**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**1.1 COMPANY NAME/ ADDRESS: 3 Elmhurst Street**

 **Newport News, VA 23503**

1.2 PRODUCT NAME : **BURLITE**

1.3 CHEMICAL NAME : Antimony and Lead filled POE mixture

1.4 PRODUCT USE : Lead-free X-ray protective sheet (attenuation material)

**SECTION 2 - HAZARDS IDENTIFICATION SUMMARY**

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

2.1 Classification of the substance or mixture

 GHS-US classification Carc.1B H350

 Aquatic Acute 1 H400

 Aquatic chronic 1 H410



2.2 Label elements

 GHS-US labeling

 Hazard pictograms

 GHS08 GHS09

 Signal word (GHS-US) Danger

 Hazard statements H350 - May cause cancer

 H400 – Vary toxic to aquatic life

 P201 – Obtain special instructions before use

 P202 – Do not handle until all safety precautions have been read

 and understood

 P273 – Avoid release to the environment

 P280 – Wear protective gloves/ protective clothing/face protection

P308 & P313 – IF exposed or concerned – get Medical advice/attention

P391 – Collect spillage

P405 – Store locked up

P 501 – Dispose of contents/containers in accordance with local/regional/national/international regulations

2.3 Other hazards No additional information available

2.4 Unknown acute toxicity (GHS-US) No data available

|  |  |
| --- | --- |
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|  |

**SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS**

3.1 Substances

 Not applicable Full text of H-phrases – see section 16

3.2 Mixture

|  |  |  |
| --- | --- | --- |
| Chemical Name GHS-US class | CAS-No | Percentage |
| Antimony Not classified | 7440-36-0 | 40-55% |
| Lead Carc. 1B. H350 | 7439-92-1 | 25-35% |
| Polyolefin elastomer (POE) not class | Trade secret | 8-15% |
| Mineral oil Not classified | 64742-62-7  | 5-10% |
| Barium sulfate Not classified | 7727-43-7 | 2 – 5% |
| Tungsten powder Not classified | 7440-33-7 | 2% |

**SECTION 4 - FIRST AID MEASURES**

4.1 GENERAL ADVICE

4.1.1 EYE CONTACT No specific first aid necessary for this route of exposure

4.1.2 SKIN CONTACT No specific first aid necessary for this route of exposure

4.1.3 INHALATION No specific first aid necessary for this route of exposure

4.1.4 INGESTION No specific first aid necessary for this route of exposure

4.2 Most important symptoms and effects, both acute and delayed

 Symptoms/injuries after inhalation None under normal use

4.3 Indication of any immediate medical attention and special treatment needed

 No additional information available

**SECTION 5 - FIRE FIGHTING MEASURES**

5.1 EXTINGUISHING MEDIA

 SUITABLE EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire

 UNSUITABLE EXTINGUISHING MEDIA: None

5.2 SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

 FIRE HAZARD None known

 EXPLOSION DATA: None known

5.3 FIRE FIGHTING EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS:

PROTECTION DURING FIREFIGHTING Firefighters should wear full protective gear

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

6.1.1 For Non-Emergency Personnel No additional information available

6.1.2 For Emergency Responders No additional information available

6.2 ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP:

 For Containment No special measures required

 Methods for cleaning up Recycle product or dispose safely. Waste disposal in accordance with local, state and federal regulations

6.4 REFERENCE TO OTHER SECTIONS No additional information available

**SECTION 7 - HANDLING AND STORAGE**

7.1 PRECAUTIONS FOR SAFE HANDLING: No special handling required

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage Conditions No special storage. Keep below 55 C ambient

**SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

8.1 CONTROL PARAMETERS - EXPOSURE LIMITS (8 hour TWA, ppm): .

|  |  |  |
| --- | --- | --- |
| COMPONENT | OSHA PEL | ACIGH TLV |
| Lead 7439-92-1 | 50 ug/ cu m | 0.05 mg/cu m |
| Antimony 7440-36-0 | 0.5 mg/cu m | 0.5 mg/cu m |
| Tungsten 7440-33-7 | 10 mg/cu m |  5 mg/cu m |

8.2 ENGINEERING CONTROLS: None required under normal product handling and use

8.3 PERSONAL PROTECTIVE EQUIPMENT:

 Hand protection None required under normal product handling and use

 Eye protection None required under normal product handling and use

 Skin and body protection None required under normal product handling and use

 Respiratory protection None required under normal product handling and use

8.4 USER SAFETY RECOMMENDATIONS**:** No special user requirements

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid – flexible thin sheet, grey color

