1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	**FLUORESCENT MAGNIFYING LAMP**
1.2	Chemical Name:	NA
1.3	Synonyms:	P/N 60643
1.4	Trade Names:	Harbor Freight Tools
1.5	Product Uses & Restrictions:	Fluorescent Bulb
1.6	Distributor's Name:	Harbor Freight Tools USA, Inc.
1.7	Distributor's Address:	26541 Agoura Road, Calabasas, CA 91302 USA
1.8	Emergency Phone:	**CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN 676687)**
1.9	Business Phone / Fax:	+1 (805) 388-1000

2. HAZARDS IDENTIFICATION

2.1 Hazard Identification:

This product is classified as a HAZARDOUS SUBSTANCE but not as DANGEROUS GOODS according to the classification criteria of [NOHSC: 1088 (2004)] and ADG Code (Australia). This item is a light bulb made from glass and metal. The glass tube is manufactured is essentially similar but not identical to that used throughout the glass industry for bottles and other common consumer items. The end-caps are generally made from, lead and brass. The SDS required by OSHA does not apply to manufactured articles. No material contained in bulb is released during normal use and operation. Take normal care with broken glass.

WARNING! HARMFUL IF SWALLOWED.

Classification: Acute Tox. 4

Hazard Statements (H): H302 – Harmful if swallowed.

Precautionary Statements (P): P264 – Wash exposed skin areas thoroughly with soap and water after handling. P270 – Do not eat drink or smoke when using this product. P301+P312 – IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P501 – Dispose of contents/container to a licensed treatment, storage or disposal facility (TSDF).

3. COMPOSITION & INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m³) ACGIH ppm TLV	ACGIH ppm STEL	NOHSC ppm ES-TWA	NOHSC ppm ES-STEL	NOHSC ppm ES-PEAK	OSHA ppm PEL	OSHA ppm STEL	OSHA ppm IDLH	OTHER
LAMP ASSEMBLY:													
INERT INGREDIENTS: GLASS, METAL PARTS	NA	NA	NA	60-100	NA	NA	NF	NF	NF	NA	NA	NA	
PHOSPHORUS POWDER	NA	NA	NA	NA	2.5	NA	2.5	NF	NF	2.5	NA	NA	Nuisance Dust

4. FIRST AID MEASURES

4.1 First Aid:

Normal first aid procedure for glass cuts if such occur through bulb breakage.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Do not apply neutralizing agents. Get medical attention, if irritation persists.

Skin: Immediately wash skin with plenty of water and soap while removing contaminated clothing and shoes. Wash clothing separately before reuse. Do not remove clothing if it sticks to the skin. In all other cases of skin contact, consult medical service if irritation persists. Get medical attention, if irritation persists.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Inhalation: If overcome by vapor, remove person from exposure to fresh air. If breathing is irregular or has stopped, start resuscitation and administer oxygen. Get medical attention immediately.

4.2 Effects of Exposure:

Ingestion: None of the materials present a potential hazard in the event of breakage of the lamp, aside from the hazard due to broken glass..

Eyes: None of the materials present a potential hazard in the event of breakage of the lamp, aside from the hazard due to broken glass..

Skin: None of the materials present a potential hazard in the event of breakage of the lamp, aside from the hazard due to broken glass

Inhalation: None of the materials present a potential hazard in the event of breakage of the lamp, aside from the hazard due to broken glass.

