

# **SAFETY DATA SHEET**

# 6007

Product Name PRO SILVER 15 SILVER BRAZING ALLOYS

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name BOC LIMITED (AUSTRALIA)

Address 10 Julius Avenue, North Ryde, NSW, AUSTRALIA, 2113

**Telephone** 131 262, (02) 8874 4400 **Fax** 132 427 (24 hours)

**Emergency** 1800 653 572 (24/7) (Australia only)

Web Site http://www.boc.com.au/

Synonym(s) 25742 SERIES - MANUFACTURER'S CODE • 6007 - SDS NUMBER

Part No.	Description	Pack	Dimensions	
LTAP1521	PROSILVER 15 ADVANCE PACK		2.5Kg 2.0 x 750	
LTAP1522	PROSILVER 15 ADVANCE PACK		2.5Kg 2.5 x 750	
LTAP1523	PROSILVER 15 ADVANCE PACK		2.5Kg 3.0 x 750	
LTAP1511	PROSILVER 15 STANDARD PACK		1.0Kg 2.0 x 750	
LTAP1512	PROSILVER 15 STANDARD PACK		1.0Kg 2.5 x 750	
LTAP1513	PROSILVER 15 STANDARD PACK		1.0Kg 3.0 x 750	
LTAP1562	PROSILVER 15 HANDI PACK	5 RODS	2.5 x 750	
LTAP1599	PROSILVER 15 DISPENSER PACK	20 RODS	2.0 x 750	
LTAP1596	PROSILVER 15 DISPENSER PACK	20 RODS	2.5 x 750	
LTAP1598	PROSILVER 15 DISPENSER PACK	20 RODS	3.0 x 750	
Use(s)	BRAZING ALLOY			
SDS Date	04 Nov 2010			

#### 2. HAZARDS IDENTIFICATION

#### CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

#### **RISK PHRASES**

R40 Limited evidence of a carcinogenic effect.

**SAFETY PHRASES** 

S23 Do not breathe gas/fumes/vapour/spray (where applicable).

S36 Wear suitable protective clothing.

#### NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN No. None Allocated DG Class None Allocated Subsidiary Risk(s) None Allocated

Packing Group None Allocated Hazchem Code None Allocated

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content	
PHOSPHORUS	P	7723-14-0	<10%	
COPPER	Cu	7440-50-8	>60%	
SILVER	Ag	7440-22-4	15%	



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## 4. FIRST AID MEASURES

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a

Poisons Information Centre, a doctor, or for at least 15 minutes.

**Inhalation** If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue

flushing with water until advised to stop by a Poisons Information Centre or a doctor.

**Ingestion** For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed,

do not induce vomiting.

Advice to Doctor Treat symptomatically.

#### 5. FIRE FIGHTING MEASURES

Flammability Non flammable. Molten material may explode in contact with water. Dust may form explosive mixtures with air.

Fire and Explosion

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Fires may re-ignite during extinguishing process.

**Extinguishing** Dry agent, soda ash, sand or lime. Do not use water or foam. Withdraw from area and let fire burn out. Prevent

contamination of drains or waterways.

Hazchem Code None Allocated

## 6. ACCIDENTAL RELEASE MEASURES

**Spillage** If spilt, collect and reuse where possible.

## 7. STORAGE AND HANDLING

Storage Store dusts/powders in tightly sealed in cool, dry, well ventilated area, removed from combustibles, oxidising

agents, acids, alkalis, heat or ignition sources. Ensure containers are adequately labelled, protected from physical

damage and sealed when not in use. Also store removed from acetylene.

**Handling** Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin

contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating,

drinking and smoking in contaminated areas.

#### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### **Exposure Stds**

Ingredient	Reference	TWA		STEL	
Copper (fume)	SWA (AUS)		0.2 mg/m3		-
Copper, dusts & mists (as Cu)	SWA (AUS)		1 mg/m3		
Phosphorus (yellow)	SWA (AUS)		0.1 mg/m3		
Silver, metal	SWA (AUS)		0.1 mg/m3		

Biological Limits No biological limit allocated.

**Engineering Controls** 

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

PPE

Wear cotton or leather gloves and safety glasses. At high dust levels, wear: dust-proof goggles, coveralls and a Class P3 (Particulate) respirator. Where an inhalation risk exists, wear: a Class P1 (Particulate) respirator.







