SAFETY DATA SHEET	ROD-3146 OPTISPERSE BLACK IRON OXIDE

Version: 1/2026 **Date Revised: 03/17/2026** **Date Issued: 03/01/2022**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II as amended by Commission Regulation (EU) 2015/830-Europe

SECTION 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name	OptiSperse Black Iron Oxide
Product code	ROD-3146
EC number	235-442-9, 277-452-2, 220-941-2, 250-178-0, 232-307-2
CAS number	12227-89-3 73398-61-5, 27924-99-8, 2943-75-1, 30399-84-9, 29894-35-7; 235783-76-3, 8002-43-5
Date of issue/Date of revision	03/17/2026
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REACH Registration Number/Numbers

Iron Oxide (Black)	01-2119457646-28
Caprylic/Capric Triglyceride	05-2116942922-40-000
Polyhydroxystearic Acid	Exempt, Polymer
Triethoxycaprylylsilane	01-2119972313-39
Isostearic Acid	01-2119493913-27
Polyglyceryl-3 Polyricinoleate	Exempt, Polymer
Lecithin	Exempt, Natural

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended uses: personal care applications

Uses advised against: Not applicable

1.3. Details of the supplier of the safety data sheet

Manufacturer: Color Techniques, Inc.
260 Ryan Street
South Plainfield, NJ 07080 USA
TELEPHONE: 908-412-9292
EMAIL: mahmoud@colortechniques.com
FAX: 908-412-9339

1.4. Emergency telephone number

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN203590
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

SECTION 2 Possible hazards

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Iron Oxides, Caprylic/Capric Triglyceride, Polyhydroxystearic Acid, Triethoxycaprylylsilane, Isostearic Acid, Polyglyceryl-3 Polyricinoleate, and Lecithin are not listed as hazardous substances or mixtures according to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.

GHS Classification:

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

Precautionary statements

Prevention: Wear protective gloves and eye and face protection
Response: Not applicable
Storage: Not applicable
Disposal: Not applicable
Hazardous ingredients: Red iron oxide
Supplemental label elements: Not applicable
Annex XVII-Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable

2.3 Other Hazards

Substance meets the criteria for PBT according to Regulation EC) No. 1907/2006, Annex XII: Not applicable
Substance meets the criteria for vPvB according to Regulation EC) No. 1907/2006, Annex XII: Not applicable
Other hazards which do not result
In classification: Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose, and throat.

SECTION 3 Composition/information on ingredients

3.1 Substances

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3.2 Mixtures

Ingredient Name	CAS Number	EINECS	Colour Index
Iron Oxide Black 96%	12227-89-3	235-442-9	77499
Caprylic/Capric Triglyceride, 1.29	73398-61-5	277-452-2	n/a
Polyhydroxystearic Acid, 1.29	27924-99-8	Polymer exempt	n/a
Triethoxycaprylylsilane, 1.0	2943-75-1	220-941-2	n/a
Isostearic Acid, 0.14	30399-84-9	250-178-0	n/a
Polyglyceryl-3 Polyricinoleate, 0.14	29894-35-7; 235783-76-3	Polymer, exempt	n/a
Lecithin, 0.14	8002-43-5	232-307-2	n/a

SECTION 4 First aid measures

4.1 Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

Eye contact Remove contact lenses, if present and easy to do. Flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

Inhalation Remove to fresh air. If breathing is labored or stopped, give artificial respiration. Get immediate medical attention

Skin contact Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or recognized skin cleanser.

Ingestion Keep person warm and at rest. Wash out mouth with water. If swallowed, drink plenty of water. Seek medical attention. Do not induce vomiting.

Protection of first aiders No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The product is not classified as hazardous substances or mixtures according to Regulation (EC) No 1272/2008 as amended.

Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat, and lungs.

4.3 Indications of any immediate medical attention and special treatment needed

Notes to medical doctor Treat symptomatically. Contact poison treatment specialist if large quantities have been ingested or inhaled.

Specific treatment No specific treatment

SECTION 5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use dry chemical CO_2, water spray (fog), or foam.

Unsuitable extinguishing Media Do not use water jet

5.2 Special hazards arising from substance or mixture

Hazards from the substance or mixture: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen

5.3 Advice for firefighters

Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for firefighters: Fire fighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus (SCBA) and full protective clothing when appropriate.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment to avoid inhalation of dust. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in containers for disposal according to local regulations. Clean with a detergent; avoid solvents

6.2 Environmental precautions

Avoid washing into waterways or public water supply.

