KOVA®poc Abnormal (25mL, 15mL and 5mL)

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: N/A Date of Issue: Oct. 19, 2016

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: KOVA ®poc Abnormal (25mL, 15mL and 5mL)

Product Component: 88105, 88115, 88125, 88205

1.2. Intended Use of the Product: No additional information available

1.3. Name, Address, and Telephone of Manufacturer/Supplier

Kova International, Inc.
7272 Chapman Avenue, Suite B
Garden Grove, CA 92841
Tel: 1-714-902-1700
Fax: 1-714-908-7945
Business hours: (8:00 a.m. - 5:00 p.m., PST, Monday - Friday)

1.4. Emergency Telephone Number

Emergency Number : Contact your local Poison Center

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Resp. Sens. 1	H334
Skin Sens. 1	H317

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS08

Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H317 - May cause an allergic skin reaction.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements (GHS-US) : P261 - Avoid breathing vapors, mist, or spray.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, and eye protection.
P284 - [In case of inadequate ventilation] wear respiratory protection .
P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P321 - Specific treatment (see section 4 on this SDS).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.
P363 - Wash contaminated clothing before reuse.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulation

Name	Product Identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	91.139172	Not classified
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-, monosodium salt	(CAS No) 75277-39-3	2.38	Not classified
Urine, Human	(CAS No) Not applicable	0.99399	Not classified
Sodium chloride	(CAS No) 7647-14-5	0.9	Not classified
Potassium chloride	(CAS No) 7447-40-7	0.9	Not classified
Glucose	(CAS No) 50-99-7	0.6	Comb. Dust
Albumins, blood serum	(CAS No) 9048-46-8	0.55	Comb. Dust
Methyl acetoacetate, monosodium salt	(CAS No) 34284-28-1	0.2	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
4H-Imidazol-4-one, 2-amino-1,5-dihydro-1-methyl-	(CAS No) 60-27-5	0.2	Not classified
Disodium 6,6'-dihydroxy-3,3'-(4,5,6,7-tetrabromo-1,3-dihydro-3-oxoisobenzofuran-1-ylidene)dibenzenesulphonate	(CAS No) 123359-42-2	0.04125	Resp. Sens. 1, H334 Skin Sens. 1, H317
Hydrochloric acid*	(CAS No) 7647-01-0	< 0.12587	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401
Sodium hydroxide*	(CAS No) 1310-73-2	< 0.113	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Esterase, carboxyl	(CAS No) 9016-18-6	0.111	Resp. Sens. 1, H334
Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis[5-methyl-2-(1-methylethyl)-, S,S-dioxide, monosodium salt	(CAS No) 62625-21-2	0.022	Not classified
Monopotassium carbonate	(CAS No) 298-14-6	0.008	Not classified
Sodium nitrite	(CAS No) 7632-00-0	0.0075	Ox. Sol. 2, H272 Acute Tox. 3 (Oral), H301 Eye Irrit. 2A, H319 Aquatic Acute 1, H400
Magnesium nitrate	(CAS No) 10377-60-3	< 0.0060126	Ox. Sol. 3, H272
1H-Pyrrole	(CAS No) 109-97-7	0.005	Flam. Liq. 3, H226 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Dam. 1, H318
1-Naphthalenesulfonic acid, 8-(phenylamino)-, monoammonium salt	(CAS No) 28836-03-5	0.005	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
3(2H)-Isothiazolone, 5-chloro-2-methyl-	(CAS No) 26172-55-4	< 0.0030063	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400

3(2H)-Isothiazolone, 2-methyl-	(CAS No) 2682-20-4	< 0.0030063	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400
N-(1-Naphthyl)ethylenediamine dihydrochloride	(CAS No) 1465-25-4	0.003	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Sodium phosphate dibasic	(CAS No) 7558-79-4	0.003	Not classified
Phosphoric acid, potassium salt (1:1)	(CAS No) 7778-77-0	0.002	Not classified
Potassium ferricyanide	(CAS No) 13746-66-2	0.0016	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Hemoglobins	(CAS No) 9008-02-0	0.0015	Comb. Dust
Ethanedioic acid, diammonium salt, monohydrate	(CAS No) 6009-70-7	0.00072	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Eye Dam. 1, H318
Potassium cyanide	(CAS No) 151-50-8	0.0004	Met. Corr. 1, H290 Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation:gas), H330 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Gentamicin	(CAS No) 1403-66-3	0.00016	Resp. Sens. 1A, H334 Skin Sens. 1A, H317 Repr. 1B, H360
Calcium chloride	(CAS No) 10043-52-4	0.00013	Eye Irrit. 2A, H319
Calcium hydroxide phosphate (Ca5(OH)(PO4)3)	(CAS No) 12167-74-7	0.000015	Not classified

Full text of H-phrases: see section 16

* These components are added to adjust pH as necessary.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitization.

