Section 1 - Chemical Product and Company Identification

Product Name: Aardvark Pigment Black-7
Company: Aardvark Colors
Address: 245 Kent Ave, Brooklyn, NY 11249 USA
Product Description: Aqueous based dispersion of carbon black used as an additive in papermaking, and various miscellaneous applications.

Section 2 - Hazard Identification

Emergency Overview:
• In its original form black powder or pellets, dust may be irritating to eyes and respiratory tract. Do not expose to temperatures above 300°C. Hazardous products of combustion can include oxides of carbon, sulfur, and organic products. Take precautionary measures against static discharges.
• Not a hazardous substance or preparation according to the Global Harmonized System (GHS).
• An aqueous dispersion it is not expected to be an inhalation hazard under normal industrial use.
• Substance listed by International Agency for Research on Cancer (IARC). See Section 11.
• Exposure to dust can aggravate existing asthma or respiratory disorders.
• May cause mechanical irritation of eyes & skin. Considered a low hazard for industrial/commercial use.

Section 3 - Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS#</th>
<th>% by Weight</th>
<th>OSHA Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&lt; 68.0</td>
<td>N</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>32.0</td>
<td>Y</td>
</tr>
<tr>
<td>Dispersing/gelling agents(s)</td>
<td>mixture</td>
<td>&lt; 5.0</td>
<td>N</td>
</tr>
</tbody>
</table>

29 CFR 1910.1200(d)(5)(ii): This dispersion has not been tested as a whole to determine whether the mixture is a health hazard; therefore the mixture shall be assumed to present the same health hazards as do the components which comprise one percent (by weight or volume) or greater of the mixture, except that the mixture shall be assumed to present a carcinogenic hazard if it contains a component in concentrations of 0.1 percent or greater which is considered to be a carcinogen under paragraph (d)(4) of this section.

Section 4 - First Aid Measures

Eyes: Flush with plenty of water for 15 minutes, occasionally lifting lower & upper eyelids. If irritation persists, seek medical attention.
Skin: Wash thoroughly with non-abrasive soap and water. Launder clothes before reuse. If irritation persists, seek medical attention.
Inhalation: Remove to fresh air. Seek medical attention. In extreme distress administer CPR / oxygen.
Ingestion: If conscious, give person 1 to 2 glasses of water. Seek medical attention immediately. Physician: Treat symptomatically.

Section 5 - Fire Fighting Measures

Material flammable, explosive, or combustible? Non-flammable as supplied in an aqueous dispersion.
Auto-Ignition Temperature: >140°C (transport) Method-IMDG-Code Flash Point: Not applicable
Minimum Ignition Temperature: >500°C (Bam Furnace) VDI 2263 >315°C (Goldberg-Greenwald Furnace) VDI 2263
Burn Velocity: > 45 seconds (dry powder). Not classified as "Highly Flammable" or "Easily Ignitable"
Combustion Hazards: Hazardous decomposition may oxides of carbon, sulfur and organic products of combustion.
Protective Equipment: Protect against inhalation of combustion byproducts. Wear self-contained breathing apparatus in confined areas.
Extinguishing Media: Use foam, carbon dioxide, nitrogen, dry chemical, or water spray to extinguish fire. A fog spray is recommended if water is used. DO NOT USE A solid water stream as it may scatter and spread fire.
Special Fire Hazards: It may not be obvious that carbon black is burning unless the material is stirred and sparks are apparent. Carbon black should be closely observed for at least 48 hours.

Section 6 - Accidental Release Measures

Personal Protection: CAUTION: Wet carbon black produces slippery walking surfaces. Proper industrial hygienic practices with rubber gloves, safety goggles and an approved NIOSH dust/mist respirator where applicable. Launder clothes before reuse.
Reproductive
Eye
Acute
Toxicological
Chemical
Exposure
Personal
Storage
Spill
Section
Section
Section
Section
Pigment
Aardvark Colors
MATERIAL SAFETY DATA SHEET
Pigment Black-7
Spill Procedure: Cover with absorbent material. Sweep, shovel or vacuum into a closed container. Do not allow material to contaminate ground water system. Do not put into public waterways or sewer systems, local authorities should be advised of significant spillage. Dispose of at an approved chemical disposal or incineration facility in compliance with all current local, state and federal regulations.

Section 7-Handling and Storage
Handling
Observe good industrial hygienic practices and safety practices. Avoid contact with eyes and skin. Do not breathe dust. Wash thoroughly before eating, drinking, smoking or applying cosmetics.

Use appropriate exhaust ventilation and/or at places where dust can be generated. Fine dust is capable of penetrating electrical equipment and may cause electrical shorts. In the presents of dust clouds, take precautionary measures against static discharge.

Storage
Protect from freezing. Storage temperature range 40°F - 100°F recommended.

