

Les « Appels à tous » sont une compilation de réponses à une problématique particulière et reflètent l'opinion de représentants d'entreprises membres. Leur contenu n'engage d'aucune façon la responsabilité de PRÉVIBOIS et ne remplace pas l'obligation de consulter les exigences légales applicables ou les directives des fabricants d'équipements.

Problématique

Une entreprise utilise le Babbitt #7 dans leur atelier d'affûtage. Or, ce produit est possiblement cancérogène et elle **souhaite le remplacer par un produit moins dangereux**.

QUESTION 1

Quel type d'alliage utilisez-vous dans votre atelier d'affûtage (Babbitt ou autre)?

Réponses

Entreprise A Le produit qui est autorisé est le Babbitt no 2

Entreprise B Babbitt (alliage sans plomb GHS 005)

Entreprise C Le produit que l'on utilise c'est du Babbitt no 2 (*voir annexe 1*)

Entreprise D –

Entreprise E –

QUESTION 2

Connaisez-vous d'autres produits moins toxiques qui pourraient substituer les Babbitt contenant du plomb?

Réponses

Entreprise A Prendre info de votre fournisseur

Entreprise B Selon nos limeurs, pour le moment, non...

Entreprise C –

Entreprise D Notre maître-limeur me dit que la compagnie DK SPEC de Bernières a développé un système pour éliminer le Babbitt. Il s'agit d'un système mécanique et il s'applique à la plupart des Babbitt mais pas à tous.

Entreprise E À la limerie, nous avons substitué la Babbitt (traditionnelle) par une autre sorte ne contenant pas de plomb (*voir annexe 2*). Ce produit est approuvé par le CIUSSS.

Annexe 1

MATERIAL SAFETY DATA SHEET
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TIN / ANTIMONY / COPPER / NICKEL ✓
(GRADE 2 NICKEL BABBITT) ✓

SECTION 1 - IDENTIFICATION

Furnished by: Grant Manufacturing & Alloying
200-C Furnace Street
P. O. Box 69
Birdsboro, PA 19508

Effective Date: 1/1/2005
Emergency Phone: (800) 496-4113
Person to Contact: Daryl Williams

SECTION 2 - CONSTITUENTS

Chemical	CAS	%WT	Carcinogen	TLV
Tin	7440-31-5	88-90%	No	2mg/cu m ACGIH
Copper	7440-50-8	3-4%	No	0.2mg/cu ACGIH/OSHA TWA 0.05mg
Antimony	7440-36-0	7-8%	No	0.5mg/cu m ACGIH/OSHA PEL
Nickel	7440-02-0	.35-.50%	No	1mg/cu m ACGIH

SECTION 3 - PHYSICAL DATA

Melting Point	466-669 ° F
Boiling Point	N/A
Vapor Pressure	Not volatile
Vapor Density	Not volatile
Solubility in Water	Nil
Appearance / Color	Silver to gray color
Specific Gravity	7.39
Odor	None
% Volatile	Nil
pH	N/A
Evaporation Rate (nBuAc=1)	N/A

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point	Not flammable
Flammable Limits	N/A
Extinguishing Methods	Class D, dry type
Unusual Hazards	Finely divided tin dust may form explosive mixtures with air
Special Fire Precautions	Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing if involved in fire

Annexe 1

MATERIAL SAFETY DATA SHEET
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**TIN / ANTIMONY / COPPER / NICKEL
(GRADE 2 NICKEL BABBITT)**

SECTION 5 - REACTIVITY DATA

Stability	Stable
Conditions to Avoid	N/A
Hazardous Polymerization	Will not occur
Incompatibility	Strong acids, reducing agents, halogens and oxidizers
Hazardous Decomposition	Strong acids or bases or at high temperatures, oxidation fumes may be evolved

SECTION 6 - SPILL, LEAK AND DISPOSAL PROCEDURES

Action to Take for Spills	Allow to solidify, collect and place in sealed drums
Disposal Method	Return to supplier

SECTION 7 - HEALTH HAZARD INFORMATION

Eye	Dust or fumes will be an irritant
Skin Contact	Not a route of entry to the body
Skin Absorption	Not a route of entry to the body
Ingestion	Practice good personal hygiene. Avoid any inhalation or ingestion. Wash thoroughly before eating or smoking. Do not wear contaminated clothing home or use compressed air to blow off dusty clothes. Tin is not regarded as toxic but excessive exposure may cause fever, nausea, diarrhea and stomach cramping.
Inhalation	Inhalation of excessive dust and/or fumes should be avoided.