Symptoms/Injuries After Inhalation: Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Thermal decomposition generates: Carbon oxides (CO, CO_2). Nitrogen oxides. Sulfur oxides. Sodium oxides. Metal oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Ventilate area. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, and spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash contaminated clothing before reuse.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Keep only in original container. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Products: Strong acids, strong bases, strong oxidizers. Water reactive materials. Alkalis. Metals.

Storage Temperature: 2 - 8 °C (35.6 to 46.4°F)

7.3. Specific End Use(s): No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Potassium cyanide (151-50-8)		
USA ACGIH	ACGIH Ceiling (mg/m³)	5 mg/m³
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	5 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	4.7 ppm
USA IDLH	US IDLH (mg/m³)	25 mg/m³

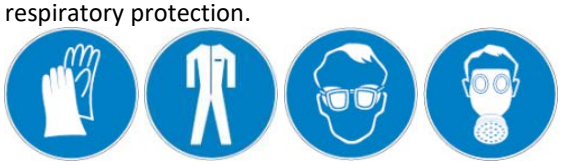
Hydrochloric acid (7647-01-0)		
USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	7 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	5 ppm
USA IDLH	US IDLH (ppm)	50 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	7 mg/m³
USA OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm

Sodium hydroxide (1310-73-2)		
USA ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	2 mg/m³
USA IDLH	US IDLH (mg/m³)	10 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m³

8.2. Exposure Controls

Appropriate Engineering Controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Local exhaust and general ventilation must be adequate to meet exposure standards. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Ensure all national/local regulations are observed.

Personal Protective Equipment : Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing : Chemically resistant materials and fabrics.

Hand Protection : Wear protective gloves.

Eye Protection : Chemical safety goggles.

Skin and Body Protection : Wear suitable protective clothing. In laboratory, medical or industrial settings, impervious disposable gloves and protective clothing are recommended if skin contact is possible.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Environmental Exposure Controls : Avoid release to the environment.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance	: Amber, red
Odor	: No data available
Odor Threshold	: No data available
pH	: 7.5 - 8
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: ≈ 100 °C (≈ 212 °F)
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Solubility	: Soluble in water.
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water reactive materials. Alkalis. Metals.

10.6. Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

Sodium chloride (7647-14-5)	
LD50 Oral Rat	3 g/kg
LC50 Inhalation Rat	> 42 g/m³ (Exposure time: 1 h)
ATE (Oral)	3,000.00 mg/kg body weight
Potassium chloride (7447-40-7)	
LD50 Oral Rat	2600 mg/kg
Glucose (50-99-7)	
LD50 Oral Rat	25800 mg/kg
Potassium cyanide (151-50-8)	
LD50 Oral Rat	7.49 mg/kg
LD50 Dermal Rabbit	22.3 mg/kg
LC50 Inhalation Rat	0.16 mg/l (Exposure time: 1 h)
LC50 Inhalation Rat	63 (52 - 79) ppm/1h
ATE (Oral)	0.50 mg/kg body weight
ATE (Gases)	31.50 ppmV/4h
Sodium nitrite (7632-00-0)	
LD50 Oral Rat	85 mg/kg
LC50 Inhalation Rat	5.5 mg/l/4h
1H-Pyrrole (109-97-7)	
ATE (Oral)	100.00 mg/kg body weight
ATE (Dust/Mist)	1.50 mg/l/4h
Magnesium nitrate (10377-60-3)	

LD50 Oral Rat	5440 mg/kg
3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4)	
LD50 Oral Rat	481 mg/kg
LC50 Inhalation Rat	1.23 mg/l/4h
ATE (Oral)	100.00 mg/kg body weight
ATE (Dermal)	300.00 mg/kg body weight
3(2H)-Isothiazolone, 2-methyl- (2682-20-4)	
ATE (Oral)	100.00 mg/kg body weight
ATE (Dermal)	300.00 mg/kg body weight
ATE (Dust/Mist)	0.50 mg/l/4h
Hydrochloric acid (7647-01-0)	
LD50 Dermal Rabbit	> 5010 mg/kg
Gentamicin (1403-66-3)	
LD50 Oral Rat	6600 mg/kg
Sodium phosphate dibasic (7558-79-4)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
Calcium chloride (10043-52-4)	
LD50 Oral Rat	2301 (1455 - 2781) mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg
Ethanedioic acid, diammonium salt, monohydrate (6009-70-7)	
ATE (Oral)	500.00 mg/kg body weight
ATE (Dermal)	1,100.00 mg/kg body weight

Skin Corrosion/Irritation: Not classified
pH: 7.5 - 8
Serious Eye Damage/Irritation: Not classified
pH: 7.5 - 8
Respiratory or Skin Sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified

Hydrochloric acid (7647-01-0)	
IARC group	3

Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.
Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.
Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.
Chronic Symptoms: None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Not classified.