Keep drums covered when not in use to avoid evaporation and/or contamination.

Section 8-Exposure Controls and Personal Protection
Personal Protection

Exposure Limits
No specific limits are established for this dispersion; therefore the OSHA limits for nuisance levels should be observed unless otherwise noted. Consult OSHA respiratory protection information 29CFR 1910.134 & American National Standard Institute’s Practices of Respiratory Protection Z88.2.

Particulate Standard
Dry powder data. (Note from Cabot Corporation: Unless otherwise indicated as "respirable or inhalable", the exposure limit represents a “total” value. The inhalable exposure limit has been demonstrated to be more restrictive than the total exposure limit, by a factor of approximately 3.

OSHA
Permissible Exposure Limit (PEL): 3.5 mg/m³ / TWA
ACGIH
Threshold Limit Value: 3.0 mg/m³ / TWA

NIOSH
Recommended Exposure Limit (REL): 3.5 mg/m³ / TWA

(As of 2-1-2011)

Section 9-Physical and Chemical Properties

Physical State
Color
pH
Odor
Liquid
Black
>8.5
None - Mild Sulfur Odor

Freeze Point / Boiling Point
Specific Gravity
% Active Solids (±1%) % Volatile (as Water)
32°F / 212°F (water portion)
~1.18
32.0
< 68.0

Boiling Point (active ingredient)
Decomposition Temperature % Volatile (as dry powder)
N/D
300°C
< 2.5% @ 950°C

Section 10-Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Do not freeze. Do not expose to temperatures above 300 °C.

Incompatible Materials: May react exothermically upon contact with strong oxidizers, such as chlorates, bromates and nitrates.

Section 11-Toxicological Information

Routes of Entry
As supplied primary routes of occupational exposure are eye, and/or skin exposure.

Exposure Limits
No exposure limits have been established for this dispersion, see Section 8.

Toxicological Data
Acute Oral LD50
(Rat) > 8000 mg/kg

Eye Irritation
(Rabbit) Draize Score 10-17/110 @24 hr. Non-irritating.

Skin Irritation
(Rabbit) 0.6/8. Slight irritation.

Sub chronic Toxicity
(Rat) inhalation, 90-days NOAEL= 1.0 mg/ m³. Target Organ- Lungs Effect: inflammation, hyperplasia, and fibrosis.

Chronic Toxicity
(Rat & Mouse) Oral, duration: 2 yr. Effect: no tumors
(Mouse) Dermal duration: 18 months. Effect: no tumors.
(Rat) Inhalation, duration: 2 yr. Target Organ: Lungs. Effect: inflammation, hyperplasia, fibrosis.

Reproductive
Toxicity
Did not show effects in animal experiments.
Section 11-Toxicological Information - continued

Carcinogenicity: Carbon Black is listed by IARC. In 2006 IARC re-affirmed its 1995 classification of carbon black as a Group 2B (possibly carcinogenic to humans). In 1995 IARC concluded, “There is inadequate evidence in humans for the carcinogenicity of carbon black.” Based on rat inhalation studies, IARC concluded that there is “sufficient evidence in experimental animals for the carcinogenicity of carbon black” resulting in their classifying carbon black as “possibly carcinogenic to humans (Group 2B).

The US National Institute of Occupational Safety & Health (NIOSH) 1978 criteria document on carbon black recommends that only carbon black with polycyclic aromatics hydrocarbon (PAH) levels greater than 0.01% require the measurement of PAHs in air. As some PAHs are possible human carcinogens, NIOSH recommends an exposure limit of 0.1 mg/ m³ for PAHs in air, measured as the cyclohexane-extractable fraction.

Manufactured carbon blacks generally contain less than 0.1% of solvent extractable polycyclic aromatic hydrocarbons (PAH). PAH content depends on numerous factors including, but not limited to, the manufacturing process, desired product specifications, and the analytical procedure used to measure and identify solvent extractable materials. Questions concerning PAH content of carbon black and the analytical procedures should be addressed to the carbon black supplier.

Carbon Black does not contain any substances listed by ACGIH, EU, NTP or OSHA.