Odor: None

Odor Threshold: N/A

pH: No data available

Melting Point/Freezing Point: Softening point 55 C

Boiling Point: No data available

Flash Point: No data available

Evaporation Rate: No data available

Flammability: No data available

Flammability Limits: No data available

Vapor Pressure: No data available

Vapor Density: No data available

Density: 3.1 gm/cc

Solubility: Insoluble in water

Partition Coefficient: No data available

Auto-Ignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

9.2 OTHER INFORMATION No additional information available

**SECTION 10 - STABILITY AND REACTIVITY**

10.1 PRODUCT REACTIVITY: No additional information available

10.2 CHEMICAL STABILITY**:** The product is stable at normal handling and storage conditions

10.3 HAZARDOUS REACTIONS**:** Will not occur

10.4 CONDITIONS TO AVOID: None

10.5 INCOMPATIBLE MATERIALS: None

**10.6** HAZARDOUS DECOMPOSITION PRODUCTS**:**. Carbon monoxide and dioxide

**SECTION 11 - TOXICOLOGICAL INFORMATION**

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

11.1.1 ACUTE TOXICITY Mixture Not classified

Product Information

 Inhalation Not classified

 Eye Contact Not classified

 Skin Contact Not classified

 Ingestion Harmful if swallowed

 Carcinogenicity May cause cancer

 Germ cell mutagenicity Not classified

 Reproductive toxicity May fertility or the unborn child

 Specific Organ toxicity (single exposure) Not classified

 Specific Organ toxicity (repeated exposure) Causes damage to organs if prolonged or repeated

 Symptoms/injuries after inhalation None under normal use

11.1.2 ACUTE TOXICITY Component Information

 LD50 & LC 50 data

|  |  |  |
| --- | --- | --- |
| COMPONENT |  |  |
| Lead 74329-92-1 | ATE (oral)IARCNTP Status | 500 kg/kg2A3 |
| Antimony 7440-36-0 | ATE (oral) | 7000000 mg/kg |
| Mineral Oil 64742-62-7 | Acute oral toxicity Rat  | LD50 > 5000 mg/kg |
| Mineral Oil mist 64742-62-7 | Acute inhalation toxicity Rat  | LC50 > 5.5 mg/L 4 hr |
| Mineral Oil 64742-62-7 | Acute dermal toxicity Rabbit  | LD50 > 2000 mg/kg |

**SECTION 12 - ECOLOGICAL INFORMATION**

ENVIRONMENTAL SUMMARY**:**

12.1 TOXICITY:

|  |  |  |
| --- | --- | --- |
| COMPONENT |  |  |
| Lead 74329-92-1 |  |  |
| LC50 fish 1 | 0.44 mg/l Exposure time 96h | Species: Cyprinus carpio |
| EC50 Daphnia 1 | 600 uG/L Exposure time 48h | Species water flea |
| LC50 fish 2 | 1.17mg/L Exposure time 96 h | Species Oncorhynus mykiss |
|  |  |  |

12.2 PERSISTENCE AND DEGRADABILITY: May cause long-term adverse environmental effects

12.3 BIOACCUMULATION: No additional information available

12.4 MOBILITY IN SOIL No additional information available

12.5 OTHER ADVERSE EFFECTS: Avoid release to the environment

**SECTION 13 - DISPOSAL CONSIDERATIONS**

13.1 WASTE DISPOSAL METHODS: Classified as a hazmat solid waste. Dispose in accordance with

 local, regional, international regulations

13.2 DISPOSAL PACKAGING: Dispose in accordance with local, regional, international regulations

**SECTION 14 - TRANSPORT INFORMATION**

SHIPPING DESCRIPTION: In accordance with DOT

TRANSPORT HAZARD CLASS: Not applicable

UN NUMBER: Not dangerous goods in sense of transport regulations

DOT PACKING GROUP: Not applicable

**SECTION 15 - REGULATORY INFORMATION**

15.1 U.S. FEDERAL REGULATIONS

 Lead (7439-92-1) Listed on the United States TSCA inventory

 Listed on SARA III Section 313 (specific toxic chemical listings)

SARA III Section 313 – Emission reporting 0.1 %

Antimony (7440-36-0) Listed on the United States TSCA inventory

 Listed on SARA III Section 313 (specific toxic chemical listings)

SARA III Section 313 – Emission reporting 1.0%

15.2 US STATE REGULATIONS

 Lead (7439-92-1) Massachusetts Right to Know List

 Minnesota Hazardous Substances List

 New Jersey Right to Know Hazardous Substances List

 Pennsylvania Right to Know List

 Proposition 65 California Carcinogen: Yes

 Proposition 65 California Developmental toxicity Yes

 Proposition 65 California Reproductive toxicity (female) Yes

 Proposition 65 California Reproductive toxicity (male) Yes

 Antimony (7440-36-0) Massachusetts Right to Know List

 Minnesota Hazardous Substances List

 New Jersey Right to Know Hazardous Substances List

 Pennsylvania Right to Know List

**SECTION 16 - OTHER INFORMATION**

FULL TEST OF H-PHRASES

Aquatic Acute 1 Hazardous to the aquatic environment - Acute Hazard, Category 1

Carc 1B Carcinogen, Category 1B

H 350 May cause cancer

H 400 Very toxic to aquatic life

Date issued 11/12/20

Revision # A

By: T.Jackson

**SECTION 16 - OTHER INFORMATION**

**REVISED DATE:**

**REFERENCE:**