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MATERIAL SAFETY DATA SHEET

40/60 (S4) S.A.B.S. (40 TIN(Sn) & 60 Pb)

1. Product Identification

This is applicable to the following product : 40% Tin and 60% Lead

2. Composition/ Information on Ingredients

Ingredients Name - %

Lead 50- 60 0.05mg/m³

Tin -30-40 2.0mg/m³

3. Hazards Identification

Emergency Overview: Moderate eye irritant
 Will not burn
 Toxic by inhalation
 Moderate Gastrointestinal Tract irritant
 Moderate Respiratory Tract irritant
 Causes Skin irritation

Eye Hazards

Eye contact with these products in finely-divided form may cause irritation and/ or conjunctivitis but not likely to permanently injure eye tissue.

Skin Hazards

Skin contact with these products in finely-divided form may cause irritation and/ or dermatitis.

Ingestion Hazards

Ingestion of these products in finely-divided forms may cause nausea, vomiting, diarrhoea and gastrointestinal irritation. Long term chronic ingestion may damage the liver, kidneys, nervous system, gastrointestinal system.

Do not induce vomiting. Call a physician. **NOTE TO PHYSICIAN**- No specific antidote. Supportive care. Treatment based on judgement of the physician in response to reactions of patient.

Inhalation Hazards

Inhalation can cause

Moderate respiratory irritation, dizziness, weakness, fatigue, nausea, and headache. May cause respiratory tract sensitization, characterised by Asthma-like symptoms. If symptoms of overexposure are experienced, evacuate to fresh air. If symptoms persist, seek medical attention.

Carcinogenicity: None of the substances in this product are confirmed as human carcinogens at this time by NTP, IARC or OSHA. (IARC classifies Lead and some lead compounds as 2B carcinogens to Humans) AGCIH lists as Lead as a “A3, (animal carcinogen with unknown relevance to humans).

Reproduction: No data available to indicate product or any components present at greater than 0.1% may cause birth defects. Women of child bearing age should avoid exposure to Lead and its inorganic compounds due to post-natal effects.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

4. First Aid Measures

Eye

Flush affected areas with water for at least 20 minutes. Seek medical assistance if necessary.

Skin

Remove contaminated clothing. Wash affected area with large quantities of water for at least five minutes. Seek medical assistance if necessary.

Ingestion

If subject is conscious, induce vomiting. If unconscious or convulsive, seek immediate medical assistance.

Inhalation

If signs and symptoms of toxicity are observed, remove subject from area, administer oxygen, and seek medical attention. Keep the subject warm and at rest. Perform cardiac pulmonary resuscitation (CPU) if breathing has stopped.

5. Fire Fighting Measures

Fire And Explosion Hazards

These products may react vigorously or ignite when exposed to flame and/ or incompatible materials (see section #6). If present in a fire or explosion they will emit fumes of the constituent metals and/ or metal oxides.

Extinguishing Media

Use dry powder. Do not use water.

Fire Fighting Instructions

If fighting a fire in which these products are present, wear a self-contained breathing apparatus with full face piece operated in pressure-demand or other positive pressure mode.

Hazardous Combustion Products:

Carbon monoxide; carbon dioxide; metal fumes; toxic fumes.

6. Accidental Release Measures

If a finely-divided form of product is spilled, clean up spillage so as to minimise dispersion of dust. Wet sweeping or vacuuming using HEPA filtration is recommended.

7. Handling And Storage

Handling And Storage Precautions

Do not store in proximity to incompatible materials

Work/Hygienic Practices

To minimise the possibility of ingestion, wash hands and face before eating, drinking, applying cosmetics, or using tobacco.

8. Exposure Controls/Personal Protection

Engineering Controls

Use appropriate ventilation (e.g., dilution, local exhaust) adequate to maintain concentrations of all components and their

decomposition by-products to within their respective OSHA, SABS or other applicable standards.

Eye/Face Protection

Wear eye protection adequate to prevent eye contact with the finely-divided forms of product and eye injury from the hazards of soldering. Plastic-frame spectacles with side shields and filter lenses (shade #3 or #4) are recommended.

Skin Protection

Wear appropriate protective gloves and clothing to prevent skin injuries from the hazards of soldering and/or for prolonged or repeated contact with finely-divided forms of product. Avoid flammable fabrics.

Respiratory Protection

If an exposure level exceeds an OSHA, SABS or other applicable standard, use a NIOSH-approved respirator having a configuration (class, type of facepiece, filter media, assigned protection factor, etc.) appropriate to the concentration of the contaminant (s) generated. For guidance on selection and use of respiratory protection, consult American National Standard Z88.2 (ANSI, New York, NY 10036usa).

9. Physical and Chemical Properties

Appearance

Odorless white metals in form of tape, flux-cored wire or other forms

Chemical type: Pure

Molecular weight: 0.00

Percent Volatiles: N/A

Percent VOCs: 0.00

Vapor Pressure: N/A

Vapor Density: N/A

Solubility: Insoluble

10. Stability And Reactivity

Stability: Stable

Incompatible Materials

Strong oxidisers; ammonium nitrate; azides; chlorine; bromine; fluorine; chlorine trifluoride; bromine trifluoride; inorganic and organic peroxides; sodium carbide; cupric nitrate; zirconium.

Hazardous Decomposition Products

Heating to elevated temperatures may liberate metal/metal oxide fumes. Hazardous polymerization will not occur.

11. Toxicological Information

Component Toxicology Data (NIOSH)

Chemical Name LD50/LC50

Conditions Aggravated By Exposure

Pre-existing pulmonary disease (e.g. bronchitis, asthma) may be aggravated by inhalation exposure, particularly as fume. Chronic exposure by inhalation and /or ingestion may aggravate pre-existing diseases of the liver, kidneys, gastrointestinal system, and nervous system.

12. Ecological Information

Overview: Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.

13. Disposal Considerations

Dispose of unused or unusable product in accordance with applicable Provincial regulations.

Waste Description: Spent or discarded material is probably a hazardous waste.

14. Delivery Information

International delivery regulation: LATA- Dangerous Goods Regulation, Not Restricted.

UN code: Not Regulated

Domestic Delivery Regulation: None known

Special delivery method and precaution: None known

15. Law and Regulation

Conform to regulation; 1. SABS regulation

2. Identification rules for hazardous and harmful materials.

3. Standards for waste disposal treatment and facility requirement.

4. Road traffic safety rules.

16. Additional Information

Reference: MSDS database, CCINFO CD 98-2, NIOSH/OSHA, Occupational Health Guidelines for Chemical Hazards, 1981.

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