6.3 Methods and material for containment and cleaning up

Avoid dust formation. Vacuum, sweep, shovel or use wet clean up techniques and place waste material in closed container.

6.4 Reference to other sections

See Section 1 for emergency contact information, Section 8 for appropriate personal protection and Section 13 for additional waste treatment information.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

Handling: good industrial hygiene practice requires that employee exposure be maintained below tlv. This is preferably achieved through the provision of adequate ventilation where necessary. Where dust cannot be controlled in this way, personal respiratory protection should be employed.

7.2 Conditions for safe storage, including any incompatibilities

Storage: store in a clean, dry area at ambient temperature in original unopened containers. Conditions of high humidity may require storage in a controlled environment.

7.3 Specific end use/uses

See the relevant identified use/uses listed in Section 1

SECTION 8 Exposure controls/personal protection

8.1 Control Parameters

Occupational exposure limits No exposure limit value known

Recommended monitoring procedures If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres-Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 1402 (Workplace atmosphere-Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace atmospheres-General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs No DNELs/DMELs available

PNECs No PNECs available

OEL(Iron Oxide Fume): 5 mg/m^{3,} (8 hour reference period), 10mg/m^3(15 minute reference period)

ACGIH TLV: 5 mg/m3 (Iron Oxide Fume)

OSHA PEL: 10 ppm (Iron Oxide Fume as Fe)

8.2 Exposure controls

Appropriate engineering controls Provide adequate ventilation. Where reasonably practicable, this should be achieved using local exhaust ventilation and good general extraction. If these are not sufficient. To maintain concentrations of particulates and solvent vapors below OEL, suitable respiratory protection must be worn.

Individual protection measures

Hygiene Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Eye/face protection Safety eyewear should be used when there is a likelihood of exposure. Use eye protection according to EN 166.

Skin protection

Hand protection Wear suitable gloves tested to EN374. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

Gloves Chemical resistant, impervious gloves complying with an approved standard should be always worn when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Body protection Personnel should wear antistatic clothing made of natural fibers or of high temperature resistant synthetic fibers.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. Respirator selectin must be based on known or anticipated exposure levels, the hazards of the product and safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.

Environmental Exposure controls Do not allow to enter drains or watercourses.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Physical state	solid **(**powder)
(b) Colour	Black
(c) Odour	characteristic
(d) Melting point/freezing point	not applicable
(e) Boiling point	not applicable
(f) Flammability	non-flammable
(g) Lower and upper explosion limit	not available
(h) Flash point	not applicable
(i) Auto-ignition temperature	not applicable

(j) Decomposition temperature	not applicable
(k) pH	5-8 for aqueous suspension
(l) Kinematic viscosity	not applicable
(m) Solubility	Insoluble in water
(n) Partition coefficient-octanol/water (log value)	not applicable
(o) Vapor pressure	not applicable
(p) Density and/or relative density	not tested
(q) Relative vapour density	not applicable
(r) Particle characteristics	MV(um) 6.05 by laser diffraction

9.2 Other information
No additional information

9.2 Other information
No additional information

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity
Conditions to avoid: none
10.2 Chemical Stability
Stable under recommended storage conditions
10.3 Possibility of hazardous reactions
None
10.4 Conditions to avoid
None
10.5 Incompatible materials
Iron oxides are not compatible with strong oxidizing agents
10.6 Hazardous decomposing products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity	This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
Irritation/corrosion	This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
Sensitization	This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
Mutagenicity	This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
Carcinogenicity	This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
Reproductive toxicity	This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
Teratogenicity	This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]

Specific target organ toxicity (single exposure)	Not determined. This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
Specific target organ toxicity (repeated exposure)	Not determined. This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
Aspiration hazard	Not determined. This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]

There are no known dangerous acute effects associated with the use of this material. The acute oral toxicity ld_{50} oral (rat) for Fe_2O_3 is greater than 10 g/kg (rat).
This product is not considered to be a known or suspected carcinogen by NTP, IARC or OSHA.

