

MSDS CODE: CB2
 Date Revised: 01/11/2006
 Prepared By: Nick Paris

Reason for Revision: See Section 16

1. CHEMICAL, PRODUCT AND COMPANY IDENTIFICATION:

Product Code(s): **807, 8000, 8452**
 Product Name: Wettable Cement Black
 Chemical Family: Carbon
 Synonyms: Wettable Carbon Black pigment, Lampblack
 C.A.S. Number: 1333-86-4
 Color Index Name: Pigment Black 7
 Color Index Number: 77266
 Formula: C

Manufacturer's Name/Address:
 Rockwood Pigments/Davis Colors, 7011 Muirkirk Road, Beltsville, Maryland, USA 20705
 Business Tel: (301) 210-7800 9a-5p (0900-1700) EST M-F
 Rockwood Pigments/Davis Colors, 3700 East Olympic Boulevard, Los Angeles, California, USA 90023
 Business Tel: (323) 269-7311 9am-5pm (0900-1700) PST M-F

24 Hour Emergency (Chemtrec): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

OSHA Hazardous Ingredients (29CFR1910.1200):			Exposure Limits (8 Hrs.TWA)	
Components:	C.A.S.	%	OSHA PEL	ACGIH TLV
Carbon Black pigment	1333-86-4	(75-90)	3.5 mg/m ³	3.5 mg/m ³
Non-Hazardous Ingredients:			Exposure Limits (8 Hrs.TWA)	
Components:	C.A.S.	%	OSHA PEL	ACGIH TLV
Sodium Salt (NaNS-F)	9084-06-4	(1-4)	Not established.	Not established.
Water		(10-25)	Not established.	Not established.

3. HAZARDS IDENTIFICATION

***** EMERGENCY OVERVIEW *****

Solid black powder with little to no odor. Inhalation can cause temporary lung irritation. May ignite in air above 500°F. Will burn in fire. Carbon monoxide and carbon dioxide are emitted. It may not be obvious that product is burning unless it is stirred and sparks are apparent. Packaging material can burn or melt in fire, producing toxic smoke and fumes.

HMIS Codes: H=0, F=1, R=0, P=0 (0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe)

Potential Health Effects:

Eyes: Non-irritating to the eyes. Excessive exposure to airborne dust may reduce visibility and/or cause unpleasant deposits.
 Skin: Will not irritate skin and is not likely to cause allergic skin reaction. Irritation to skin or mucous membranes can occur by direct mechanical action or by rigorous skin cleaning necessary for removal of dust.
 Ingestion: Small amount (less than one ounce/30 grams) swallowed is not likely to cause injury. If large amount ingested, may cause gastric irritation, nausea and diarrhea. Seek medical attention.
 Inhalation: Not a hazard in normal industrial use. As with all dusty materials, inhalation may cause respiratory irritation, sneezing, coughing, and runny nose.

Human Effects and symptoms of overexposure:

Acute: Dust concentrations above the permissible exposure limit may cause temporary upper respiratory tract discomfort.

MSDS CODE: CB2
Date Revised: 01/11/2006
Prepared By: Nick Paris

Page 2 of 5

Reason for Revision: See Section 16

Chronic: Epidemiological studies of workers in the Carbon Black pigment producing industries of North America and Western Europe show no significant adverse health effect due to occupational exposure to Carbon Black pigment. Early studies in the former USSR and Eastern Europe report respiratory diseases among workers exposed to Carbon Black pigment, including bronchitis, pneumonia, emphysema, and rhinitis. Such studies are of questionable validity, due to inadequate study design and methodology, lack of appropriate controls for cigarette smoking, and other confounding factors such as concurrent exposures to carbon monoxide, coal oil and petroleum vapors. Moreover, review of these studies indicates that concentrations of Carbon Black pigment were greater than current occupational exposure standards. In Monograph 65, issued in April 1996, the International Agency for Research on Cancer (IARC) re-evaluated Carbon Black pigment and concluded that: "Although one cohort study on the Carbon Black pigment production industry showed slight excesses of cancer, the totality of the epidemiology studies, both in the Carbon Black pigment production industry and in some user industries, suggested that there is inadequate evidence for the carcinogenicity in humans of Carbon Black pigment."