4. FIRST AID MEASURES – cont'd

4.3	Symptoms of Overexposure:	Eyes: Intact lamp has no known exposure hazards. Skin: Intact lamp has no known exposure hazards. Ingestion: Intact lamp has no known exposure hazards. In the unlikely event of ingestion of a large quantity of material, seek medical attention. Inhalation: Intact lamp has no known exposure hazards. If discomfort, irritation of symptoms of pulmonary involvement should develop, remove from exposure and seek medical attention.
4.4	Acute Health Effects:	Eyes: Intact lamp has no known exposure hazards. Skin: Intact lamp has no known exposure hazards. Breakage of the lamp may result in some exposure to the phosphor powder dust. No adverse affects are expected from occasional exposure to broken lamps, but as a matter of good practice, prolonged or frequent exposure should be avoided. Ingestion: Intact lamp has no known exposure hazards. In the unlikely event of ingestion of a large quantity of material, seek medical attention. Inhalation: Intact lamp has no known exposure hazards. Breakage of the lamp may result in some exposure to the phosphor powder dust. No adverse affects are expected from occasional exposure to broken lamps, but as a matter of good practice, prolonged or frequent exposure should be avoided
4.5	Chronic Health Effects:	None reported by the manufacturer.
4.6	Target Organs:	Eyes, Skin, Central Nervous System (CNS)
4.7	Medical Conditions Aggravated by Exposure:	None reported by the manufacturer.

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PROTECTIVE EQUIPMENT	B
EYES / SKIN	

5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	Under extreme heat, glass may melt or crack. When exposed to high temperatures toxic fumes may be released from broken lamps.
5.2	Extinguishing Methods:	Water, Dry Chemical, Foam, Carbon Dioxide.
5.3	Firefighting Procedures:	Keep containers cool until well after the fire is out. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters should wear full-face, self-contained breathing apparatus (MSHA/NIOSH approved or the equivalent) and impervious clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1	Spills:	Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. Normal precautions should be taken for collection of broken glass. Place materials in closed containers to avoid generating dust. Breakage of the lamp may result in some exposure to the phosphor powder dust and/or to elemental mercury vapor. No adverse effects are expected from occasional exposure to broken lamps, but as a matter of good practice, prolonged or frequent exposure should be avoided through the use of adequate ventilation during disposal of large quantities of lamps. The promethium is in the form of a small piece of wire below any known applicable standards for the general public. If product is crushed, use respiratory protection equipment. Do not use compressed air to clean up any residue. Use a wet method or vacuums equipped with High Efficiency Particulate (HEPA) filters to clean up any residues from this product. Waste must be placed in dust tight containers or sealed plastic bags for disposal. Label properly. Keep spills and cleaning runoffs out of drains, municipal sewers and open bodies of water.

7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	General precautions apply to handling product to avoid breakage. Avoid inhalation of any airborne dust from broken lamp.
7.2	Storage & Handling:	General precautions apply to handling product to avoid breakage. Use extreme care for handling broken glass. Do not place heavyweight things on this product.
7.3	Special Precautions:	Avoid inhalation of any airborne dust from broken lamp. Provide local exhaust when disposing large quantities of lamps.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 Exposure Limits: ppm (mg/m^3)

	ACGIH		NOHSC			OSHA			OTHER
CHEMICAL NAME(S)	TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	
PHOSPHORUS POWDER	2.5	NA	2.5	NF	NF	2.5	NA	NA	DUST

8.2	Ventilation & Engineering Controls:	Use local or general exhaust ventilation to effectively remove and prevent buildup of vapors or mist generated from the handling of this product. Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station).
8.3	Respiratory Protection:	No special respiratory protection is required under typical circumstances of use or handling. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134, or applicable U.S. state regulations, or the appropriate standards of Canada, its provinces, EU member states, or Australia.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd

8.4	Eye Protection:	Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling large quantities of this product. Always use protective eyewear when cleaning broken lamp tubes. Contact lenses pose a special hazard; soft lenses may absorb and concentrate irritants. Have suitable eye wash water available. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	
8.5	Hand Protection:	Use protective gloves when handling broken lamp tubes. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the EU member states.	
8.6	Body Protection:	No special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate standards of Canada, the EU member states, or U.S. OSHA.	

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	White bulb, metal base
9.2	Odor:	Odorless
9.3	Odor Threshold:	NA
9.4	pH:	NA
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	NA
9.7	Flashpoint:	NA
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	NA
9.11	Relative Density:	NA
9.12	Solubility:	NA
9.13	Partition Coefficient (log P_{ow}):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	NA

10. STABILITY & REACTIVITY

10.1	Stability:	This product is stable
10.2	Hazardous Decomposition Products:	NA
10.3	Hazardous Polymerization:	NA
10.4	Conditions to Avoid:	Open flames, sparks, high heat, and proximity to incompatible substances.
10.5	Incompatible Substances:	Glass will react with hydrofluoric acid.