Sodium chloride (7647-14-5)	
LC50 Fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Potassium chloride (7447-40-7)	

LC50 Fish 1	1060 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	825 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	750 (750 - 1020) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	880 mg/l (Exposure time: 24 h - Species: Daphnia magna)

Potassium cyanide (151-50-8)	
LC50 Fish 1	0.04 - 0.046 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 1	0.113 mg/l
LC50 Fish 2	0.044 - 0.084 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Sodium nitrite (7632-00-0)	
LC50 Fish 1	0.19 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
LC50 Fish 2	0.092 - 0.13 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

1H-Pyrrole (109-97-7)	
LC50 Fish 1	197 - 224 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4)	
LC50 Fish 1	1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
EC50 Daphnia 1	4.71 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 2	0.12 (0.12 - 0.3) mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])

Hydrochloric acid (7647-01-0)	
LC50 Fish 1	7.45 mg/l (Species: Oncorhynchus mykiss - Exposure time: 96h)

Sodium hydroxide (1310-73-2)	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	40 mg/l

Calcium chloride (10043-52-4)	
LC50 Fish 1	10650 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	2400 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability

KOVA Liqua-Trol® I Abnormal (120mL and 15mL)	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

KOVA Liqua-Trol® I Abnormal (120mL and 15mL)	
Bioaccumulative Potential	Not established.

Sodium chloride (7647-14-5)	
BCF Fish 1	(no bioaccumulation)

Sodium nitrite (7632-00-0)	
Log Pow	-3.7 (at 25 °C)

1H-Pyrrole (109-97-7)	
Log Pow	0.75

3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4)	
Log Pow	-0.71 - 0.75 (at 20 °C)

Calcium chloride (10043-52-4)	
BCF Fish 1	(no bioaccumulation)

12.4. Mobility in Soil
No additional information available

12.5. Other Adverse Effects
Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods
Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.
Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.
Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

KOVA Liqua-Trol® I Abnormal (120mL and 15mL)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-, monosodium salt (75277-39-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance

Sodium chloride (7647-14-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Potassium chloride (7447-40-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

4H-Imidazol-4-one, 2-amino-1,5-dihydro-1-methyl- (60-27-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Glucose (50-99-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Hemoglobins (9008-02-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Monopotassium carbonate (298-14-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Potassium ferricyanide (13746-66-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Potassium cyanide (151-50-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302	
CERCLA RQ	10 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	100 lb (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)

Esterase, carboxyl (9016-18-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))

Sodium nitrite (7632-00-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1.0 %

Albumins, blood serum (9048-46-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))

1H-Pyrrole (109-97-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis[5-methyl-2-(1-methylethyl)-, S,S-dioxide, monosodium salt (62625-21-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

1-Naphthalenesulfonic acid, 8-(phenylamino)-, monoammonium salt (28836-03-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Magnesium nitrate (10377-60-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance SP

3(2H)-Isothiazolone, 2-methyl- (2682-20-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance SP

Hydrochloric acid (7647-01-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA
CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb (gas only)
SARA Section 313 - Emission Reporting	1.0 % (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

Sodium hydroxide (1310-73-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	1000 lb

Sodium phosphate dibasic (7558-79-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	5000 lb

Phosphoric acid, potassium salt (1:1) (7778-77-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Calcium chloride (10043-52-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ethanedioic acid, diammonium salt, monohydrate (6009-70-7)	
CERCLA RQ	5000 lb listed under Ammonium oxalate

N-(1-Naphthyl)ethylenediamine dihydrochloride (1465-25-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State Regulations

Potassium cyanide (151-50-8)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List

Sodium nitrite (7632-00-0)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List

1H-Pyrrole (109-97-7)
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List

Magnesium nitrate (10377-60-3)

U.S. - Massachusetts - Right to Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Hydrochloric acid (7647-01-0)

U.S. - Massachusetts - Right to Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Sodium hydroxide (1310-73-2)

U.S. - Massachusetts - Right to Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Sodium phosphate dibasic (7558-79-4)

U.S. - Massachusetts - Right to Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Ethanedioic acid, diammonium salt, monohydrate (6009-70-7)