Other Effects: None known.

Medical Conditions None known. Carbon Black pigment, like any nuisance dust, may aggravate certain pre-existing upper respiratory disorders, such as bronchitis or asthma.

Aggravated by Exposure: respiratory disorders, such as bronchitis or asthma.

Carcinogenicity: IARC: Listed Group 2B/Possible Human Carcinogen NTP: Not Listed OSHA: Not Listed

Other: The IARC changed the listing of Carbon Black pigment April 12, 1996 from Category 3 (insufficient evidence to make a determination) to Category 2B (Known animal carcinogen/possible human carcinogen) based on the results of rat inhalation studies of Carbon Black pigment, despite the lack of any parallel evidence in humans or other animal species. See section 11.

4. FIRST AID MEASURES

Eyes: Flush eyes with water, lifting eyelids periodically. Remove contact lenses. Continue flushing for 15 minutes or until eyes return to normal. Get medical attention if irritation develops or persists.

Skin: Wash with soap and water. Get medical attention if irritation develops or persists. Wash clothing before re-use.

Ingestion: Swallowing less than an ounce (less than 30 grams) will not cause harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and Contact medical personnel or poison control center immediately. Do not give anything by mouth to an unconscious person.

Inhalation: Move from dusty area to fresh air and get medical attention for any breathing difficulty. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Flammable Properties: Not Flammable.

Flash Point: May ignite in air above 315°C. Flash point is above 500°C.

Upper Explosive Limit (UEL): 122 g/m³

Lower Explosive Limit (LEL): Will not explode

Auto-ignition Temperature: Exposure to excessive heat greater than 500°F (260°C) can cause this product to ignite.

Extinguishing Media: Use water fog or foam to cool below ignition point. Wets poorly with water or water spray. Use extinguishing agents that are suitable to the surrounding fire; water spray, dry chemical, foam or CO₂

Fire fighting Instructions: This product may contain residual oxygenated volatiles that can further react and generate heat. In the event the product reaches 230°F, bags should be separated by an air space and allowed to cool and should be removed from the vicinity of other combustibles. Carbon monoxide and carbon dioxide are emitted. It may not be apparent when Carbon Black pigment is burning until it is stirred and sparks are visible. Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes and smoke inhalation.

6. ACCIDENTAL RELEASE MEASURES

Small Spill: If dust is generated, use appropriate respiratory protection. Vacuum or scoop material into an appropriately marked container for re-use or disposal. Avoid excessive generation of dust.

Large Spill: Use recommended protective clothing and respiratory protection. Use shovel to reclaim material. Vacuum or scoop material into an appropriately marked container for re-use or disposal. Avoid excessive generation of dust. Spill area can be washed with water. Collect wash water for approved disposal. Prevent runoff from entering storm sewers and ditches which lead to natural waterways.

7. HANDLING AND STORAGE

Storage: Store dry at ambient temperature away from food and beverages, excessive heat or flame sources (furnace, kilns, boilers etc.). Avoid breathing dust. Avoid contact with eyes and skin. Wash thoroughly after handling.

MSDS CODE: CB2
 Date Revised: 01/11/2006
 Prepared By: Nick Paris

Reason for Revision: See Section 16

Handling: Avoid breathing dust. Avoid getting in eyes or on skin. Wash thoroughly after handling. Avoid contact with moisture. Re-seal bag immediately after use. Pallets are wrapped in polyethylene plastic. Removal may cause an electrostatic spark; therefore removal of the wrap should not be in the presence of flammable vapors.

