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**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

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**1.1 Product identifier**

**Product name** BROWN BRONZE POWDER  
**Synonyms** BROWN-BRONZE POWDER

**1.2 Uses and uses advised against**

**Uses** INDUSTRIAL APPLICATIONS • SURFACE TREATMENT

**1.3 Details of the supplier of the product**

**Supplier name** DUBOIS CHEMICALS AUSTRALIA PTY LIMITED  
**Address** 305 Frankston Dandenong Rd, Dandenong South, VIC, 3175, AUSTRALIA  
**Telephone** (03) 9768 3860  
**Email** [sales@duboischchemicals.com.au](mailto:sales@duboischchemicals.com.au)  
**Website** <http://duboischchemicals.com.au/>

**1.4 Emergency telephone numbers**

**Emergency** 13 11 26 (Poisons Information Centre)

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**2. HAZARDS IDENTIFICATION**

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**2.1 Classification of the substance or mixture**

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

**Physical Hazards**

Not classified as a Physical Hazard

**Health Hazards**

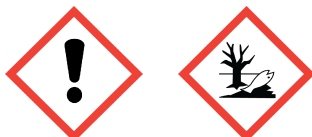
Skin Corrosion/Irritation: Category 2  
Serious Eye Damage / Eye Irritation: Category 2A  
Specific Target Organ Toxicity (Single Exposure): Category 3 (Respiratory Irritation)

**Environmental Hazards**

Aquatic Toxicity (Chronic): Category 2

**2.2 GHS Label elements**

**Signal word** WARNING

**Pictograms****Hazard statements**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H411 Toxic to aquatic life with long lasting effects.

**PRODUCT NAME BROWN BRONZE POWDER****Prevention statements**

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

**Response statements**

P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P321	Specific treatment is advised - see first aid instructions.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

**Storage statements**

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

**Disposal statements**

P501	Dispose of contents/container in accordance with relevant regulations.
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**2.3 Other hazards**

May form combustible dust concentrations in air.

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**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

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**3.1 Substances / Mixtures**

Ingredient	CAS Number	EC Number	Content
ANTIMONY PENTASULPHIDE	1315-04-4	215-255-5	>=25 to <=50%
IRON OXIDE (FE2O3)	1309-37-1	215-168-2	>=25 to <=50%
GRAPHITE	7782-42-5	231-955-3	>=10 to <=25%
SILICA, AMORPHOUS - FUME	69012-64-2	273-761-1	>=10 to <=25%
MAGNESIUM OXIDE	1309-48-4	215-171-9	<=0.3%

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**4. FIRST AID MEASURES**

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**4.1 Description of first aid measures**

<b>Eye</b>	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.
<b>Inhalation</b>	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
<b>Skin</b>	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.
<b>Ingestion</b>	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).
<b>First aid facilities</b>	None allocated.

**4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

**4.3 Immediate medical attention and special treatment needed**

Treat symptomatically.

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**5. FIRE FIGHTING MEASURES**

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**5.1 Extinguishing media**

Use dry chemical, carbon dioxide, foam or water fog. Prevent contamination of drains and waterways.

## PRODUCT NAME BROWN BRONZE POWDER

### 5.2 Special hazards arising from the substance or mixture

Combustible. May evolve toxic gases (antimony oxides) when heated to decomposition. May evolve carbon oxides, sulphur oxides and metal oxides when heated to decomposition. May form combustible dust concentrations in air

### 5.3 Advice for firefighters

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.

### 5.4 Hazchem code

- 3Z
- 3 Alcohol Resistant Foam is the preferred firefighting medium but, if it is not available, normal foam can be used.
- Z Wear full fire kit and breathing apparatus. Contain spill and run-off.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.

### 6.2 Environmental precautions

Prevent product from entering drains and waterways.

### 6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with moist sand or similar, collect and place in sealable containers for re-use. Avoid generating dust.

### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe 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.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.

### 7.3 Specific end uses

No information provided.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Antimony & compounds (as Sb)	SWA [AUS]	--	0.5	--	--
Fumed silica (respirable dust)	SWA [AUS]	--	2	--	--
Graphite (all forms except fibres)	SWA [AUS]	--	3	--	--
Iron oxide fume (Fe <sub>2</sub> O <sub>3</sub> ) (as Fe)	SWA [AUS]	--	5	--	--
Magnesium oxide (fume)	SWA [AUS]	--	10	--	--

#### Biological limits

No biological limit values have been entered for this product.

### 8.2 Exposure controls

**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.

**PRODUCT NAME BROWN BRONZE POWDER**

**PPE**

- Eye / Face**      Wear dust-proof goggles.
- Hands**         Wear PVC or rubber gloves.
- Body**            Wear coveralls.
- Respiratory**    Where an inhalation risk exists, wear a Class P3 (Particulate) respirator.



