

Material Safety Data Sheet

Product Trade Name: **DIVERCOAT LR**

ID: H207

*** Section 1 - Chemical Product and Company Identification ***

Product Trade Name: DIVERCOAT LR

Manufacturer Information

Heatbath Corporation

P.O. Box 51048

Indian Orchard, MA 01151-5048

Contact Phone: (413) 452-2000

8:00 AM-5:00PM

CHEMTREC Emergency Phone: (800) 424-9300
24 Hours

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Component	Percent
001333-82-2	Chromic Acid	30-40
016893-85-9	Sodium Silicofluoride	1-20
010022-31-8	Barium Nitrate	1-10

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following:
Chromium (7440-47-3), Chromium (VI) compounds- water soluble, (RR-01554-3).

Additional Information:

This product is considered hazardous as defined by 29 CFR 1910.1200 (Hazard Communication).

*** Section 3 - Hazards Identification ***

Emergency Overview:

DANGER -- CORROSIVE! Contact with this material will cause burns to the skin, eyes and mucous membranes. Prolonged or repeated breathing may cause ulceration of nasal membranes. Following skin exposure to this product, the sensation of irritation or pain may be delayed. Cancer hazard.

Eye Contact:

This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

Skin Contact:

This product is corrosive to the skin. Contact with the skin or mucous membranes may cause severe irritation and burns. Following skin exposure to this product, the sensation of irritation or pain may be delayed. Contact with broken skin may lead to formation of firmly marginated "chrome sores". Product contains chromium, which may cause an allergic skin sensitization reaction.

Skin Absorption:

A component in this product may be harmful or fatal if absorbed through the skin, especially if skin is damaged.

Ingestion:

This product may produce corrosive damage to the teeth, mouth, throat, and gastrointestinal tract if it is swallowed.

Inhalation:

Inhalation of mists of this product may cause severe irritation and burns to the respiratory tract. Nasal itch and soreness, perforation of the nasal septum, dental erosion, and chronic asthmatic bronchitis may result from repeated exposure.

Medical Conditions Aggravated by Exposure:

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

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*** Section 4 - First Aid Measures ***

Eye Contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention. Do not stop washing eyes even if you think they are completely rinsed.

Skin Contact:

Immediately flush skin with plenty of water. Remove all clothes and footwear while flushing. Wash clothing before reuse or completely discard. Destroy contaminated shoes. Continue washing for at least 15 minutes. If irritation or burns are present get treatment by a physician as soon as possible.

Ingestion:

Do not induce vomiting. Have victim drink large amounts of water as quickly as possible to dilute the product. Never give anything by mouth to an unconscious person. Give several glasses of milk or several ounces of milk of magnesia. Get medical attention immediately.

Inhalation:

If mist or vapor of this product is inhaled, remove person immediately to fresh air. If breathing has stopped, start artificial respiration immediately. Make sure mouth and throat are free of foreign material and air passage is clear. Keep victim warm, quiet and lying down. A trained attendant should administer oxygen as soon as possible, particularly if breathing is difficult. Get medical attention.

First Aid: Notes to Physician

No information available.

*** Section 5 - Fire Fighting Measures ***

Flash Point:	> 218 °F	Upper Flammable Limit (UFL):	Not applicable
Flammability Classification:	Nonflammable	Lower Flammable Limit (LFL):	Not applicable

Fire & Explosion Hazards:

This product contains a strong oxidizing agent, which can supply oxygen to stimulate or accelerate combustion of organic or other combustible materials.

Decomposition Products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Decomposition of this product may emit acid vapors, and Chromium compounds.

Extinguishing Media:

Dry chemical, foam, carbon dioxide, and/or water fog.

Fire-Fighting Instructions:

Firefighters: Wear full protective clothing including self-contained breathing apparatus. Properly decontaminate all equipment after use.

*** Section 6 - Accidental Release Measures ***

Containment and Clean up procedures must be conducted in accordance with all local, state, and federal regulations.

Containment Procedures:

Stop the flow of material, if this can be done without risk. Wear appropriate protective equipment and clothing during clean up.

Clean-Up Procedures:

Sweep spill and transfer material into appropriate container(s) for disposal. Dispose of collected material according to local, state, and federal regulations.

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*** Section 7 - Handling and Storage ***

Handling Procedures:

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. This product is for industrial use only. Use with adequate ventilation. Do not take internally.

Storage Procedures:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Do not store near organic materials.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines:

A: General Product Information

Follow all applicable exposure limits.

B: Component Exposure Limits

Barium Nitrate (010022-31-8)

OSHA 0.5 mg/m³ TWA (as Ba)

NIOSH 0.5 mg/m³ TWA (as Ba), 50 mg/m³ IDLH

Chromium trioxide (CrO₃) (001333-82-0)

ACGIH: 0.5 mg/m³ TWA (related to Chromium)

OSHA: (as Cr): 1 mg/m³ TWA (related to Chromium)

NIOSH: as CrO₃: 0.001 mg/m³ TWA; NIOSH Potential Occupational Carcinogen - see Appendix A; see Appendix C for supplementary exposure limits

Engineering Controls:

Mechanical ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face Protective Equipment:

Wear chemical goggles and/or full-face shield (if splashing is possible).

Skin Protection:

Use impervious gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended because clothing that is contaminated with chromic acid is dangerously flammable.

Respiratory Protection:

If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Personal Protective Equipment:

Eyewash fountains and emergency showers are required.

