

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY INFORMATION

PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

EMERGENCY PHONE NUMBERS (412) 434-4515 (U.S.)
(24 hours/day):

(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
0532-83889090 (China)

TECHNICAL INFORMATION: (740) 363-9610 (DELAWARE, OH) 8:00 a.m. - 5:00 p.m. EST
PRODUCT SAFETY/MSDS INFORMATION: (412) 492-5555 7:00 a.m. - 4:30 p.m. EST
Product ID: T499 (0808)
PRODUCT NAME: FLOCCULANT AGENT
SYNONYMS: None
ISSUE DATE: 05/10/2007
EDITION NO.: 1
CHEMICAL FAMILY: MIXTURE

EMERGENCY OVERVIEW:

CAUSES IRREVERSIBLE EYE DAMAGE. MAY CAUSE MODERATE SKIN IRRITATION. VAPOR AND/OR SPRAY MIST MAY BE HARMFUL IF INHALED. MAY BE HARMFUL IF SWALLOWED. This product is not expected to present any unusual hazards under fire or spill conditions.
Read entire MSDS before use.

SECTION 2 - COMPOSITION INFORMATION

The following ingredient(s) marked with an "x" are considered hazardous under applicable U.S. OSHA and/or Canadian WHMIS regulations. If no ingredients are listed, then there are no U.S. OSHA and/or Canadian WHMIS hazardous ingredients in this product.

Material/ CAS Number	Percent	Hazardous
ALUMINUM SULFATE 10043-01-3	10 - 30	X
CARBON BLACK 1333-88-4	10 - 30	X
CALCIUM HYDROXIDE 1305-62-0	5 - 10	X

SECTION 3 - HAZARDS IDENTIFICATION

ACUTE OVEREXPOSURE EFFECTS

EYE CONTACT:

This product contains a material which causes irreversible eye damage. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact.

SKIN CONTACT:

May cause moderate skin irritation. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

SKIN ABSORPTION:

Skin absorption not expected to occur.

INHALATION:

Vapor and/or spray mist may be harmful if inhaled.

INGESTION:

May be harmful if swallowed.

SIGNS & SYMPTOMS OF OVEREXPOSURE:

Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

CHRONIC OVEREXPOSURE EFFECTS

Avoid long-term and repeated contact.

The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures. See Section 11, of this MSDS for a detailed list of chronic health effects information available on individual ingredients in this product.

SECTION 4 - FIRST AID MEASURES

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available.

EYE CONTACT:

Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

SKIN CONTACT:

Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. If any symptoms persist, contact a poison control center, emergency room, or physician as further treatment may be necessary.

INHALATION:

Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician for treatment information.

INGESTION:

Gently wipe or rinse the inside of the mouth with water. Sips of water may be given if person is fully conscious. Never give anything by mouth to an unconscious or convulsing person. Do Not induce vomiting. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASHPOINT: 200 Degrees F (93 Degrees C)

FLASHPOINT TEST METHOD:

Pensky-Martens Closed Cup

UEL: Not Available.

LEL: Not Available.

AUTOIGNITION TEMPERATURE:

Not Available.

EXTINGUISHING MEDIA:

Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or universal aqueous film forming foam) designed to extinguish NFPA Class IIIB combustible liquid fires.

PROTECTION OF FIREFIGHTERS:

Water spray may be ineffective. Water spray may be used to cool closed containers that are exposed to extreme heat. If water is used, fog nozzles are preferable. Firefighters should wear self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Material not known to be explosive. May produce hazardous decomposition products when exposed to extreme heat. Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

SECTION 6 - ACCIDENTAL RELEASE MEASURE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:

If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

STORAGE:

Do not store above 120 degrees F. (48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class IIIb combustible liquids.

SECTION 8 - EXPOSURE CONTROLS & PERSONAL PROTECTION

ENGINEERING CONTROLS:

Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 8 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

PERSONAL PROTECTIVE EQUIPMENT

EYES:

Wear chemical-type splash goggles and full face shield when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.