11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation:	NO	Absorption:	YES	Ingestion:	YES
11.2	Toxicity Data:	This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature, is available for some of the components of the product, but is not presented in this document.					
11.3	Acute Toxicity:	See Section 4.4					
11.4	Chronic Toxicity:	See Section 4.5					
11.5	Suspected Carcinogen:	Lead is listed as ACGIH Group A3 (Confirmed animal carcinogen with unknown relevance to human); IARC Group 2B (Possibly carcinogenic to humans); NTP13 Group 2 (Reasonably Anticipated to be a Human Carcinogen); CA65 (cancer).					
11.6	Reproductive Toxicity:	Lead is not reported to cause reproductive toxicity in humans.					
	Mutagenicity:	This product is not reported to produce mutagenic effects in humans.					
	Embryotoxicity:	This product is not reported to produce embryotoxic effects in humans.					
	Teratogenicity:	This product is not reported to cause teratogenic effects in humans.					
	Reproductive Toxicity:	Lead is not reported to cause reproductive toxicity in humans.					
11.7	Irritancy of Product:	NA					
11.8	Biological Exposure Indices:	NE					
11.9	Physician Recommendations:	Treat symptomatically.					

12. ECOLOGICAL INFORMATION

12.1	Environmental Stability:	This product is supplied as a sealed unit and, as such, should not present a hazard to the environment.
12.2	Effects on Plants & Animals:	There are no specific data available for this product.
12.3	Effects on Aquatic Life:	There are no specific data available for this product.

13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal:	Dispose of in accordance with federal, state, provincial and local regulations.
13.2	Special Considerations:	NA

14. TRANSPORTATION INFORMATION

The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.

14.1	49 CFR (GND):	NOT REGULATED
14.2	IATA (AIR):	NOT REGULATED
14.3	IMDG (OCN):	NOT REGULATED
14.4	TDGR (Canadian GND):	NOT REGULATED
14.5	ADR/RID (EU):	NOT REGULATED
14.6	SCT (MEXICO):	NOT REGULATED
14.7	ADGR (AUS):	NOT REGULATED

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product does not contain any substances subject to SARA Title III, section 313 reporting requirements.
15.2	SARA Threshold Planning Quantity:	NA
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory or are otherwise exempt.
15.4	CERCLA Reportable Quantity (RQ):	NA
15.5	Other Federal Requirements:	Lead (and its compounds) is listed as a Hazardous Air Pollutant (HAP). Lead (and its compounds) is listed as a Toxic Pollutant under the Clean Water Act (CWA). Lead (and its compounds) is listed as Priority Pollutants under the Clean Water Act (CWA). This product does not contain any Class 1 or Class 2 ozone depletors.
15.6	Other Canadian Regulations:	This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS: NA
15.7	State Regulatory Information:	Lead can be found on the following state criteria list(s): California Proposition 65 (CA65), Florida Toxic Substances List (FL), Illinois Hazardous Substances List (IL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Rhode Island Hazardous Substances List (RI), and Washington Permissible Exposures List (WA). None of the other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI). **WARNING:** This product contains a substance(s) known to the State of California to cause cancer, birth defects or other reproductive harm. California law requires this warning be given to customers in the State of California.
15.8	Other Requirements:	The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC: Harmful (Xn) Risk Phrases (R): 20 – Harmful by inhalation. Safety Phrases (S): (1/2)-45-61 – Keep locked up and out of reach of children. In case of accident or if you feel unwell seek medical advice immediately (show label where possible). Avoid release to the environment. Refer to special instructions/safety data sheet. 