U.S. - Massachusetts - Right to Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 09/16/2016

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal) Category 1
Acute Tox. 1 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 1
Acute Tox. 1 (Oral)	Acute toxicity (oral) Category 1
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Met. Corr. 1	Corrosive to metals Category 1
Ox. Sol. 2	Oxidizing solids Category 2
Ox. Sol. 3	Oxidizing solids Category 3
Repr. 1B	Reproductive toxicity Category 1B
Resp. Sens. 1	Respiratory sensitisation Category 1
Resp. Sens. 1A	Respiratory sensitisation Category 1A
Skin Corr. 1A	Skin corrosion/irritation Category 1A

Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
Skin Sens. 1A	Skin sensitization Category 1A
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H300	Fatal if swallowed
H301	Toxic if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Name: KOVA ®poc Normal (25mL, 15mL and 5mL)

Product Component: 88105, 88115, 88125, 88205

1.2. Intended Use of the Product

Use of the Substance/Mixture: For in vitro diagnostic use only.

1.3. Name, Address, and Telephone of Manufacturer/Supplier

Kova International, Inc.
7272 Chapman Avenue, Suite B
Garden Grove, CA 92841
Tel: 1-714-902-1700
Fax: 1-714-908-7945
Business hours: (8:00 a.m. - 5:00 p.m., PST, Monday - Friday)

1.4. Emergency Telephone Number

Emergency Number : Contact your local Poison Center

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Not classified

2.2. Label Elements

GHS-US Labeling

No labeling applicable

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. May cause an allergic reaction in sensitive individuals.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	98.8676538	Not classified
Sodium chloride	(CAS No) 7647-14-5	0.3	Not classified
Potassium chloride	(CAS No) 7447-40-7	0.3	Not classified
4H-Imidazol-4-one, 2-amino-1,5-dihydro-1-methyl-	(CAS No) 60-27-5	0.2	Not classified
Sodium phosphate dibasic	(CAS No) 7558-79-4	0.1345	Not classified
Sodium hydroxide*	(CAS No) 1310-73-2	< 0.1	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Hydrochloric acid*	(CAS No) 7647-01-0	< 0.1	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401
Sodium azide	(CAS No) 26628-22-8	0.095	Acute Tox. 2 (Oral), H300 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Phosphoric acid, monosodium salt	(CAS No) 7558-80-7	0.0064	Not classified
Magnesium nitrate	(CAS No) 10377-60-3	< 0.00000084	Ox. Sol. 3, H272
3(2H)-Isothiazolone, 5-chloro-2-methyl-	(CAS No) 26172-55-4	< 0.00000042	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400
3(2H)-Isothiazolone, 2-methyl-	(CAS No) 2682-20-4	< 0.00000042	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400

Full text of H-phrases: see section 16

* These components are added to adjust pH as necessary.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Not expected to present a significant hazard under anticipated conditions of normal use. May cause an allergic reaction in sensitive individuals.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. May cause exacerbation of asthma if mists are inhaled.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation. May cause an allergic reaction in sensitive individuals.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Thermal decomposition generates: Carbon oxides (CO, CO_2). Nitrogen oxides. Sulfur oxides. Sodium oxides. Potassium oxides. Metal oxides. Phosphorus oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Ventilate area. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, and spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash contaminated clothing before reuse.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep only in original container. Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Products: Strong acids, strong bases, strong oxidizers. Water reactive materials. Alkalis. Metals.

7.3. Specific End Use(s): For in vitro diagnostic use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Sodium azide (26628-22-8)		
USA ACGIH	ACGIH Ceiling (mg/m³)	0.29 mg/m³
USA ACGIH	ACGIH Ceiling (ppm)	0.11 ppm (vapor)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	0.3 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	0.1 ppm

Sodium hydroxide (1310-73-2)		
USA ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	2 mg/m³
USA IDLH	US IDLH (mg/m³)	10 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m³

Hydrochloric acid (7647-01-0)		
USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	7 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	5 ppm
USA IDLH	US IDLH (ppm)	50 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	7 mg/m³

USA OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm

8.2. Exposure Controls

Appropriate Engineering Controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Local exhaust and general ventilation must be adequate to meet exposure standards. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Ensure all national/local regulations are observed.

Personal Protective Equipment : Not generally required. The use of personal protective equipment may be necessary as conditions warrant. Gloves. Protective clothing. Protective goggles.

Materials for Protective Clothing : Chemically resistant materials and fabrics.

Hand Protection : Wear protective gloves.

Eye Protection : Chemical safety goggles.

