

PRODUCT NAME(S): Concrete Dye – Terra Cotta

SECTION 1 – IDENTIFICATION

Manufacturer's Info:
Rhino Linings Corporation
 9747 Businesspark Avenue
 San Diego, CA, 92131

Product name: Concrete Dye – Terra Cotta

Information phone: (858) 450 0441
Emergency contact: CHEMTREC (800) 424 9300

SECTION 2 – HAZARD(S) IDENTIFICATION

OSHA Hazard Communication Standard:
 This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

GHS-Label Elements: **Signal Word:** **Pictogram(s):**
 WARNING



GHS 08

Classification of the substance or mixture:

<u>Hazard Class</u>	<u>Category</u>	<u>Hazard Statement Codes</u>	<u>Hazard Statements</u>
Carcinogenicity	2	H351	Suspected of causing cancer by inhalation

Precautionary Statements:

Prevention: P201 Obtain special instruction before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P281 Use personal protective equipment as required.

Response: P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents/container to hazardous or special waste collection point in accordance with local/regional/national/international regulations.

Hazards not otherwise classified: Combustible Dust
 100% - unknown acute toxicity; 100% - unknown hazards to the environment.
 See Section 11, 12 and 15 for additional info.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS #	EC #	Concentration, %
Azo metal complex (Cobalt Compound)	Trade secret	Trade secret	99 – 100

SECTION 4 – FIRST-AID MEASURES

Description of First Aid measures:

Inhalation: Move to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory problems, seek medical attention.

Skin: Wash material off of the skin with plenty of soap and water. Remove contaminated clothing and shoes and wash them before reuse. Get medical advice/attention if irritation develops or persists.

Eye: Immediately rinse with water for several minutes, especially under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Do not rub eyes in order to prevent corneal injury. Get medical advice/attention if eye irritation develop or persists.

Ingestion: Move to fresh air and keep at rest in a position comfortable for breathing. Remove dentures if any. Rinse mouth thoroughly with water and then drink 60 to 240 mL (2 to 8 oz). Get medical advice/attention if symptoms occur.

Most important symptoms/effects, acute and delayed: See Section 11 for more details.

General advice for First Aid responders: Show this SDS to physician.

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Note to physician: Specific antidotes or neutralizers do not exist. Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Recommended medical monitoring for at least 24 hours.

SECTION 5 – FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: Not known.

Specific hazards arising from the chemical: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. Hazardous combustion products: carbon, nitrogen and cobalt oxides, low molecular weight organic compounds.

Special Protective Equipment and Precautions for fire-fighters: Wear NIOSH or OSHA approved self-contained breathing apparatus in positive pressure mode with full face piece and full protective gear. Isolate the scene by removing all persons from the incident area. No action should be taken involving any personal risk or without suitable training.

Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Ensure adequate ventilation/exhaust extraction. Avoid breathing dust during clean up. Take precautionary measures against static discharges when cleaning up. Use protective equipment as described in Section 8.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater, basements or confined areas. Inform the relevant authorities if the product has caused environmental pollution. See Section 12 for more details.

Methods and materials for containment and cleaning up: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with HEPA filter and place in a designated labeled waste container. Seal the container, and properly dispose of the waste material in accordance with existing federal, state and local regulations. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, see Section 1 for the Emergency contact; for further disposal measures, see Section 13.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling: Avoid generating and do not breathe dust. Do not rely on your sight to determine if dust is in the air. Use adequate ventilation and dust collection methods to keep airborne levels below the exposure limits. Maintain and test ventilation and dust collection equipment. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Take precautionary measures against static discharges. Wear appropriate respiratory, eye and skin protection. Avoid contact with skin and eyes. Wash hands thoroughly after handling. Hands and/or face should be washed before eating, drinking and smoking and at the end of the shift. Remove contaminated clothing and protective equipment before entering eating areas. Wash or vacuum clothing when becomes dusty.

Conditions for safe storage, including any incompatibilities: Store in a dry, cool and well-ventilated area, protected from direct sunlight and away from incompatible materials (see Section 10 for details), food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed.

Storage stability: Stable under normal conditions.

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200. Employees and consumers should be warned of health risks associated with product use. See Section 8 for additional information on hygiene measures.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters/Occupational exposure limit values: Results are listed in Section 15.

Appropriate engineering controls: Good local and general ventilation and wet methods should be sufficient to control worker exposure to airborne contaminants below recommended exposure limits. Local exhaust may be required in some areas.