SECTION 8 - FIRST AID PROCEDURES

Eyes	Flush eyes with water for 15 minutes
Skin	Wash thoroughly with soap and water and remove contaminated clothes
Ingestion	Induce vomiting if person is still conscious, seek medical attention
Inhalation	Remove person to fresh air, seek proper medical assistance

Annexe 1

MATERIAL SAFETY DATA SHEET
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TIN / ANTIMONY / COPPER / NICKEL
(GRADE 2 NICKEL BABBITT)

SECTION 9 - SPECIAL HANDLING PROCEDURES

Ventilation	If fumes or dust is being generated, a mechanical device must be used to maintain exposure levels below TLVs
Respiratory Protection	Only required if TLVs are exceeded, use proper dust & fume mask in areas where excessive dust or fumes are being generated
Skin Protection	Use gloves and other protective clothing for excessive skin contact

SECTION 10 - SPECIAL PRECAUTIONS & ADDITIONAL INFORMATION

Storage	Store in dry conditions, avoid contact with strong acids & bases
Handling Information	OSHA regulations for air born contaminants 29 CFR 1910.1000, OSHA regulations 29 CFR 1910.1025 Personnel must wash their hands prior to eating, smoking, drinking or when applying any type of cosmetics.

SECTION 11 - TRANSPORTATION

Proper Shipping	Not required
UN Number	N/A
NA Number	N/A
DOT Exemption Number	N/A
Hazardous Classes	N/A

NOTE: The information given is in good faith, but no warranty, expressed or implied, is made.

Annexe 2

Material Safety Data Sheet					
Section 1 Identification			Section 6 Accidental Release Measures		
Product Name:	Grade 2 Nickel Babbitt	Health: 0	Sweep up and place in suitable (fiberboard) containers for reclamation or later disposal.		
Chemical Family:	Metal	Flammability: 0			
Formula:	Sn/Sb/Cu/Ni	Reactivity: 0			
C.A.S.	7440-31-5 7440-36-0 7440-50-8	Hazard Scale: Least: 0 Slight: 1 Moderate: 2 High: 3 Extreme: 4			
NA = Not Applicable NE = Not Established					
Section 2 Component Mixture			Section 7 Handling and Storage		
Component	CAS Number	%	Dim	Exposure Limits:	
Tin	CAS# 7440-31-5	89			
Antimony	CAS# 7440-36-0	7.5		2 mg/mf	
Copper	CAS# 7440-50-8	3.5			
Section 3 Hazard Identification (Also see section 11)			Section 8 Exposure Controls & Personal Protection		
Generally not hazardous in normal handling, however good laboratory practices should always be used. Avoid long term exposure to skin or by inhalation.			Respiratory Protection: NIOSH approved dust mask		
Section 4 First Aid Measures			Mechanical: <input type="checkbox"/>	Hand Protection: Gloves to prevent skin exposure as latex or vinyl	
INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen			Ventilation: Local Exhaust: <input checked="" type="checkbox"/>	Eye Protection: Splash Goggles	
FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.					
EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid.					
INGESTION: Do not induce vomiting. Contact a physician.					
Section 5 Fire Fighting Measures			Section 9 Physical and Chemical Properties		
Fire Extinguisher Type:	Special powder or dry sand. Do not use water!		Melting Point: 360-620°F	Specific Gravity: N/A	
Fire/Explosion hazards:	Dust at sufficient concentrations can form explosive mixtures with air.		Boiling Point: 2984°F	Percent Volatile by Volume: 0	
Fire Fighting procedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing. Toxic fumes may be generated at elevated temperatures.		Vapor Pressure: Not volatile	Evaporation Rate: N/A	
The information contained herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty is expressed or implied regarding the completeness or accuracy of this information, whether originating from Nathan Trotter & Co., Inc. or from an alternate source. Users of this material should satisfy themselves by independent investigation of current scientific and medical information that this material may be safely handled.			Vapor Density: Information not available	Evaporation Standard: Not applicable	
			Solubility in Water: Insoluble	Auto Ignition Temperature: Not applicable	
			Appearance and Odor: Silvery-Gray granules, bars, or mossy flakes	Lower Flamm. Limit in Air: Not applicable	
			Flash Point: N/A	Upper Flamm. Limit in Air: Not applicable	
Section 10 Stability and Reactivity Information			Section 11 Additional Information		
Stability: Stable			Conditions to Avoid: Moisture		
Materials to Avoid: Halogens, halogen trifluorides, sulfur, potassium peroxide, acids					
Hazardous Polymerization: Will Not Occur					
Condition to Avoid: None known					
			Effects of overexposure, Acute and Chronic: No effects expected to skin. May cause mechanical abrasion to eyes. Prolonged inhalation of dust or fume may result in a benign pneumoconiosis, producing distinctive changes in the lungs with no apparent disability or complications. Conditions aggravated/target organs: Persons with pre-existing eye, skin or respiratory conditions may be more susceptible.		
			DOT Classification: Not Regulated		
			DOT regulations may change from time to time. Please consult the most recent version of the relevant regulations.		
			Revision No: 1	Date Entered: 02/01/07	Approved by: LME

Annexe 2