*** Section 9 - Physical & Chemical Properties ***

Physical State: Powder

Odor: Bland

Vapor Density: Not applicable

Specific Gravity: 67 lb/ft³

Viscosity: Not applicable

Solubility in Water: Complete

Percent Volatile: Not applicable

Appearance: Orange - Brown Granular

Vapor Pressure: Not determined

Boiling Point: Not determined

pH: 1.9 (1.0 % solution)

VOC: Not applicable

Evaporation Rate: Not determined

Percent Solids: Not determined

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*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

Keep away from heat, ignition sources and incompatible materials.

Incompatibility:

This product is incompatible with organic materials, reducing agents, and alkalis.

Decomposition Products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Decomposition of this product may emit acid vapors, and Chromium compounds.

Hazardous Polymerization:

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Toxicity:

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Chromium trioxide (CrO₃) (001333-82-0)

Oral LD50 (Rat): 80 mg/kg

Oral LD50 (Mouse): 127 mg/kg

Barium Nitrate (010022-31-8)

Oral LD50 (Rat): 355 mg/kg

Sodium Silicofluoride (016893-85-9)

Oral LD50 (Rat): 125 mg/kg

Oral LD50 (Mouse): 70 mg/kg

Carcinogenicity:

A: General Product Information

No information available for the product. But all precautions should be observed due the composition of this product.

B: Component Carcinogenicity

Chromium trioxide (CrO₃) (1333-82-0)

ACGIH: A4-not classifiable as a human carcinogen (related to Chromium)

NIOSH: occupational carcinogen

NTP: Known Carcinogen; (under Chromium and Certain Chromium Compounds) (Select Carcinogen)

IARC: Monograph 49; 1990 (related to Chromium) (Group 3 (not classifiable))

Chronic Toxicity

No information available for the product.

Chromium III, the naturally occurring form, has low toxicity while chromium VI is highly toxic due to strong oxidation characteristics and permeability through biological membranes. Excessive exposure to chromium VI can produce allergic skin sensitization reactions and severe nasal irritation, scarring and damage to the lungs, liver and kidney damage.

Other Toxicological Information:

None available.

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*** Section 12 - Ecological Information ***

Ecotoxicity:

A: General Product Information

No data available for this product. Due to the low pH of this product, it is expected to harm many forms of aquatic and terrestrial life forms. Do not discharge into waterways, lakes, or streams.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

Environmental Fate:

No data available for this product.

*** Section 13 - Disposal Considerations ***

Wastes must be tested using methods described in 40 CFR Part 261. It is the generator's responsibly to determine if the waste meets applicable definitions of hazardous wastes. State and local regulations may differ from Federal disposal regulations. Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

*** Section 14 - Transportation Information ***

US DOT Information

Proper Shipping Name	Oxidizing solid, corrosive, N.O.S. (Barium Nitrate, Chromic Acid)
Hazard Class	5.1
UN / NA Number	UN3085
Packing Group	II
Placards	5.1, 8
Product RQ (lb)	18

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

No additional information is available.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Chromium trioxide (CrO3) (001333-82-0)

SARA 313: form R reporting required for 1.0% de minimis concentration (related to Chromium)

CERCLA: final RQ = 5000 pounds (2270 kg) (no reporting of releases of this hazardous material is required if the diameter of the pieces of the solid metal released is equal to or exceeds 0.004 inches) (related to Chromium)

SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactive: No

State Regulations

A: General Product Information

No information available.

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B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA	RI
Barium Nitrate	010022-31-8	No	Yes	Yes	No	Yes	Yes	Yes
Chromium trioxide (CrO3)	001333-82-0	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sodium Silicofluoride	016893-85-9	No	No	Yes	Yes	Yes	No	No

Other Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Barium Nitrate	010022-31-8	Yes	Yes	Yes
Chromium trioxide (CrO3)	001333-82-0	Yes	Yes	Yes
Sodium Silicofluoride	016893-85-9	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Barium Nitrate	010022-31-8	1% item 145 (1199)
Chromium trioxide (CrO3)	001333-82-0	1% item 1291 (127)

* * * Section 16 – Other Information * * *

NFPA Ratings: Health: 3 Fire: 0 Reactivity: 1 Other:

Hazard Scale: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe

HMIS Ratings: Health: 3* Fire: 0 Reactivity: 1 Pers. Prot.:

Hazard Scale: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe, * = Chronic hazard

MSDS Change History:

5/20/03: Rev.02; MSDS as issued by Chemtech Finishing Systems.

1/18/05: Chemtech Finishing Systems acquired by Heatbath Corporation.

5/27/05: Rev.03; Chemtech MSDS issued under new manufacturer: Heatbath Corporation.

Sec.1 - Manufacturer Information Updated

Sec.16 - MSDS Change History section added, Contact Information Updated

Key/Legend:

ACGIH = American Conference of Governmental Industrial Hygienists	NFPA = National Fire Protection Association
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act	NIOSH = National Institute for Occupational Safety and Health
EPA = Environmental Protection Agency	NTP = National Toxicology Program
HMIS = Hazardous Material Identification System	OSHA = Occupational Safety and Health Administration
IARC = International Agency for Research on Cancer	SARA = Superfund Amendments and Reauthorization Act
MSHA = Mine Safety and Health Administration	TSCA = Toxic Substance Control Act

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Heatbath Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

Contact: Jeff Szotek

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This is the end of MSDS for Divercoat LR.