Personal protective equipment:

Eye/face protection:

When directly handling product, eye protection is required. Examples of eye protection include safety glasses with side shields or chemical goggles. Contact lenses should not be worn when working with this product. Dust can get under the lenses and cause abrasion of the cornea.

Skin/body protection:

Impervious gloves should be worn when working with this product. Do not rely on barrier creams in place of impervious gloves. Do not get product inside gloves.

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Body should be covered with appropriate clothing (apron, arm covers or full body suit) depending on the task being performed and the risks involved. Appropriate footwear should be also selected based on the task being performed and the risks involved. Wash contaminated clothing when becomes dusty.

Respiratory protection:

Use local or general ventilation to control exposures below applicable exposure limits.

Use properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and assigned protection factor of the selected respirator.

Additional Protective Measures: Educate and train employees in safe handling of this product. Follow all label instructions. As a general hygiene practice, wash hands and face after use. Clean water should always be readily available for emergency skin and eye washing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES	
Appearance:	Dull yellow powder
Odor:	Odorless
Odor threshold:	Not applicable
pH:	5 – 6
Melting point/ freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	Not applicable
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not available
Upper/ lower flammability or explosive limits:	Not applicable
Vapor pressure:	Not applicable
Vapor density:	Not applicable
Relative density:	1.20
Solubility (water):	Insoluble
Partition coefficient n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	459 – 469°F
Viscosity:	Not applicable

SECTION 10 – STABILITY AND REACTIVITY
<p>Reactivity: Product will not undergo hazardous polymerization. Corrosive effects to metal are not anticipated.</p> <p>Chemical stability: Stable under recommended storage conditions.</p> <p>Conditions to avoid: Generation of dust, open flame and sparks.</p> <p>Incompatible materials: Not known.</p> <p>Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced. In fire conditions, depending on temperature, air supply and presence of other materials, decomposition products can include, but are not limited to carbon, nitrogen and cobalt oxides, low molecular weight organic compounds.</p>

SECTION 11 – TOXICOLOGICAL INFORMATION				
<p>Likely Routes of Exposure: Skin and Eye Contact, Inhalation and Ingestion.</p> <p>Symptoms of exposure:</p> <p>Acute toxicity:</p> <p>Oral: No data available.</p> <p>Dermal: No data available.</p> <p>Inhalation: No data available.</p> <p>Skin corrosion / irritation: No data available.</p> <p>Serious eye damage / eye irritation: Dust may cause abrasion of the cornea.</p> <p>Specific target organ toxicity, single exposure: No data available.</p> <p>Aspiration hazard: Not an aspiration hazard.</p> <p>Chronic toxicity:</p> <p>Respiratory and Skin Sensitizer: No data available.</p> <p>Germ cell mutagenicity: No data available.</p> <p>Carcinogenicity:</p> <p style="margin-left: 20px;">This product contains component that is suspected to be carcinogenic to humans.</p> <table style="margin-left: 40px; border: none;"> <tr> <td style="padding-right: 20px;">○ Cobalt and Cobalt compounds, CAS #: 7440-48-4:</td> <td>IARC: Group 2B (Possibly Carcinogenic to Humans)</td> </tr> <tr> <td></td> <td>ACGIH: A3 Animal carcinogen</td> </tr> </table> <p>Reproductive toxicity: No data available.</p>	○ Cobalt and Cobalt compounds, CAS #: 7440-48-4:	IARC: Group 2B (Possibly Carcinogenic to Humans)		ACGIH: A3 Animal carcinogen
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	ACGIH: A3 Animal carcinogen			

Specific target organ toxicity, repeated exposure: No data available.

Medical conditions aggravated by overexposure: No data available.

Toxicity test results: No data available.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: Not known.

Ecotoxicity test results: No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Product Disposal: The generation of waste should be avoided or minimized wherever possible. If product becomes a waste, it may meet criteria of hazardous waste as defined in 40 CFR 261, Subpart C and D. Do not discharge into sewer system. Spill cleanup residues may be subject to RCRA storage and disposal requirements. Dispose waste in compliance with local, state and federal regulations via licensed waste disposal contractor.

Container disposal: Even after emptying, container may retain residues. Containers should be completely emptied and safely stored until appropriately reconditioned or disposed through licensed contractor in accordance with government regulation.

This material and its container must be disposed of in a safe way.

