SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL PRODUCT IDENTIFICATION:

PRODUCT ID	UCD-5861SF
PRODUCT DESCRIPTION	BURNT UMBER
TRADE NAME	UCD(TM) Colorant
FORMULA ID	UCD-5861SF
FORMULA VERSION NUMBER	17
PRINT DATE	03/05/2014

MANUFACTURER IDENTIFICATION:

NAME	CHROMAFLO TECHNOLOGIES CORP
ADDRESS	2600 MICHIGAN AVENUE ASHTABULA OH 44004
TELEPHONE	440-997-5137
EMERGENCY CONTACT	Chemtrec
EMERGENCY TELEPHONE	(800) 424-9300 (703) 527-3887 (outside the U.S.)

HMIS INFORMATION:

Health - 1* Flammability - 0 Reactivity - 0

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

1
CAS# 1333-86-4
Carbon Black
PCT BY WT: <1%
EXPOSURE LIMIT:
OSHA PEL 3.5 mg/m3

2
CAS# 14808-60-7
Crystalline Silica (Quartz)
PCT BY WT: <1%
EXPOSURE LIMIT:
OSHA PEL 10 mg/m3/(%SiO2 + 2) respirable
ACGIH TLV 0.025 mg/m3 respirable

3
CAS# 68412-53-3
Nonylphenyl (branched) Polyoxyethylene Ether Phosphate
PCT BY WT: 1-5%
EXPOSURE LIMIT:

4
CAS# 1309-37-1
Iron Oxide
PCT BY WT: 15-20%
EXPOSURE LIMIT:
OSHA PEL 10 mg/m3
ACGIH TLV 5 mg/M3

5
CAS# 1317-34-6
Manganite
PCT BY WT: 5-10%
EXPOSURE LIMIT:
OSHA PEL 5 mg/m3 as Mn, ceiling
ACGIH TLV 0.2 mg/m3 as Mn

6
CAS# NA
Polyester Resin
PCT BY WT: 60-65%
EXPOSURE LIMIT:

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This product contains one or more reported carcinogens or suspected carcinogens which are noted NTP, IARC, or OSHA-Z in the other limits recommended column.

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This product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding, or grinding.

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SECTION 3 - HAZARDS IDENTIFICATION

This product contains carbon black, a substance identified by the International Agency for Research on Cancer (IARC), as a Classification 2b (possibly carcinogenic to humans).

CAUTION! : May cause skin and eye irritation

POTENTIAL HEALTH EFFECTS:

ACUTE EFFECTS:

EYE:
Exposure can cause eye irritation. Symptoms may include stinging. tearing, redness, and swelling.

SKIN:
May be mildly irritating. Contact with skin may produce a burning sensation.

INHALATION:
Toxic if inhaled; excessive exposure causes headaches, dizziness, nausea, vomiting, and loss of consciousness.

INGESTION:
Very hazardous in case of ingestion.

CHRONIC EFFECTS:

EYE:
May cause conjunctivitis.

INGESTION:
No harmful effects by chronic exposure reported.

INHALATION:
Prolonged or repeated exposure may cause lung damage.

SKIN:
Repeated contact can cause dermatitis.

MEDICAL CONDITIONS AGGRAVATED

May aggravate pre-existing eye disorders.

Previous respiratory impairments.

May aggravate pre-existing skin disorders.

CARCINOGENICITY:

Based on the presence of components (02)
Crystalline silica is listed as a known carcinogen(NTP) and as a carcinogen when inhaled in the form of quartz or cristobalite from occupational sources (IARC Group 1).

Based on the International Agency for Research on Cancer (IARC) conclusion that there is sufficient evidence in experimental animals for the carcinogenicity of carbon black dust and inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that carbon black dust is possibly carcinogenic to humans (Group B). Consult IARC's Monograph Volume 65. The results of the working group were based on studies involving the inhalation of carbon black and other insoluble fine dust particles. Other routes of entry were not reviewed as part of this study. This dispersion contains carbon black in a "wet out" form and does not pose an inhalation hazard. Good hygiene practices should be followed to minimize exposures to any respirable dusts. The study findings produced results consistent with the massive accumulation of fine dust particles in the lung which overwhelm the natural lung clearance mechanisms, known as the "lung overload" phenomenon, rather than from a specific chemical effect of the dust particle in the lung. Carbon Black has not been listed as a carcinogeh by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon blacks with a PAH level

greater than 0.1% be considered suspect carcinogens.

SECTION 4 - FIRST AID MEASURES

NOTE TO PHYSICIAN:

Flush eyes immediately with large amounts of water for at least 15 minutes. Flush under both upper and lower lids. Seek medical aid. Wash from skin with soap and water. If irritation develops, seek medical aid. Wash contaminated clothing before reuse. If inhaled, remove person to fresh air and aid in breathing if necessary. Seek medical aid. If ingested, seek medical aid.