Storage Temperature (Min/Max) : Ambient/50°C (122°F)
 Shelf Life : Unlimited in closed container
 Special Sensitivity : Excessive Heat and Strong oxidizing agents. such as chlorates, bromates, and nitrates.
 Other Precautions : None

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Maintain air levels below the recommended exposure limit using exhaust ventilation if necessary.
 Eyes: Safety Glasses.
 Skin: Body-covering clothing. Rubber, Plastic, Leather or cloth gloves are suggested to facilitate personal hygiene.
 Respiratory Protection: Workplace ambient dust concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved respirator with dust prefilter should be worn.
 Other: Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of hazardous chemicals.
 Work/Hygiene Practices: Employees should wash their hands and face before eating, drinking or using tobacco products.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Solid Black Powder
 Odor : Odorless
 Physical State : Dry Powder
 pH : 7 - 9 in 50 gr/l H₂O aqueous suspension; DIN 787/9
 Vapor Pressure : Not a vapor
 Vapor Density : Not a vapor
 Boiling Point : Not applicable
 Freezing Point : Not applicable
 Melting Point : Greater than 500°F (260°C)
 Solubility in Water : Insoluble
 Specific Gravity (g/ml) : 1.7 to 1.9 @ 20°C (68°F); DIN 787/10
 Bulk Density (kg/m³) : Not available
 Particle Size (microns) : 0.03-0.10
 Volatile Organic Compounds (VOC) : None Contained
 Chemical Formula : C + Na NS-F

10. STABILITY AND REACTIVITY

Chemical Stability (Conditions to Avoid): Stable. Keep away from flames and heat. Exposure to excessive heat greater than 500°F (260°C) can cause this product to ignite.
 Incompatibility (materials to avoid): Excessive heat and Strong oxidizing agents. such as chlorates, bromates, and nitrates.
 Decomposition Temperature C^o (F^o): Does not decompose
 Hazardous Decomposition Products: Carbon monoxide and carbon dioxide when burning.
 Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

Eyes: Not irritating to rabbit eyes
 Skin: Not irritating to rabbit skin Dermal, LD 50 greater than 240mg/kg, IP injection, mice and rats
 Ingestion: Non irritating. The oral, LD50 for rats is greater than 5000 mg/l
 Inhalation: Non irritating. LC 50 greater than 156 mg/m³, mice and rats
 Subchronic: Data not established for product
 Chronic/Carcinogenicity: Data not established for product
 Other (Mutagenic, Teratogenic, Reproductive Tests): This product contains less than 0.1% of absorbed PAHs (polynuclear aromatic hydrocarbons). In non-absorbed form, some PAHs have been found to be carcinogens in animal studies. No correlating carcinogenic effect,

MSDS CODE: CB2
 Date Revised: 01/11/2006
 Prepared By: Nick Paris

Reason for Revision: See Section 16

however, has been observed in humans due to exposure to Carbon Black pigment. Chronic inflammation, lung fibrosis and lung tumors have been observed in some rats experimentally exposed, for long periods of time, to very high concentrations of Carbon Black pigment and several other insoluble fine dust particles. Tumors have not been observed in other animal species (i.e mouse and hamster) under similar circumstances and study conditions. Researchers conducting the rat inhalation studies believe that these effects most likely result from the massive accumulation of small dust particles in the lung which overwhelm the natural lung clearance mechanism, known as the "lung overload" phenomenon, rather than from a specific chemical effect of the dust particles in the lung.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: Fish toxicity: Golden Orfe (*Leuciscus idus*) LCo greater than 1000 mg/l
 Chemical Fate Information: No appreciable bioconcentration is expected in the environment or biological organisms. Does not biodegrade. Not mobile in soil. Not soluble in water.

13. DISPOSAL CONSIDERATIONS

Material which cannot be re-used should be disposed in accordance with federal, state and local environmental control regulations at an authorized site. This product when discarded as sold is not a RCRA hazardous waste. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40CFR 261.20-24)

14. TRANSPORT INFORMATION

DOT Shipping Name : Carbon Black pigment
 Technical Shipping Name : Pigment, NOI
 DOT Hazardous Classification : Non-Regulated
 DOT Hazard Class : Non-Regulated
 DOT Identification Number : None
 DOT Labels required : None
 DOT Placards required..... : None
 UN Class : Combustible solid
 UN/NA Number : None
 Freight Class : 45

15. REGULATORY INFORMATION

***** U.S. Federal Regulations *****

OSHA: This product is considered Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

CERCLA/SUPERFUND: (40 CFR 117,302) Reportable Quantity (RQ):
 Not Reportable, however, we recommend you contact local authorities to verify requirements for your site.