SECTION 14 – TRANSPORT INFORMATION

Land transport, U.S. DOT: Non-regulated

Sea transport, IMDG: Non-regulated

Air transport, IATA/ICAO: Non-regulated

SECTION 15 – REGULATORY INFORMATION

U.S. Regulations:

OSHA HCS: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29CFR 1910.1200.

TSCA Regulations:

All components of this product are listed or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

EPCRA Section 302 (40 CFR Part 355) (Emergency Response Planning, Extremely Hazardous Substance):

No components are subject to the reporting.

EPCRA Section 304 (40 CFR Part 355) (Emergency Release Notification Requirements):

No components are subject to the reporting.

EPCRA Sections 311 & 312 (Hazardous Chemical Inventory Reporting, Hazard Categories):

Chronic Health Hazard, Fire Hazard

EPCRA Section 313 (40 CFR Part 372) (Toxic Chemical Release Inventory Reporting):

The following components of this product are present above De Minimis level and therefore require reporting:

- Cobalt compounds, CAS #: N/A, N096: in product: 100% De Minimis: 1.0%

CERCLA Sections 102-103 (40 CFR Part 302) (Hazardous Substances Release Notification):

The following component is listed:

- Cobalt compounds, CAS #: N/A, N096: RQ: Not assigned

Clean Air Act:

- Ozone Depleting Substances (ODS): This product does not contain and is not manufactured with ozone depleting substances.
- Hazardous Air Pollutants, OSHA, Section 112(b), Table Z-1 and Table Z-3:

Substance	Regulatory Limits			Recommended Limits		
	OSHA PEL		Cal/OSHA PEL	NIOSH REL	ACGIH® 2015 TLV®	
	mppcf	mg/m ³	(as of 4/26/13) 8hrs TWA, mg/m ³	(as of 4/26/13) Up to 10hrs TWA, mg/m ³		
Cobalt metal, dust, and fume (as Co), CAS #: 7440-48-4	-	0.1	0.02	0.05	0.02	
Inert or Nuisance Dust	Total dust	50	15	10 (as PNOR)	See Appendix D	10
	Respirable fraction	15	5	5 (as PNOR)	See Appendix D	3

mppcf – millions of particles per cubic foot; Appendix D refers to Appendixes of Hazardous Air Pollutants List, Section 112(b) of Clean Air Act

IDLH: Cobalt compounds, CAS #: N/A: 20 mg Co/m³

Clean Water Act:

- Section 307(a)(1): No components are subject to the reporting.
- Section 311(b): No components are subject to the reporting.

NFPA rating: Health: 1 Fire: 1 Reactivity: 0 Special: 0

HMIS rating: Health: 1 Flammability: 1 Physical hazard: 0

State Regulations:

California Prop. 65 Components:

Based on available information, this product does not contain components known to State of California to cause cancer, birth defects, or any other reproductive harm.

Instruction: for regulatory information on components of this mixture, check the appropriate state websites.

International Regulations/Inventories:

Canadian Regulations: All ingredients of this product are listed or are exempt from the DSL.

WHMIS Classification (Controlled Products Regulations): Class D2A: Very toxic materials

WHMIS Label Information:



SECTION 16 – OTHER INFORMATION

LEGEND

GHS	Globally Harmonized System
CAS	Chemical Abstracts Services
EC	European Community
EPA	Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
ACGIH	American Conference of Governmental Industrial Hygienists
NIOSH	National Institute of Occupational Safety and Health
PEL	Permissible Exposure Limits
TLV	Threshold Limit Value
REL	Recommended Exposure Limit
TWA	Time-Weighted Average
STEL	Short-term exposure limit
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
STOT, SE	Specific Target Organ Toxicity following Single Exposure
STOT, RE	Specific Target Organ Toxicity following Repeated Exposure
DOT	Department of Transportation
IMDG	International maritime dangerous goods code
IATA, ICAO	International Air Transport Association, International Civil Aviation Organization
TSCA	Toxic Substances Control Act
EPCRA	Emergency Planning and Community Right-to-Know Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
RQ	Reportable Quantity
DSL	Domestic Substance List
WHMIS	Workplace Hazardous Materials Information System

Latest revision date: March 11, 2016 – Preparation of SDS in accordance to the GHS requirements

Date of the previous revision: Not available

Disclaimer: The data set forth in this sheet are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. Rhino Linings Corporation makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereof.