

The Soap Kitchen

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MATERIAL SAFETY DATA SHEET

Version : 01

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PRODUCT NAME : NATRACOL E172 BLACK IRON OXIDE

1 IDENTIFICATION OF SUBSTANCE AND COMPANY

Commercial Product: Natracol E172 Black Iron Oxide

Our Code: ROCA 42238

Company: The Soap Kitchen
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2. CHEMICAL COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	EINECS No	CAS No	Contents	Symbol	Risk No
Black Iron Oxide	235-442-5	12227-89-3	98%	NC	Not classified

Formula: Fe₃O₄

CAS No: 12227-89-3

Composition comments:

Inorganic Powder. Fe₃O₄ C.I. Pigment Black 11, C.I. No. 77499. Alternative CAS No.: 1317-61-9.

3. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Powder
Colour:	Black
Odour:	None
pH value:	6-6.5 typically
Boiling Point (°C):	>1000
Melting Point:	Not available
Flash Point:	Not applicable
Explosion Limit:	Not available
Vapour Pressure:	1000
Density:	Not available
Specific Gravity (Water=1):	4.9 @ 20°C
Solubility in water:	Insoluble

4. STABILITY & REACTIVITY

Stability:	Above 60°C oxidizes to Fe ₂ O ₃ .
Conditions to avoid:	Avoid heat.
Materials to avoid:	No incompatible groups noted.
Hazardous Decomposition Products:	No hazardous decomposition products.

5. HANDLING AND STORAGE

Usage Precautions:	Avoid handling which leads to dust formation.
Storage precautions:	Product is not stable if stored at temperatures above 60°C due to the content of black iron oxide. Keep in a cool, dry ventilated storage and closed containers.
Storage Criteria:	Unspecified storage.

6. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient Name	CAS No	STD	LT EXP (8hrs)	ST EXP (15min)
Red Iron Oxide	12227-89-3	NUI	-	-

Ingredients: NUI = Nuisance Dust.

The UK HSE guidance note EH40, recommend adequate control of exposure to dusts and where there is not indication of the need for a lower value, personal exposure should be kept below;-

8h TWA 10mg/m³ total inhalable dust.
8h TWA 4mg/m³ respirable dust.

Process Control Measures:	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.
Ventilation:	Provide adequate general and local exhaust ventilation.
Respirators:	No specific recommendations made, but protection against nuisance dust must be used when the general level exceeds 10mg/m ³ .
Protective Gloves:	Use suitable protective gloves if risk of skin contact.
Eye Protection:	Wear dust resistant safety goggles where there is a danger of eye contact.
Other Protection:	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygienic Work Routines:	No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Change work clothing daily before leaving work place.

7. HAZARDS IDENTIFICATION

Not regulated as a health or environmental hazard under certain legislation.

8. FIRST AID MEASURES

General:	Contaminated clothing should be removed and washed before being reused.
Inhalation:	Remove victim immediately from source of exposure. Remove the exposed person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion:	Rinse mouth thoroughly with water. Victims who are not unconscious should drink large quantities of milk or water, or self induce vomiting. NEVER MAKE AN UNCONCIOUS PERSON VOMIT OR DRINK FLUIDS! Get medical attention if any discomfort continues.
Skin:	Remove effected person from source of contamination. Remove contaminated clothing. Wash the skin immediate with soap and water. Get medial attention if any discomfort continues.
Eyes:	Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

9. ACCIDENTAL RELEASE MEASURES

Personal Precautions During Spill:	Wear protective clothing if dust in the atmosphere is a problem.
Precautions to Protect Environment:	Avoid washing into watercourses. Avoid contaminating public drains or water supply.
Clean up Methods:	Avoid dust formation. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container.

10. DISPOSAL CONSIDERATIONS

Via an authorised disposal contractor to an approved waste disposal site

11. FIRE FIGHTING MEASURES

Extinguishing Media:	This material is not combustible. Use extinguishing media appropriate for surrounding fire.
Special Fire Fighting Procedures:	This material is non-combustible, but may be subject to slow oxidation if stored at temperatures above 60°C as a results of the presence of black iron oxide. If oxidation should occur, heat will be the liberated

which could cause surrounding combustibles to burn. Use extinguishing media appropriate for any combustible material involved in the fire. The pallet should be broken apart and cooled with water to dissipate the heat.

Unusual Fire & Explosion Hazard: No unusual fire or explosion hazard noted.

12. TOXICOLOGICAL INFORMATION

From literature surveys undertaken:-

Iron Oxide:-

LD50: oral, rat = >5000mg/kg

Rabbit: eyes = non irritant

Rabbit skin (24 h) = non irritant

Health Hazards, General: No specific health warning noted.

Inhalation: Repeated and prolonged inhalation of iron oxide fumes has been reported to produce changes in lung X-Rays of exposed individuals. This condition, siderosis, is considered to be benign pneumoconiosis that exhibits no adverse health effects. To the best of our knowledge, this condition has not been observed after prolonged exposure to Iron Oxide Pigments.

Ingestion: No specific health warnings noted.

Skin: Powder may irritate skin.

Eyes: May cause irritation.

Other Health Effects: This substance has no evidence of carcinogenic properties.

Medical Symptoms: Prolonged or repeated exposure may cause: Skin irritation. Irritation of eyes and mucous membranes.

13. ECOLOGICAL INFORMATION

Environmental Hazards: From literature surveys undertaken:-

Aquatic Toxicity (fish): = *Leuciscus idus* (Golden Orfe) Lco: >100mg/l

Bacterial Toxicity: = Harmless against *pseudomonas putida* at >1000mg/l

Water hazard classification = According to present state of knowledge, these pigments are generally not hazardous to water.

Separation: These pigments are separated in most filtration and/or sedimentation processes.

Biological/Chemical Oxygen Demand: Not applicable.

14. TRANSPORT INFORMATION

Not regulated as a hazardous material

15. REGULATORY INFORMATION

EEC (EINECS) No.:	235-442-5
Risk Phrases:	Not classified.
Safety Phrases:	Not classified.
UK Regulatory References:	Chemicals (Hazard Information & Packaging) Regulations 1996.
EC Directives:	Dangerous Substances Directive 67/548. Dangerous Preparations Directive 88/379.
Guidance Notes:	UK HSE guidance note EH40, Occupational Exposure Limits.

16. OTHER INFORMATION

This product should be stored, handled and used in accordance with good industrial hygienic practices and in conformity with any legal regulation. The above information is based on the present state of our knowledge of the product at the time of publication. The user must satisfy himself that the product is entirely suitable for his purpose.

This information contained herein is based on the present state of our knowledge and believed to be correct but does not purport to be all-inclusive and shall be used as guide. It does not represent a guarantee of properties of the product. It is user's responsibility to determine the safety, toxicity, suitability of the product, all applicable national, international and local regulations or provisions and all above information for his/her own handling & use. No guarantee expressed or implied is made by The Soap Kitchen and shall not be held liable for any damage resulting from handling, use or from contact with the above product. User assumes all risk and responsibility.