Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **BLACK IRON OXIDE**

Other name(s): C7053 Synthetic Black Iron Oxide; C7133 Synthetic Black Iron Oxide; Black Cosmetic Iron Oxide CG060

Recommended Use of the Chemical and Restrictions on Use Pigment for cosmetic and food applications.

Supplier: Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia
ABN: 51 600 546 512
Street Address: 70 Marple Avenue
Villawood NSW 2163
Australia

Telephone Number: +61 2 8717 2929
Facsimile: +61 2 9755 9611
Emergency Telephone: **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS. It is transported in packages with a volume not more than 450 litres.

This product is classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in packages with a volume of more than 450 litres.

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

However, in packages with a volume of more than 450 litres, the product is classified as Hazardous and the following must be observed:

Classification of the chemical:
Self-heating substances and mixtures - Category 2

SIGNAL WORD: WARNING

Hazard Statement(s):
H252 Self-heating in large quantities; may catch fire.

Precautionary Statement(s):

Prevention:
P235+P410 Keep cool. Protect from sunlight.
P280 Wear protective gloves, protective clothing.

Response:
No response statements.

Storage:
P407 Maintain air gap between stacks/pallets.
P413 Store bulk masses greater than 410 kg at temperatures not exceeding 55°C.
P420 Store away from other materials.

Disposal:
No disposal statements.

Poisons Schedule (SUSMP): None allocated.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Iron oxide	1317-61-9	100%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:
Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact:
If skin or hair contact occurs, remove contaminated clothing and wash skin and hair with soap and water. If irritation occurs seek medical advice.

Eye Contact:
If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion:
Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice.

Indication of immediate medical attention and special treatment needed:
Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Hazchem or Emergency Action Code: 1Y

Specific hazards arising from the chemical:
Substance liable to spontaneous combustion. On burning will emit toxic fumes, including those of oxides of iron.

Special protective equipment and precautions for fire-fighters:
Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:
Shut off all possible sources of ignition. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:
Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling:
Avoid skin and eye contact and breathing in dust.
Avoid handling which leads to dust formation. May form flammable dust clouds in air. For precautions necessary refer to Safety Data Sheet "Dust Explosion Hazards". Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities:
Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store below 25°C. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for particulates:

Dusts not otherwise classified: 8hr TWA = 10 mg/m^3

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls:
Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Avoid generating and breathing in dusts. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as Personal Protective Equipment (PPE):
The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.

Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Powder
Colour:	Black
Odour:	Characteristic
Odour Threshold:	Not available
Solubility:	Insoluble in water.
Specific Gravity:	5.2 at 20°C
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	Not available
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not available
Autoignition Temperature (°C):	Not available
Melting Point/Range (°C):	1538
Boiling Point/Range (°C):	Not available
Decomposition Point (°C):	Not available
pH:	Not applicable
Viscosity:	Not available
Partition Coefficient:	Not available

10. STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical stability: Stable if stored and handled under recommended conditions.

Possibility of hazardous reactions: Dust explosion hazard. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding.

Conditions to avoid: Avoid exposure to heat, sources of ignition, and open flame. Avoid dust generation.

Incompatible materials: Incompatible with combustible materials.

Hazardous decomposition products: Oxides of iron.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: No adverse effects expected, however, large amounts may cause nausea and vomiting.

Eye contact: May be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

Skin contact: Repeated or prolonged skin contact may lead to irritation.

Inhalation: Breathing in dust may result in respiratory irritation.

Acute toxicity:
Oral LD50 (rat): >5,000 mg/kg (1)

Skin corrosion/irritation: May cause mechanical irritation.
Serious eye damage/irritation: May cause mechanical irritation.
Respiratory or skin sensitisation: No information available.

Chronic effects: No information available for the product.

Mutagenicity: No information available.
Carcinogenicity: No information available.
Reproductive toxicity: No information available.
Specific Target Organ Toxicity (STOT) - single exposure: No information available.
Specific Target Organ Toxicity (STOT) - repeated exposure: No information available.
Aspiration hazard: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways.
Persistence/degradability:	No information available.
Bioaccumulative potential:	No information available.
Mobility in soil:	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods:
Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS. It is transported in packages with a volume not more than 450 litres.

This product is classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in packages with a volume of more than 450 litres.

UN No:	3190
Transport Hazard Class:	4.2 Spontaneously Combustible
Packing Group:	III
Proper Shipping Name or Technical Name:	SELF-HEATING SOLID, INORGANIC, N.O.S. (BLACK IRON OXIDE)
Hazchem or Emergency Action Code:	1Y

Marine Transport
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

This product is classified as a Dangerous Good according to the International Maritime Dangerous Goods Code when transported by sea in packages with a volume of more than 450 litres.

UN No:	3190
Transport Hazard Class:	4.2 Spontaneously Combustible
Packing Group:	III
Proper Shipping Name or Technical Name:	SELF-HEATING SOLID, INORGANIC, N.O.S. (BLACK IRON OXIDE)
IMDG EMS Fire:	F-A
IMDG EMS Spill:	S-J

Air Transport
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

This product is classified as a Dangerous Good according to the International Air Transport Association Dangerous Goods Regulations when transported by air in packages with a volume of more than 450 litres.

UN No:	3190
Transport Hazard Class:	4.2 Spontaneously Combustible
Packing Group:	III
Proper Shipping Name or Technical Name:	SELF-HEATING SOLID, INORGANIC, N.O.S. (BLACK IRON OXIDE)

15. REGULATORY INFORMATION

Classification:
Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

However, in packages with a volume of more than 450 litres, the product is classified as Hazardous and the following must be observed:

Classification of the chemical:
Self-heating substances and mixtures - Category 2

Hazard Statement(s):
H252 Self-heating in large quantities; may catch fire.

Poisons Schedule (SUSMP): None allocated.

This material is listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

(1) Supplier Safety Data Sheet; 04/ 2018.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

Reason(s) for Issue:
5 Yearly Revised Primary SDS
Change in Handling & Storage Requirements

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris.