SAFETY DATA SHEET

Issuing Date No data available **Revision Date** 16-Dec-2014 **Revision Number** 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name **UV Replacement Bulbs**

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lights, Mercury Vapor

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Armatron International, Inc.
Supplier Address 15 Highland Avenue
Malden
MA
02148
US
Supplier Phone Number Phone:781-321-2300
Fax:781-324-8403
Contact Phone1-781-321-2300
Supplier Email sdeyoreo@armatronintl.com
Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) This product is an article which is a UV bulb and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured UV bulb.

Carcinogenicity	Category 1B
Reproductive toxicity	Category 1A

GHS Label elements, including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard Statements
May cause cancer
May damage fertility or the unborn child

This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance This is a UV bulb. In case of rupture: the above hazards exist.

Appearance White **Physical State** Solid/Powder Solid **Odor** None

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity
88.45% of the mixture consists of ingredient(s) of unknown toxicity

Other information

May be harmful if swallowed
Harmful to aquatic life with long lasting effects

Interactions with Other Chemicals
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

.

Chemical Name	CAS No	Weight-%	Trade Secret
Glass, oxide	65997-17-3	5 - 10	*
Silicic acid, barium salt	12650-28-1	1 - 5	*
Waste solids, copper electric cable cinders - Substance obtained from burning of insulated cable and wire. Contains mainly cuo and may contain carbonaceous residues and small amounts of lead and chlo	85305-08-4	0.1 - 1	*
Mercury	7439-97-6	< 0.1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

General Advice First aid is upon rupture of sealed UV bulb.

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

Skin Contact Wash with soap and water.

Inhalation Remove to fresh air.

Ingestion Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical
No information available.

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with eyes.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions

Environmental Precautions Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed. Store locked up.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glass, oxide 65997-17-3	TWA: 1 fiber/cm3 respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m³ inhalable fraction	-	
Waste solids, copper electric cable cinders - Substance obtained from burning of insulated cable and wire. Contains mainly cuo and may contain carbonaceous residues and small amounts of lead and chlo 85305-08-4	TWA: 1 mg/m³ Cu dust and mist	-	IDLH: 100 mg/m³ Cu dust and mist IDLH: 100 mg/m³ Pb TWA: 1 mg/m³ Cu dust and mist TWA: 0.050 mg/m³ Pb
Mercury 7439-97-6	TWA: 0.025 mg/m³ TWA: 0.025 mg/m³ Hg S*	(vacated) TWA: 0.05 mg/m³ vapor (vacated) STEL: 0.03 mg/m³ (vacated) S* (vacated) Ceiling: 0.1 mg/m³ (vacated) Ceiling: 0.1 mg/m³ Hg Ceiling: 0.1 mg/m³	IDLH: 10 mg/m³ Ceiling: 0.1 mg/m³ TWA: 0.05 mg/m³ vapor

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection No special protective equipment required.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Solid/Powder, Solid		
Appearance	White	**Odor**	None
Color	No information available	**Odor Threshold**	No information available

Property	**Values**	**Remarks Method**
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	No data available	None known
Water Solubility	Virtually insoluble	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to avoid
None known based on information supplied.

Incompatible materials
None known based on information supplied.

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information. In case of rupture:.
Inhalation	Specific test data for the substance or mixture is not available.
Eye Contact	Specific test data for the substance or mixture is not available.
Skin Contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Component Information

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA

Glass, oxide 65997-17-3		Group 3		
Waste solids, copper electric cable cinders - Substance obtained from burning of insulated cable and wire. Contains mainly cuo and may contain carbonaceous residues and small amounts of lead and chlo 85305-08-4			Reasonably Anticipated	X
Mercury 7439-97-6		Group 3		

IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans
NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive Toxicity Contains a known or suspected reproductive toxin.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Chronic Toxicity Contains a known or suspected carcinogen. Contains a known or suspected reproductive toxin. Possible risk of irreversible effects.

Target Organ Effects Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Reproductive System.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
2,962.00 mg/kg
ATEmix (inhalation-gas)
26,654.00 ppm (4 hr)
ATEmix (inhalation-dust/mist)
8.90 mg/l
ATEmix (inhalation-vapor)
65.00 ATEmix

12. ECOLOGICAL INFORMATION

Ecotoxicity
Harmful to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Mercury 7439-97-6		96h LC50: = 0.18 mg/L (Cyprinus carpio) 96h LC50: = 0.9 mg/L (Oryzias latipes) 96h LC50: = 0.16 mg/L (Cyprinus carpio) 96h LC50: = 0.5 mg/L (Cyprinus carpio)		96h EC50: = 5.0 µg/L

Persistence and Degradability
No information available.

Bioaccumulation
No information available

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging Dispose of contents/containers in accordance with local regulations.

US EPA Waste Number D009 U151

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Mercury 7439-97-6	U151	Included in waste streams: F039, K071, K106, K175	0.2 mg/L regulatory level	U151

California Hazardous Waste Codes M003

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Silicic acid, barium salt 12650-28-1	Toxic soluble
Waste solids, copper electric cable cinders - Substance obtained from burning of insulated cable and wire. Contains mainly cuo and may contain carbonaceous residues and small amounts of lead and chlo 85305-08-4	Toxic
Mercury 7439-97-6	Toxic

14. TRANSPORT INFORMATION

DOT NOT REGULATED
Proper Shipping Name NON REGULATED
Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated
Proper Shipping Name NON REGULATED
Hazard Class N/A

IMDG/IMO Not regulated
Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Silicic acid, barium salt - 12650-28-1	12650-28-1	1 - 5	1.0
Waste solids, copper electric cable cinders - Substance obtained from burning of insulated cable and wire. Contains mainly cuo and may contain carbonaceous residues and small amounts of lead and chlo - 85305-08-4	85305-08-4	0.1 - 1	1.0
Mercury - 7439-97-6	7439-97-6	< 0.1	10

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances

Waste solids, copper electric cable cinders - Substance obtained from burning of insulated cable and wire. Contains mainly cuo and may contain carbonaceous residues and small amounts of lead and chlo 85305-08-4		X		
Mercury 7439-97-6		X	X	

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Mercury 7439-97-6	1 lb		RQ 1 lb final RQ RQ 0.454 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Mercury - 7439-97-6	Developmental

U.S. State Right-to-Know Regulations

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Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Silicic acid, barium salt 12650-28-1			X	X	
Tin 7440-31-5	X	X	X		
Mercury 7439-97-6	X	X	X	X	X

International Regulations

Component	Carcinogen Status	Exposure Limits
Mercury 7439-97-6 (< 0.1)		Mexico: TWA 0.05 mg/m^3

Canada

WHMIS Hazard Class

Non-controlled

16. OTHER INFORMATION

NFPA	**Health Hazards** 1	**Flammability** 0	**Instability** 0	**Physical and Chemical Hazards** -
HMIS	**Health Hazards** 0	**Flammability** 0	**Physical Hazard** 0	**Personal Protection** X

Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
Revision Date	16-Dec-2014
Revision Note	No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet