

Material Safety Data Sheet

MANUFACTURER INFORMATION	Company name	NIHON ALMIT CO., LTD.		
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			Date	Nov.1, 2002

REFERENCE NO.

PRODUCT NAME	almit SRC Solder Paste Sn63 HM1-RMA V14L(H)		
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CHARACTERISTICS	Classification of single product or compound	Compound		
	Chemical name	Tin-Lead solder, flux		
		Flux (flux, paste)	9.5%	
		Tin	Lead	
	Ingredients and content	57%	33%	
	Chemical or structural formula	Sn	Pb	
	Official gazette announcement No.			
Cas No.	7440-31-5	7439-92-1		

CLASSIFICATION OF HAZARD	Category	Acute toxic material
	Hazard	Liable to catch fire by heating (Dangerous object title4 petroleum third kind) Not subject to the Fire Services Act.
	Harm	Harmful fumes be emitted by heating. Inhalation of the fume will harm the central nervous, digestive, blood-forming systems and the liver.

FIRST-AID MEASURES	Skin contact	Wash with soap and water. If any skin irritation develops, seek medical advice.
	Eye contact	Flush immediately with running water and seek medical advice.
	Inhalation	Remove affected person to fresh air. Obtain medical advice according to symptoms.
	Ingestion	Give milk and obtain urgent medical advice.

FIRE FIGHTING MEASURES	Method	Remove the origin of fire and use extinguishers.
	Extinguishers	Dry chemical, carbon dioxide, foam

ACCIDENTAL RELEASE MEASURES	Scrape up the spill and wipe with a cloth wet with alcohol.
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HANDLING AND STORAGE	Handling	Avoid inhaling fumes. Operators should wear suitable workwear, gloves, safety shoes and glasses which are distinguished from ordinary clothing. Local ventilation and environmental control of working area should be provided.
	Storage	Storage in a cool area.

EXPOSURE CONTROLS	Control concentration	None		
	Exposure limit	Sn	TLV	2 mg/m ³ (ACGIH)
		Pb	TLV	0.15 mg/m ³ (ACGIH)
	Equipment measures	Provide local ventilation at the origin.		
Personal protection	Suitable protectors depending on operations. Charcoal mask, glasses, rubber gloves, protective clothes, safety shoes, etc.			

PHYSICAL AND CHEMICAL PROPERTIES	Appearance	Grey paste
	Odour	Mild
	Boiling Point	≤350°C

	Vapour pressure	≤0.01 mmHg (20°C)			
	Melting point	183°C			
	Specific gravity	4.7			
	Solubility in water	Insoluble			
HAZARD INFORMATION (STABILITY AND REACTIVITY)	Flash point	≥About 160°C			
	Ignition point	≥300°C			
	Oxidation ability	N/I			
	Self-reactivity, explosiveness	N/I			
	Stability, reactivity	Stable			
	Others	—			
HARM INFORMATION	Erosivity against skin	N/I			
	Irritant	Weak irritant against skin and eyes			
	Allergy	N/I			
	Acute toxicity	Fatal dose	Tin powder	Abdominal cavity –rat	LD ₅₀ >1000mg/kg
				Abdominal cavity – guinea pig	LD ₃₀ > 100mg/kg· 4 months
			Pb	Causes quadriplegia, colic, pallor, vomiting, diarrhoea, bloody excrement, palpitation, kidney trouble. Results in death in one or two days.	
	Subacute toxicity	N/I			
	Chronic toxicity	Causes fatigue, headache, paresthesia and paralysis of limbs, dysuria.			
	Carcinogenic	N/I			
	Variation origin	N/I			
Reproductive toxicity	N/I				
Teratogenicity	N/I				
ECOLOGICAL INFORMATION	Degradability	N/I			
	Accumulability	Continuous excessive intake of lead may harm formation of hemoglobin and cause anemia. Also may affect the nervous system and cause constipation, colic in abdomen, paralysis of arm extensor. Moreover may irritate meninges and cause meningitis.			
	Toxicity to fishes and shellfishes	Lead concentrates in shellfishes.			
DISPOSAL CONSIDERATIONS	Consign to licensed professionals of industrial waste disposal.				
TRANSPORATION CONSIDERATIONS	Stable loading to avoid turnover and falling which cause deformation and scattering.				
	Domestic	Freezing			
	Overseas	Packing with polystyrene foam and corrugated cardboard box.			
APPLICABLE REGULATIONS	Labor safety sanitation law	Lead poisoning			
	PRTR (Pollutant Release and Transfer Resistor)	The Class I designated chemical substance (lead)			