Superfund Amendments and Reauthorization Act (SARA), Title III:
 Section 302 (Extremely Hazardous Substances): None
 Section 311/312 (Hazard Categories): Reportable on Tier I and/or Tier II reports if present at a facility at any on time in amounts equal to or greater than 10,000 pounds.

Section 313 (Reportable Toxic Ingredients):
 Chemical Name: C.A.S. Concentration
 None Reportable

T.S.C.A.: This product is listed on TSCA Inventory. Carbon black pigment is a Chemical Hazard Information Profile (CHIP) Chemical under TSCA.

CONEG: This product meets the Coalition of Northeast Governors (CONEG) Source Reduction Council limits for the sum of the levels of Lead, Cadmium, Mercury and Hexavalent Chromium of less than 100 parts per million by weight.

U.S. Clean Air Act, 1990: Carbon Black pigment is not made with nor does it contain any Class 1 or Class 2 ozone depleting substances as defined under the 1990 amendments to the act.

MATERIAL SAFETY DATA SHEET

MSDS CODE: CB2
 Date Revised: 01/11/2006
 Prepared By: Nick Paris
 Reason for Revision: See Section 16

U.S. FDA Regulations: Carbon Black pigment is permitted for indirect contact with food and drugs when used as a filler in rubber articles intended for repeat use under 21 CFR (Code of Federal Regulations) 177.2600. Limitation: Total Carbon Black pigment in the rubber may not exceed 50% by weight of the rubber product. This product, which is a furnace process black, may not exceed 10% by weight of rubber product intended for use in contact with milk or edible oils.

U.S. NSF Certification: Information on Carbon Black pigments has been given to the National Sanitation Foundation (NSF) and may be used to obtain approval for formulations using Carbon Black pigment.

***** International Regulations *****

Australia: Australian Inventory of Chemical Substances (AICS)
 Canadian WHMIS: Not restricted/non-hazardous, controlled substance (D2A)
 Canadian Environmental Protection Act (CEPA): All components of this product are on the Domestic Substances List (DSL), and acceptable for use under the provisions of CEPA.

Europe (EU): All components of this product are on the European Inventory of Existing Commercial Chemical Substances (EINECS).

Japan: Ministry of International Trade & Industry List of Existing Chemical Substance (MITI)

Korea: Toxic Chemical Control Law (TCCL)

***** State Regulations *****

California Proposition 65 Warning: This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

CA = California Safe Drinking Water and Toxic Enforce Act (Proposition 65)
 MA = Massachusetts Hazardous Substance List
 NJ4 = New Jersey Other- included in 5 predominant ingredients >1%
 PA3 = Pennsylvania Non-hazardous present at 3% or greater

Louisiana: Right to know legislation requires inventory reporting through Community Right-to-Know when the quantity of Carbon Black pigment exceeds 500 pounds on any given day. Spills or releases beyond the site of the facility of greater than 5,000 pounds are required to be immediately reported to the state Emergency Response Commission via the Office of the State Police, Transportation and Environmental Safety Section, Hazardous Material Hotline, (504) 925-6596 (collect calls accepted 24 hours per day).

Chemical Name:	C.A.S.	Concentration	State Code
Carbon Black pigment	1333-86-4	75 - 90%	NJ4
Sodium Salt (NaNS-F)	9084-06-4	1 - 4%	NJ4

Note: This information based on random sample analyses. Actual content may vary from batch to batch.

16. OTHER INFORMATION

Reason for revision: 7/23/2003 - Revised to reflect OSHA hazardous status.
 6/14/2005 - Added 8000 to list of products.
 1/11/2006 - Updated review date.

HMIS Codes: H=0, F=1, R=0, P=0 (0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe)

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of the Manufacturer. The data on this sheet relates only to the specific material designated herein. It may not be valid for this material if used in combination with any other materials or process. It is the users responsibility to verify suitability and completeness of this information for their own particular use. The Manufacturer assumes no legal responsibility for use or reliance upon these data.