SECTION 5 - FIRE FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES OF THE CHEMICAL: Emits toxic fumes under fire conditions

Flashpoint	-N/A	°F	
Explosion Level	Low	- -N/A	
	High	- -N/A	

EXTINGUISHING MEDIA:

CO_2, foam, dry chemical.

Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur.

FIRE-FIGHTING PROCEDURES AND EQUIPMENTS:

Firefighters must wear NIOSH-approved self-contained breathing apparatus and full protective equipment.

Water may be used to keep fire-exposed containers cool until fire is out.
Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Wear appropriate safety equipment. Eliminate all ignition sources. Contain and clean up spill immediately. Prevent from entering floor drains. Contain liquids using absorbants. Vacuum or sweep powders carefully to minimize dusting. Shovel all spill materials into disposal drums and follow disposal instructions. Scrub spill area with detergent and flush with copious amounts of water.

Always dispose of in accordance with local, state and federal regulations.

SECTION 7 - HANDLING AND STORAGE

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor liquid and/or solid) all hazard precautions given in the data sheet must be observed. All

five gallon pails and larger metal containers, including tank cars and and tank trucks, should be grounded and/or bonded when material is transferred.

If used in dry form, use proper grounding techniques when emptying contents from package. Failure to use proper grounding techniques may result in build-up of hazardous electrostatic charges which could cause flash fire or explosion.

Surfactants can cause foaming problems in biological wastewater treatment plants and other high shear operations.

Store in closed properly labeled containers away from heat, open flames and strong oxidizers.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EYE PROTECTION:
Chemical safety goggles or safety glasses.

RESPIRATORY PROTECTION:
A NIOSH/MSHA - approved respirator as necessary.

If the OSHA PEL, ACGIH TLV, or any other TLV for any component listed in Section II is exceeded, use NIOSH approved air-purifying respirator.

SKIN PROTECTION:
Permeation resistant gloves [butyl rubber, nitrile rubber, polyvinyl alcohol]. However, please note that PVA degrades in water. Cover as much of the exposed skin area as possible with appropriate clothing. If skin creams are used, keep the area covered by the cream to a minimum.

ENGINEERING CONTROLS:
Use ventilation adequate to maintain safe levels.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance	PIGMENTED LIQUID	
Odor	CHARACTERISTIC	
Vapor Pressure	-N/A	
Specific Gravity	1.384	
Formula Weight per Volume	11.5159	LBS/GAL

SECTION 10 - STABILITY AND REACTIVITY

INCOMPATIBILITIES:
Strong acids, strong alkali (bases), peroxides, and other oxidizers.

Strong acids.

Strong alkalis, hydrofluoric acid, powerful oxidizers and fluorine containing compounds.

Strong acids and oxidizers.

DECOMPOSITION:
Carbon monoxide, carbon dioxide, various hydrocarbons.

At higher temperatures, can change crystal structure to form tridymite or cristobalite, which have greater health hazards.

CONDITIONS TO AVOID:
Based on the presence of components (02)
This material will react with hydrofluoric acid and strong alkaline solutions.

Avoid contact with strong acids.

Can create dust cloud if used in dry form.

Excessive heat, flame and other possible ignition sources.

Accumulation of static charges.

POLYMERIZATION:
Product will not undergo hazardous polymerization.

STABILITY:
Stable

SECTION 11 - TOXICOLOGICAL INFORMATION

Not Evaluated at this time.

SECTION 12 - TRANSPORT INFORMATION

No Data

SECTION 13 - REGULATORY INFORMATION

DISPOSAL CONSIDERATIONS:
Dispose of unused product, spilled product, and empty containers in accordance with applicable local, state, and federal regulations. Do not discharge into waterways or sewer systems.

OTHER REGULATIONS:

Based on the presence of components (02,**)
This product contains Proposition 65 substances known to the state of CA to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986"

TSCA Status:

TSCA (United States) The intentional ingredients of this product are listed.

SARA 313 INFORMATION:
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Manganite
CAS# 1317-34-6 PCT BY WT: 5-10%

SECTION 14 - OTHER INFORMATION

Prepared by . . . . . : Regulatory Affairs
(regulatory@chromaflo.com)

MSDS Prepared for . . . . . :

CHROMAFLO TECHNOLOGIES CORP
MATERIAL SAFETY DATA SHEET

UCD-5861SF

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, and storage and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and is not valid for such material used in combination with any other materials or in any process, unless specified in the text. This information is supplied upon the condition that the user will make the appropriate determination as to its suitability for their purposes prior to use.

CERCLA RQ - Section 101(14)F

Component	RQ (LBS)
Phosphoric Acid	5000

CERCLA RQ - Section 101(14)F

Component	RQ (LBS)
1,4-Dioxane	100