16. OTHER INFORMATION

16.1	Other Information:	**WARNING! HARMFUL IF SWALLOWED.** This item is a manufactured light bulb made from class and metal. The SDS required by OSHA does not apply to manufactured articles. No material contained in bulb is released during normal use and operation. Take normal care with broken glass. Wash exposed skin areas thoroughly with soap and water after handling. Do not eat drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. **KEEP LOCKED UP AND OUT OF REACH OF CHILDREN.** **WARNING:** This product contains a substance(s) known to the State of California to cause cancer, birth defects or other reproductive harm.	
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.	
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & Harbor Freight Tools USA, Inc.'s knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.	
16.4	Prepared for:	**Harbor Freight Tools USA, Inc.** 26541 Agoura Road Calabasas, CA 91302 USA Tel: +1 (805) 388-1000 http://www.harborfreight.com/	HARBOR FREIGHT TOOLS Quality Tools at Ridiculously Low Prices
16.5	Prepared by:	**ShipMate, Inc.** P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 http://www.shipmate.com	

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
C	Ceiling Limit
ES	Exposure Standard (Australia)
IDLH	Immediately Dangerous to Life and Health
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short-Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.

HMIS-III HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard

HEALTH
FLAMMABILITY
PHYSICAL HAZARDS
PERSONAL PROTECTION

PERSONAL PROTECTION RATINGS:

A		**G**	
B		**H**	
C		**I**	
D		**J**	
E		**K**	
F		**X**	**Consult your supervisor or SOPs for special handling directions.**

Safety Glasses | **Splash Goggles** | **Face Shield & Protective Eyewear** | **Gloves**

Boots | **Synthetic Apron** | **Protective Clothing & Full Suit** | **Dust Respirator**

Full Face Respirator | **Dust & Vapor Half-Mask Respirator** | **Full Face Respirator** | **Airline Hood/Mask or SCBA**

OTHER STANDARD ABBREVIATIONS:

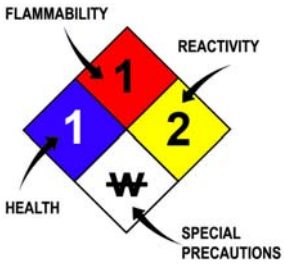
ML	Maximum Limit
mg/m3	milligrams per cubic meter
NA	Not Available
ND	Not Determined
NE	Not Established
NF	Not Found
NR	No Results
ppm	parts per million
SCBA	Self-Contained Breathing Apparatus

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:	
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
W	Use No Water
OX	Oxidizer
TREFOIL	Radioactive



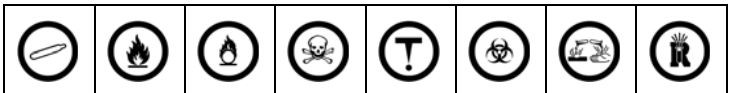
TOXICOLOGICAL INFORMATION:

LD_{50}	Lethal Dose (solids & liquids) which kills 50% of the exposed animals
LC_{50}	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD_{lo}	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD_{lo}, LD_{lo}, & LD_o or TC, TC_o, LC_{lo}, & LC_o	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL_m	Median threshold limit
log K_{OW} or log K_{OC}	Coefficient of Oil/Water Distribution

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System
DOT	U.S. Department of Transportation
TC	Transport Canada
EPA	U.S. Environmental Protection Agency
DSL	Canadian Domestic Substance List
NOHSC	National Occupational Health and Safety Commission (Australia)
NDSL	Canadian Non-Domestic Substance List
PSL	Canadian Priority Substances List
TSCA	U.S. Toxic Substance Control Act
EU	European Union (European Union Directive 67/548/EEC)
WGK	Wassergefährdungsklassen (German Water Hazard Class)
HMIS-III	National Paint & Coatings Association Hazardous Materials Identification System

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

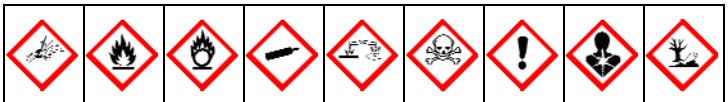


Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

EC (67/548/EEC) INFORMATION:

C	E	F	N	O	T	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful

CLP/GHS (1272/2008/EC) PICTOGRAMS:



GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environ-ment