

Iron(III) oxide**12342-1KG**

Version 1.1

Revision Date 12/14/2021

Print Date 05/11/2023

SECTION 1. IDENTIFICATION

Product name : Iron(III) oxide

Number : 000000020766

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : solid

Color : red

Odor : odourless

Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

Precautionary statements : **Prevention:**
Use personal protective equipment as required.

Hazards not otherwise : Repeated or prolonged exposure may irritate eyes, skin and

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classified

respiratory system.

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTSFormula : Fe₂O₃

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Iron oxide	1309-37-1	100.00 %

SECTION 4. FIRST AID MEASURES

General advice : First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation : If inhaled, remove to fresh air. Call a physician if irritation develops or persists.

Skin contact : After contact with skin, wash immediately with plenty of water. If symptoms persist, call a physician.

Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. If eye irritation persists, consult a specialist.

Ingestion : Immediately give large quantities of water to drink. If accidentally swallowed obtain immediate medical attention.

Notes to physician

Most important : No information available.

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symptoms/effects, acute and
delayed

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

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry powder

Specific hazards during : The product itself does not burn.
firefighting

Special protective equipment : Wear self-contained breathing apparatus and protective suit.
for firefighters

Further information : Use extinguishing measures that are appropriate to local
circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, : Evacuate personnel to safe areas.
protective equipment and : Wear personal protective equipment. Unprotected persons
emergency procedures : must be kept away.
Provide adequate ventilation.
Avoid dust formation.
Avoid contact with skin, eyes and clothing.

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Methods and materials for : Use mechanical handling equipment.
containment and cleaning : Sweep up and shovel into suitable containers for disposal.
up : Dispose of in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE**Handling**

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Precautions for safe handling : Wear personal protective equipment.
Use only in well-ventilated areas.
Avoid inhalation, ingestion and contact with skin and eyes.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

Conditions for safe storage, including any incompatibilities : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.

Engineering measures : Use with local exhaust ventilation.

Eye protection : Safety glasses with side-shields

Hand protection : Latex gloves
Gloves must be inspected prior to use.
Replace when worn.

Skin and body protection : Protective suit

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis
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SAFETY DATA SHEET



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Iron oxide	1309-37-1	TWA : Time weighted average	5 mg/m3	01 2010	ACGIH:US. ACGIH Threshold Limit Values, as amended
Further information	:	Form of exposure : Respirable fraction.			

Iron oxide	1309-37-1	REL : Recomm ended exposure limit (REL):	5 mg/m3	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Further information	:	Form of exposure : Dust and fume. Expressed as : as Fe			

Iron oxide	1309-37-1	PEL : Permissi ble exposure limit	10 mg/m3	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Further information	:	Form of exposure : Fume.			

Iron oxide	1309-37-1	TWA : Time weighted average	10 mg/m3	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Further information	:	Form of exposure : Fume.			

Iron oxide	1309-37-1	:	Listed	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
Further information	:	Form of exposure : Respirable fraction.			

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Iron oxide	1309-37-1	:	Listed	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Total dust.			
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Iron oxide	1309-37-1	TWA : Time weighted average	15 millions of particles per cubic foot of air	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Respirable fraction.			
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Iron oxide	1309-37-1	TWA : Time weighted average	15 mg/m3	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Total dust.			
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Iron oxide	1309-37-1	TWA : Time weighted average	5 mg/m3	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Respirable fraction.			
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Iron oxide	1309-37-1	TWA : Time weighted average	50 millions of particles per cubic foot of air	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Total dust.			
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical state	: solid
Color	: red
Odor	: odourless
Odor threshold	: Note: No data available
pH	: 4 - 8 at 50.00 g/l Note: suspension
Melting point/range	: 1,565 °C
Boiling point/boiling range	: Note: No data available
Flash point	: Note: Not applicable
Evaporation rate	: Note: No data available
Flammability	: The product is not flammable.
Lower explosion limit	: Note: Not applicable
Upper explosion limit	: Note: Not applicable
Vapor pressure	: Note: No data available
Vapor density	: Note: No data available
Density	: ca. 5 g/cm ³ at 20 °C
Water solubility	: Note: insoluble

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Partition coefficient: n-octanol/water	: Note: No data available
Ignition temperature	: Note: Not applicable
Auto-ignition temperature	: Note: not auto-flammable
Decomposition temperature	: Note: No decomposition if used as directed.
Viscosity, dynamic	: Note: No data available
Viscosity, kinematic	: Note: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: 159.69 g/mol
Bulk density	: ca. 700 kg/m ³

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable
Possibility of hazardous reactions	: None known.
Conditions to avoid	: None known.
Incompatible materials	: None
Hazardous decomposition products	: No hazardous decomposition products known.

SECTION 11. TOXICOLOGICAL INFORMATION

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Acute oral toxicity	: LD50: > 5,000 mg/kg Species: Rat
Acute inhalation toxicity	: Note: Not classified due to data which are conclusive although insufficient for classification.
Acute dermal toxicity	: Note: No data available
Skin irritation	: Species: Rabbit Result: No skin irritation Method: OECD Test Guideline 404
Eye irritation	: Species: Rabbit Result: slight irritation Method: OECD Test Guideline 405
Sensitisation	: Species: Guinea pig Result: Not a skin sensitizer.
Genotoxicity in vitro	: Note: Not classified due to data which are conclusive although insufficient for classification.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish	: LC0: > 50,000 mg/l Exposure time: 96 h Species: Danio rerio (zebra fish)
Toxicity to daphnia and other aquatic invertebrates	: Immobilization EC50: > 100 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea)

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Method: OECD Test Guideline 202

Toxicity to algae : Note: Not classified due to data which are conclusive although insufficient for classification.

Toxicity to bacteria : EC50: > 10,000 mg/l
Exposure time: 3 h
Species: activated sludge
Method: ISO 8192

Elimination information (persistence and degradability)

Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

Further information on ecology

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

SECTION 15. REGULATORY INFORMATION

Inventories

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US. Toxic Substances
Control Act : On TSCA Inventory

Australia. Industrial
Chemicals Act (AICC), as
amended : On the inventory, or in compliance with the inventory

Canada. Canadian
Environmental Protection
Act (CEPA). Domestic
Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals
Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. Inventory of
Chemicals and Chemical
Substances (PICCS) : On the inventory, or in compliance with the inventory

China. Inventory of Existing
Chemical Substances
(IECSC) : On the inventory, or in compliance with the inventory

New Zealand. Inventory of
Chemicals (NZIoC), as
published by ERMA New
Zealand : On the inventory, or in compliance with the inventory

National regulatory information

SARA 302 Components : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards : No SARA Hazards

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California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts RTK : Iron oxide 1309-37-1

New Jersey RTK : Iron oxide 1309-37-1

Pennsylvania RTK : Iron oxide 1309-37-1

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 1*	1
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group