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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	BROWN SOLID
<b>Odour</b>	BLAND ODOUR
<b>Flammability</b>	COMBUSTIBLE
<b>Flash point</b>	NOT RELEVANT
<b>Boiling point</b>	NOT AVAILABLE
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	NOT AVAILABLE
<b>Vapour density</b>	NOT AVAILABLE
<b>Relative density</b>	NOT AVAILABLE
<b>Solubility (water)</b>	SLIGHTLY SOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT RELEVANT
<b>Lower explosion limit</b>	NOT RELEVANT
<b>Partition coefficient</b>	NOT AVAILABLE
<b>Autoignition temperature</b>	NOT AVAILABLE
<b>Decomposition temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	NOT AVAILABLE
<b>Explosive properties</b>	NOT AVAILABLE
<b>Oxidising properties</b>	NOT AVAILABLE
<b>Odour threshold</b>	NOT AVAILABLE

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**10. STABILITY AND REACTIVITY**

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**10.1 Reactivity**

Carefully review all information provided in sections 10.2 to 10.6.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Polymerization is not expected to occur.

**10.4 Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid) and halogenated acids (BrF3).

**10.6 Hazardous decomposition products**

May evolve toxic gases (antimony oxides) when heated to decomposition.

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**11. TOXICOLOGICAL INFORMATION**

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**11.1 Information on toxicological effects**

**Acute toxicity**      Based on available data, the classification criteria are not met.

**PRODUCT NAME BROWN BRONZE POWDER****Information available for the ingredients:**

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
IRON OXIDE (FE2O3)	> 5000 mg/kg (rat)	--	> 210 mg/m <sup>3</sup> /2wks (rat)

<b>Skin</b>	Contact may result in the rash "Antimony spots" (similar to Chicken Pox in appearance), dermatitis and skin discolouration.
<b>Eye</b>	Contact may result in irritation, lacrimation, pain and redness.
<b>Sensitisation</b>	Not classified as causing skin or respiratory sensitisation.
<b>Mutagenicity</b>	Not classified as a mutagen.
<b>Carcinogenicity</b>	Insufficient data available to classify antimony as a carcinogen. Antimony trioxide is classified as possibly carcinogenic to humans (IARC Group 2B).
<b>Reproductive</b>	Not classified as a reproductive toxin.
<b>STOT - single exposure</b>	Over exposure may result in irritation of the nose and throat, coughing, and inflammation with breathing difficulties.
<b>STOT - repeated exposure</b>	Repeated exposure to antimony may effect the respiratory system resulting in antimony pneumoconiosis (inflammation of the lungs due to irritation caused by the inhalation of dust). Animal studies have also indicated cardiovascular and kidney damage from repeated exposure.
<b>Aspiration</b>	Not classified as causing aspiration.

**12. ECOLOGICAL INFORMATION****12.1 Toxicity**

Toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability**

Little information is available on the transformations of antimony in various environmental media (e.g. air, water, soil).

**12.3 Bioaccumulative potential**

Most antimony compounds show little or no tendency to accumulate in aquatic life. Some plants, mosses, lichens and fungi are able to accumulate antimony compounds.

**12.4 Mobility in soil**

The mobility of antimony in soils is not clearly understood. Some studies indicate that antimony is highly mobile, while others conclude that it strongly adsorbs to soil. In water, it usually adheres to sediments.

**12.5 Other adverse effects**

No information provided.

**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

**Waste disposal** Insoluble forms may be consigned to approved landfill site. To convert to insoluble (sulphide) form, (wearing PPE, using fume cupboard): Dissolve in minimum concentrated hydrochloric acid (HCl). Filter if necessary. Dilute with water until white precipitate forms. Add more 6M HCl to redissolve. Saturate with hydrogen sulphide. Filter, wash and dry precipitate. Contact the manufacturer/supplier for additional information (if required).

**Legislation** Dispose of in accordance with relevant local legislation.

**14. TRANSPORT INFORMATION**

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



**PRODUCT NAME BROWN BRONZE POWDER**

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
<b>14.1 UN Number</b>	3082	3082	3082
<b>14.2 Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (diantimony pentasulphide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (diantimony pentasulphide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (diantimony pentasulphide)
<b>14.3 Transport hazard class</b>	9	9	9
<b>14.4 Packing Group</b>	III	III	III

**14.5 Environmental hazards**

Marine Pollutant.

**14.6 Special precautions for user**

<b>Hazchem code</b>	●3Z
<b>GTEPG</b>	9C1
<b>EmS</b>	F-A, S-F

**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

<b>Poison schedule</b>	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
<b>Classifications</b>	Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).
<b>Inventory listings</b>	<b>AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)</b> All components are listed on AIIC, or are exempt. <b>EUROPE: EINECS (European Inventory of Existing Chemical Substances)</b> All components are listed on EINECS, or are exempt.

**16. OTHER INFORMATION**

<b>Additional information</b>	<b>RESPIRATORS:</b> 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.
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**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, 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.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; 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 report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**PRODUCT NAME BROWN BRONZE POWDER****Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

**Report status**

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

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier 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, importer or supplier.

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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