SECTION 12 Ecological information

12.1 Toxicity
No harmful effects known other than those associated with suspended inert solids in water.
This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
12.2 Persistence and degradability
Methods for the determination of biodegradability are not applicable to inorganic substances
This product has not been tested. Classification according to Regulation (EC) No.1272/2008 [CLP/GHS]
12.3 Bioaccumulative potential
The product is practically insoluble in water and not biodegradable
12.4 Mobility in soil
No information available
12.5 Results of PBT and vPvB assessment
According to Annex xiii of Regulation (EC) 1907/2006 A PBT and vPvB assessment shall not be conducted for inorganic substances. This material is an inorganic substance, thus a PBT and vPvB assessment is not required.

12.6 Endocrine disrupting properties
No evidence of endocrine disrupting properties.

12.7 Other adverse effects
No known significant effects or critical hazards.

SECTION 13 Disposal considerations

13.1 Waste treatment methods
No hazardous waste according to European Directive 2000/5322/EC. Reclaim and recycle material, if possible, otherwise dispose according to local regulations. As sold, this product is not classified as a RCRA hazardous waste as defined by 40CFR261. It is the responsibility of the user to determine RCRA classification of any product containing this iron oxide.

ECTION 14 Transportation information

	ADR	IMDG	ICAO	IATA
14.1 UN number	Not dangerous goods	Not dangerous goods	Not dangerous goods	Not dangerous goods
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class	Not regulated	Not regulated	Not regulated	Not regulated
14.4 Packing group	-	-		
14.5 Environmental hazards	no	no	no	no

14.6 Special precautions for uses Transport within user's premises. Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available

SECTION 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations Health and Safety at Work etc. Act 1974 (as amended).
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 716).
EH40/2005 Workplace exposure limits

EU legislation Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended)
Commission Regulation (EU) No 453/2010 of 20 May 2010.
Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Commission Regulation (EU) No 2015/830 of 28May 2015

Authorizations (Annex XIV Regulation 1907/2008) No specific authorizations are known for this product

Restrictions (Annex XVII Regulation 1907/2006) No specific authorizations are known for this product

15.2 Chemical safety assessment
No chemical safety assessment has been carried out.

Inventories
TSCA Complies
Canadian WHMIS – this material is not a controlled substance
European Community - listed on ecoin, the European Core Inventory
Canada (DSL): Complies
Canada (NDSL): Complies
Australia (AICS): Complies
Japan (ENCS): listed
China (IECSC): listed
EC (einecs/elincs): listed
Korea (ECL): listed
New Zealand (HASNO): listed
Philippine (PICCS): listed

US Federal Regulations
SARA 313 Section 313 of the Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372
SARA 311/312 Hazard Categories: Acute Health Hazard No
Chronic Health Hazard No
Fire Hazard No

Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act) This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42

CERCLA This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARS) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

SECTION 16 Other information

NFPA Ratings:		HMIS Ratings:	
Health	1	Health	1
Flammability	0	Flammability	0
Reactivity	0	Reactivity	0
Personal Protection	E – Glasses, Gloves, Dust Resp.		

GHS Classification:

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Abbreviations and acronyms

ATE: Acute Toxicity Estimate
CLP: Classification, Labelling and Packaging Regulation (Regulation (EC) No. 1272/2008)
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level
N/A: Not available
EUH statement: CLP-specific Hazard statement
PBT: Persistent, Bioaccumulative and Toxic
PNEC: Predicted No Effect Concentration
RRN: Reach Registration Number
SGG: Segregation Group
vPvB: Very Persistent and Very Bioaccumulative

Key literature references/data sources: ECHA database
Full text of abbreviated H statements: Not applicable
Full text of classifications {CLP/GHS]: Not applicable
Advise of the training of workers: None
Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] : Not classified
Revision and update of this Safety Data Sheet: The manufacturer revises this sds if new information with influence on risk assessment is available or permitting/restriction is given.
Changes against the last edition to this Safety date sheet: Repeals ROD-3146 OptiSperse Black Iron Oxide SDS valid since 03/01/2022 Additional information added to Section 9,12
Disclaimer:
The information provided in this Safety Data Sheet is correct to the best of our knowledge with current data available at the date of publication. Such information is offered solely for your consideration, investigation, and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones, which exist. Color Techniques Inc. makes no warranty, expressed or implied, with respect to the use of such information and assumes no responsibility, therefore. Information on this safety data sheet is not intended to constitute a basis for product specification.

END OF SDS