. 2.
Eye irrit. 2A.
Aquatic ChrTox. 3.

Signal word: Warning

Hazard statements:
Causes skin irritation.
Causes serious eye irritation.
Harmful to aquatic life with long lasting effects.

Precautionary statements:
Wash ... thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
Specific treatment (see ... on this label).

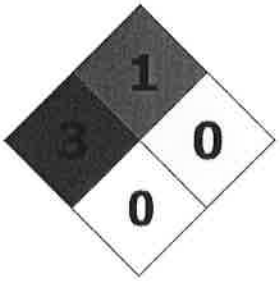
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists get medical advice/attention.
Take off contaminated clothing and wash before reuse.
Dispose of contents/container to ....

Other Non-GHS Classification:

WHMIS

E 

NFPA/HMIS



NFPA SCALE (0-4)

Health	3
Flammability	1
Physical Hazard	0
Personal Protection	0

HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 9005-25-8	Starch, Potato, Reagent Grade	20 %
CAS 5329-14-6	Sulphamidic acid	80 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Consult a physician.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Consult a physician.

After eye contact:

Flush eyes with water as a precaution. Rinse or flush exposed eye gently using water for 15-20 minutes. Consult a physician.

After swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water. DO NOT induce vomiting. Consult a physician.

Most important symptoms and effects, both acute and delayed:

Irritation. Headache. Shortness of breath. Nausea.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Do not inhale gases, fumes, dust, mist, vapor, and aerosols.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Carbon oxides may be released. Nitrogen oxides. Sulphur oxides.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Avoid generating dust. Avoid breathing vapors, dust, mist, or gas. Further processing of solid materials may result in the formation of combustible dusts.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that dust-handling systems (exhaust ducts, dust collectors, vessels, and processing equipment) are designed to prevent the escape of dust into the work area. Avoid contact with skin, eyes and clothing.

Environmental precautions:

Prevent from reaching drains, sewer, or waterway. Prevent further leakage or spillage. Should not be released into environment.

Methods and material for containment and cleaning up:

Sweep up and containerize for disposal. Avoid generating dust. Always obey local regulations. Sweep up and shovel. Keep in suitable closed containers for disposal. Follow proper disposal methods. Refer to Section 13.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions refer to Section 2. Avoid contact with skin, eyes, and clothing. Avoid dispersal of dust in the air. Do not clear dust on surfaces with compressed air. Wash hands after handling.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry, and well-ventilated area. Store away from incompatible materials. Refer to Sections 5 and 10. Store product and empty container away from heat and sources of ignition. Keep container tightly closed in a cool, dry, and well-ventilated area. Store in inert atmosphere. Protect from freezing an physical damage. Store as corrosive.

SECTION 8: Exposure controls/personal protection

Control Parameters:	9005-25-8, High-polymeric carbohydrate material, 10 mg/m3 USA. ACGIH Threshold Limit Values (TLV). 9005-25-8, High-polymeric carbohydrate material, 15 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants. 9005-25-8, High-polymeric carbohydrate material, 5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants. 9005-25-8, High-polymeric carbohydrate material, 5 mg/m3 USA. NIOSH Recommended Exposure Limits. 9005-25-8, High-polymeric carbohydrate material, 10 mg/m3 USA. NIOSH Recommended Exposure Limits.
Appropriate Engineering controls:	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Respiratory protection:	Normal ventilation is adequate. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.
Protection of skin:	Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wear protective clothing.
Eye protection:	Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles.
General hygienic measures:	Perform routine housekeeping to prevent dust generation. Do not eat, drink, smoke, or use personal products when handling chemical substances. Wash hands before breaks and immediately after handling the product.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	White powder.	**Explosion limit lower**: **Explosion limit upper**:	Not Determined Not Determined
Odor:	Odorless	**Vapor pressure at 20°C**:	Not Determined
Odor threshold:	Not Determined	**Vapor density**:	Not Determined
pH-value:	Not Determined	**Relative density**:	Approx 2
Melting/Freezing point:	Decomposes at 205C	**Solubilities**:	Solube in water: 213 g/l at 20°C.
Boiling point/Boiling range:	Not Determined	**Partition coefficient (n-octanol/water)**:	Not Determined
Flash point (closed cup):	Not Determined	**Auto/Self-ignition temperature**:	Not Determined

Evaporation rate:	Not Determined	**Decomposition temperature:**	Not Determined
Flammability (solid, gaseous):	Not Determined	**Viscosity:**	a. Kinematic: Not Determined b. Dynamic: Not Determined
Density at 20°C:	Not Determined		

SECTION 10: Stability and reactivity

Reactivity:

None under normal processing.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions: None

Conditions to avoid:

Dust generation. Incompatible materials.

Incompatible materials:

Strong oxidizing agents. Strong bases. Nitric acid. Chlorine.

Hazardous decomposition products:

Ammonia. Oxides of sulfur. Nitrogen. Carbon.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

9005-25-8 LD50 Intraperitoneal - Mouse - 6,600 mg/kg

5329-14-6 LD50 Oral - rat - 3,160 mg/kg

Chronic Toxicity: No additional information.

Corrosion Irritation:

Dermal:

9005-25-8 Skin - Human Result: Mild skin irritation - 3 h

5329-14-6 Skin - Human Result: Mild skin irritation

Ocular:

5329-14-6 Eyes - rabbit Result: Moderate eye irritation

Sensitization: No additional information.

Numerical Measures: No additional information.

Carcinogenicity: No additional information.

Mutagenicity: No additional information.

Reproductive Toxicity: No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - 70.3 mg/l - 96 h (OECD Test Guideline 203): 5329-14-6

Persistence and degradability: No additional information.

Bioaccumulative potential: No additional information.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

US DOT

UN Number:
ADR, ADN, DOT, IMDG, IATA 3261

Limited Quantity Exception: None

Bulk:
RQ (if applicable): None
Proper shipping Name: Corrosive Solid, Acidic, Organic, N.O.S., (Sulfamic Acid).
Hazard Class: 8
Packing Group: III.
Marine Pollutant (if applicable): No additional information.
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: Corrosive Solid, Acidic, Organic, N.O.S., (Sulfamic Acid).
Hazard Class: 8
Packing Group: III.
Marine Pollutant (if applicable): No additional information.
Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.of this material.

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).
DNEL Derived No-Effect Level (REACH).
PNEC Predicted No-Effect Concentration (REACH).
DOT US Department of Transportation.
IATA International Air Transportation Association.
GHS Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH American Conference of Governmental Industrial Hygienists.
CAS Chemical Abstracts Service (division of the American Chemical Society).
NFPA National Fire Protection Association (USA).

Effective date: 01.12.2015
Last updated: 06.24.2015