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#### PRO SILVER 15 SILVER BRAZING ALLOYS **Product Name**

# 9. PHYSICAL AND CHEMICAL PROPERTIES

ROD, STRIP, SHEET, FOIL, PRESS **INSOLUBLE Appearance** Solubility (water)

PARTS, WIRE, RINGS, POWDER

NOT AVAILABLE Odour ODOURI ESS **Specific Gravity NOT AVAILABLE** % Volatiles **NOT AVAILABLE** На **NOT AVAILABLE** Flammability NON FLAMMABLE Vapour Pressure **NOT AVAILABLE Flash Point NOT AVAILABLE** Vapour Density **Boiling Point NOT AVAILABLE Upper Explosion Limit NOT RELEVANT Melting Point** 644°C **Lower Explosion Limit** NOT RELEVANT

**Evaporation Rate NOT RELEVANT** 

## 10. STABILITY AND REACTIVITY

**Chemical Stability** Stable under recommended conditions of storage.

**Conditions to Avoid** Avoid heat, sparks, open flames and other ignition sources.

**Material to Avoid** Incompatible with acids (eg. nitric acid), evolving flammable hydrogen gas. Dusts will react with oxidising

agents (eg. hypochlorites), acids and alkalis. If molten, will react explosively with water. Also incompatible

with acetylene.

**Hazardous** Decomposition **Products** 

May evolve toxic gases if heated to decomposition.

**Hazardous Reactions** Polymerization will not occur.

#### 11. TOXICOLOGICAL INFORMATION

**Health Hazard** Summary

Non toxic solid - toxic dust/fume if generated. Use safe work practices to avoid dust/fume inhalation. Over exposure to dust/fume may result in "metal fume fever" with delayed symptoms, including breathing difficulties. Chronic exposure may result in lung fibrosis. Fume is reported to be possibly carcinogenic to humans (IARC Group 2B). Individuals with pre-existing respiratory impairment (eg asthmatics) or nervous system, blood or kidney disease are at increased risk and should be medically screened before exposure. Chronic absorption of silver can cause argyria, a bluish-grey discolouration of various tissues, but this is unlikely to occur when handling silver alloys.

Eye Contact with fumes or dusts generated may result in irritation, pain and redness.

Inhalation Irritant. Over exposure to dust or fumes (if heated) may result in irritation of the nose and throat with ulceration/

perforation of the nasal septum. Inhalation of fumes (if welding) may result in metal fume fever, a flu-like illness

with dry throat, cough, chills, tight chest, weakness and muscular aches. Effects may be delayed.

Skin Low irritant. Prolonged or repeated contact may result in mechanical irritation.

Ingestion is considered unlikely due to product form. May result in a metallic taste, thirst, vomiting and ulceration. Ingestion

Metals may accumulate within the body with toxic effects.

**Toxicity Data** PHOSPHORUS (7723-14-0)

LD50 (Ingestion): > 15,000 mg/kg (rat)

COPPER (7440-50-8)

LD50 (Intraperitoneal): 3500 ug/kg (mouse) LDLo (Subcutaneous): 375 mg/kg (Rabbit)

TDLo (Ingestion): 120 ug/kg (human - gastrointestinal upset)

SILVER (7440-22-4)

TCLo (Inhalation): 1 mg/m3 (human)

# 12. ECOLOGICAL INFORMATION

**Environment** 

Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.

# 13. DISPOSAL CONSIDERATIONS

For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. For larger **Waste Disposal** 

amounts, contact the manufacturer for additional information. Prevent contamination of drains or waterways as aquatic life may be threatened and environmental damage may result.

Legislation Dispose of in accordance with relevant local legislation.



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#### 14. TRANSPORT INFORMATION

#### NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Shipping Name None Allocated

UN No. None Allocated **DG Class** None Allocated Subsidiary Risk(s) None Allocated

None Allocated **Hazchem Code** None Allocated **Packing Group** 

#### 15. REGULATORY INFORMATION

Poison Schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform

Scheduling of Drugs and Poisons (SUSDP).

**AICS** All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

#### 16. OTHER INFORMATION

#### Additional Information

BEFORE ADDING TO FURNACE: Ensure all water, grease, oil, chemical residues or ANY foreign material is removed before placing in furnace as contamination may cause explosion. Preheat material and keep dry before placing into furnace.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

IARC - GROUP 2B - POSSIBLE HUMAN CARCINOGEN. This product contains an ingredient which has demonstrated sufficient evidence to have been classified by the International Agency for Research into Cancer (IARC) as possibly carcinogenic to humans and whose use should be strictly monitored and controlled.

#### ABBREVIATIONS:

ACGIH - American Conference of Industrial Hygienists.

ADG - Australian Dangerous Goods.

BEI - Biological Exposure Indice(s).

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

EC No - European Community Number.

HSNO - Hazardous Substances and New Organisms.

IARC - International Agency for Research on Cancer.

mg/m3 - Milligrams per Cubic Metre.

NOS - Not Otherwise Specified.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

STEL - Short Term Exposure Limit.

SWA - Safe Work Australia.

TWA - Time Weighted Average.

## **HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

#### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

#### **Report Status**

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.



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While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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