Skin and Body Protection : Wear suitable protective clothing. In laboratory, medical or industrial settings, impervious disposable gloves and protective clothing are recommended if skin contact is possible.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Environmental Exposure Controls : Avoid release to the environment.

Other Information When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Green, yellow
Odor	: No data available
Odor Threshold	: No data available
pH	: 7.5 - 8
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: ≈ 100 °C (≈ 212 °F)
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Solubility	: Soluble in water
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

9.2. Other Information: No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water reactive materials. Alkalis. Metals.

10.6. Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

Sodium phosphate dibasic (7558-79-4)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
Phosphoric acid, monosodium salt (7558-80-7)	
LD50 Oral Rat	8290 mg/kg
LD50 Dermal Rabbit	> 7940 mg/kg
Sodium azide (26628-22-8)	
LD50 Oral Rat	27 mg/kg
Sodium chloride (7647-14-5)	
LD50 Oral Rat	3 g/kg
LC50 Inhalation Rat	> 42 g/m³ (Exposure time: 1 h)
ATE (Oral)	3,000.00 mg/kg body weight
Potassium chloride (7447-40-7)	
LD50 Oral Rat	2600 mg/kg
Hydrochloric acid (7647-01-0)	
LD50 Dermal Rabbit	> 5010 mg/kg
Magnesium nitrate (10377-60-3)	
LD50 Oral Rat	5440 mg/kg
3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4)	
LD50 Oral Rat	481 mg/kg
LC50 Inhalation Rat	1.23 mg/l/4h
ATE (Oral)	100.00 mg/kg body weight
ATE (Dermal)	300.00 mg/kg body weight
3(2H)-Isothiazolone, 2-methyl- (2682-20-4)	
ATE (Oral)	100.00 mg/kg body weight
ATE (Dermal)	300.00 mg/kg body weight
ATE (Dust/Mist)	0.50 mg/l/4h

Skin Corrosion/Irritation: Not classified
pH: 7.5 - 8
Serious Eye Damage/Irritation: Not classified
pH: 7.5 - 8
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified

Hydrochloric acid (7647-01-0)	
IARC group	3

Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. May cause exacerbation of asthma if mists are inhaled.
Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation. May cause an allergic reaction in sensitive individuals.
Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.
Chronic Symptoms: None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Not classified.

Sodium azide (26628-22-8)	
LC50 Fish 1	0.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC50 Fish 2	0.7 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
ErC50 (Algae)	0.348 mg/l

Sodium chloride (7647-14-5)	
LC50 Fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Potassium chloride (7447-40-7)	
LC50 Fish 1	1060 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	825 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	750 (750 - 1020) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	880 mg/l (Exposure time: 24 h - Species: Daphnia magna)

Sodium hydroxide (1310-73-2)	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	40 mg/l

Hydrochloric acid (7647-01-0)	
LC50 Fish 1	7.45 mg/l (Species: Oncorhynchus mykiss - Exposure time: 96h)

3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4)	
LC50 Fish 1	1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
EC50 Daphnia 1	4.71 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 2	0.12 (0.12 - 0.3) mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])

12.2. Persistence and Degradability

KOVA Liqua-Trol® II Normal (120mL and 15mL)	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

KOVA Liqua-Trol® II Normal (120mL and 15mL)	
Bioaccumulative Potential	Not established.

Sodium chloride (7647-14-5)	
BCF Fish 1	(no bioaccumulation)

3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4)	
Log Pow	-0.71 - 0.75 (at 20 °C)

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Prevent runoff from entering drains, sewers or waterways.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Sodium phosphate dibasic (7558-79-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	5000 lb

Phosphoric acid, monosodium salt (7558-80-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Sodium azide (26628-22-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)
SARA Section 313 - Emission Reporting	1.0 %

Sodium chloride (7647-14-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Potassium chloride (7447-40-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

4H-Imidazol-4-one, 2-amino-1,5-dihydro-1-methyl- (60-27-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Sodium hydroxide (1310-73-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	1000 lb

Hydrochloric acid (7647-01-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA
CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb (gas only)
SARA Section 313 - Emission Reporting	1.0 % (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

Water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Magnesium nitrate (10377-60-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance SP

3(2H)-Isothiazolone, 2-methyl- (2682-20-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance SP

15.2. US State Regulations

Sodium phosphate dibasic (7558-79-4)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Sodium azide (26628-22-8)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Sodium hydroxide (1310-73-2)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Hydrochloric acid (7647-01-0)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Magnesium nitrate (10377-60-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 09/16/2016

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Ox. Sol. 3	Oxidizing solids Category 3
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Sens. 1	Skin sensitization Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H300	Fatal if swallowed
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)