Section 12-Ecological Information

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Liquid</th>
<th>Potential to Bioaccumulation</th>
<th>Not expected due to physicochemical properties of substance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degradaibility</td>
<td>Aqueous portion will evaporate; active material is not expected to degrade.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecotoxicity</td>
<td>Aquatic Toxicity - Carbon Black CAS# 1333-86-4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acute Toxicity</th>
<th>Species</th>
<th>Dose</th>
<th>Acute Toxicity</th>
<th>Species</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC₅₀(96-hr)</td>
<td>Fish (Brachydianos)</td>
<td>&gt; 1,000 mg/L</td>
<td>EC₅₀ (72 hr)</td>
<td>Algae (Scenedesmus subspicatus)</td>
<td>&gt;10,000 mg/L</td>
</tr>
<tr>
<td>EC₅₀(24-hr)</td>
<td>Daphnia magna</td>
<td>&gt; 5,600 mg/L</td>
<td>NOEC</td>
<td>Algae (Scenedesmus subspicatus)</td>
<td>≥ 10,000 mg/L</td>
</tr>
<tr>
<td>ECC₅₀(3-hr)</td>
<td>Activated sludge</td>
<td>≥ 800 mg/L</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 13-Disposal Considerations

Hazardous waste classification under federal regulations (40 CFR Part 261 et seq.) is dependent upon whether the material is a RCRA “listed hazardous waste” or has any of the four RCRA “hazardous waste characteristics”:


Check your state and local regulations, which may be more stringent than the federal regulations. Technical Industries, Inc. provides this data for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

Container Disposal Empty drums retain residue, observe label safeguards until the drum is clean and/or destroyed.

Section 14-Transport Information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>Not regulated.</th>
<th>UN Code</th>
<th>None, Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERCLA</td>
<td>The following organizations do not classify carbon black as a &quot;hazardous cargo&quot; if it is &quot;carbon, non-activated:&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RID, ADR, IMDG Code, ICAO-TI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canadian Transport of Dangerous Goods Regulation, EU Transport of Dangerous Goods Regulation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 15-Regulatory Information

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA Inventory</td>
<td>Carbon Black is on the Chemical Hazard Information Profile (CHIP) list under TSCA.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Inv.</td>
<td>All components of this product are listed on or exempted from the following inventories:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada Inventory</td>
<td>Australia Inventory (AICS)</td>
<td>Korea Inventory</td>
<td>New Zealand Inventory</td>
</tr>
<tr>
<td>Japan Inventory</td>
<td>China Inventory (IECSC)</td>
<td>Philippines Inventory (PICCS)</td>
<td></td>
</tr>
</tbody>
</table>

SARA Hazards Notification, Title III Rules for active ingredient(s):

Section 302- None

Sec. 311 / 312 CHRONIC/Delayed HEALTH HAZARD. Reporting may be required if the materials are present at any one time in amounts equal to or greater than 10,000 pounds.
Aardvark Colors
Pigment Black-7

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Section 313
Under EPA Toxic Release Inventory (TRI) the reporting threshold for 21 Polycyclic Aromatic Compounds has been lowered to 100 lbs/year. The 100 lbs/yr applies to cumulative total. In addition the TRI reporting threshold for Benzo [g,h,i] perylene is 10 lbs/year. Carbon black may contain certain PACs and/or Benzo [g,h,i] perylene. Users are advised to evaluate their own TRI reporting responsibilities.

U.S. CONEG
This product meets the 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.

Section 15-Regulatory Information - continued

U.S. State Regulations
R-T-K - Louisiana: State legislation requires Carbon Black inventory reporting thru Community Right-To-Know when the 500 lbs. (dry basis) threshold is exceeded on any given day. Spills or releases beyond the site of the facility of >5,000 pounds are required to be reported immediately to Emergency Response Commission via Office of the State Police & the state Environmental Safety Section, Hazardous Material Hotline @ (504) 925-6596 (collect calls accepted 24-hr. a day).

California Prop. 65
This product contains a component(s) considered to be a California Proposition 65 substance."Carbon Black (airborne, unbound particles of respirable size)". Please note that all three listing qualifiers (airborne, unbound (not bound within a matrix), and respirable size (10 micrometers or less in diameter) must be met for this substance to be considered a Proposition 65 substance.

FDA Regulations
Carbon black is permitted for indirect contact with food and drugs when used as filler in rubber articles intended for repeat use under 21 CFR (Code of Federal Regulations) 177.2600. Limitations: *Total carbon black (Channel process or furnace process) in the rubber may not exceed 50% by weight of the rubber product. This is a furnace process. Carbon black. *Furnace Process black content may not exceed 10% by weight of rubber product intended for use in contact with milk or edible oils.

Hazard Rating Index
HMIS III Guidelines (Hazardous Material Information Systems, USA)

<table>
<thead>
<tr>
<th>Active Ingredient (dry)</th>
<th>CAS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health</th>
<th>1* Chronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = Minimal</td>
<td>A= Eye / Clothing</td>
</tr>
<tr>
<td>1 = Slight</td>
<td>Health 1</td>
</tr>
<tr>
<td>2 = Moderate</td>
<td>Flammability 0</td>
</tr>
<tr>
<td>3 = High</td>
<td>Physical Hazard 0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Hazard</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>B= Eye Protection / Gloves</td>
</tr>
<tr>
<td>1</td>
<td>Personal E</td>
</tr>
</tbody>
</table>

Important Note:
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