SKIN/GLOVES:

Wear protective clothing to prevent skin contact. Apron and gloves should be constructed of rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment. The decision whether to clean or discard contaminated clothing should be based on the chemicals contaminating them. Some chemicals can cause skin irritation, sensitization or other health effects if the cleaning process does not remove all traces of them. Consult a safety professional to determine whether clothing contaminated with this product can be safely cleaned and reused.

RESPIRATOR:

Where ventilation is inadequate, use a NIOSH-approved air purifying respirator with the appropriate chemical cartridges or positive-pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used. Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

GENERAL HYGIENE - ESTABLISHED EXPOSURE LIMITS

If Threshold Limit Values (TLVs) have been established by ACGIH, OSHA, Ontario or PPG, they will be listed below. These limits are intended for use in the practice of industrial hygiene as guidelines or recommendations in the control of potential workplace health hazards. These limits are not a relative index of toxicity and should not be used by anyone without industrial hygiene training.

Material/ CAS Number	Percent	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
CARBON BLACK 1333-86-4	10 - 30	3.5 mg/m ³	Not established	3.5 mg/m ³	Not established
CALCIUM HYDROXIDE 1305-62-0	5 - 10	5 mg/m ³	Not established	5 mg/m ³	Not established

Material/ CAS Number	Percent	Ontario TWA	Ontario STEL	PPG IPEL	PPG STEL
CARBON BLACK 1333-86-4	10 - 30	3.5 mg/m ³	Not established	Not established	Not established
CALCIUM HYDROXIDE 1305-62-0	5 - 10	5 mg/m ³	Not established	Not established	Not established

Key: ACGIH=American Conference of Governmental Industrial Hygienists; OSHA=Occupational Safety and Health Administration; TLV=Threshold Limit Value; TWA=Time Weighted Average; PEL=Permissible Exposure Limit (1989 Vacated values); IPEL=Internal Permissible Exposure Limit; Ceiling=TLV or PEL Ceiling Limit; STEL=TLV or PEL Short-Term Exposure Limit; Skin= Skin Absorption Designation. [C- Ceiling Limit; S-Potential Skin Absorption; R-Respirable Dust] Additional Information Not applicable.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

(FORMULA VALUES, NOT SALES SPECIFICATIONS)

SPECIFIC GRAVITY:	1.224
PHYSICAL STATE:	Liquid
Percent Solids:	100.00
Percent Volatile by Volume:	.000
pH:	Not available.
ODOR THRESHOLD:	Not available.
Vapour Pressure:	N.A. mmHg
ODOR/APPEARANCE:	Viscous liquid with an odor characteristic of the solvents listed in Section 2.
VAPOR DENSITY:	HEAVIER THAN AIR
Evaporation Rate:	0
BOILING POINT OR RANGE:	Not available.
Freezing Point or Range:	Not Applicable.
Melting Point or Range(°C):	Not Applicable.
Partition coefficient (n-octanol/water):	Not Applicable.
WEIGHT PER GALLON:	10.20 (U.S.) / 12.2 (IMPERIAL)

SECTION 10 - STABILITY AND REACTIVITY

STABILITY:
This product is normally stable and will not undergo hazardous reactions.

CONDITIONS TO AVOID:
None Known.

INCOMPATIBLE MATERIALS:
Avoid contact with strong alkalis, strong mineral acids, or strong oxidizing agents.

HAZARDOUS POLYMERIZATION:
None Known.

HAZARDOUS DECOMPOSITION PRODUCTS:
- Carbon monoxide - Carbon dioxide

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Material/ CAS Number	Percent	ORAL LD50 (g/kg)	DERMAL LD50 (g/kg)	INHALATION LC50 (mg/l)
ALUMINUM SULFATE 10043-01-3	10 - 30	6.21 g/kg	Not Available	Not Available
CARBON BLACK 1333-86-4	10 - 30	15.40 g/kg	3.00 g/kg	Not Available
CALCIUM HYDROXIDE 1305-62-0	5 - 10	7.34 g/kg	Not Available	Not Available

CHRONIC TOXICITY

Ingredient Target Organ/Chronic Effects:
- Carcinogen

Mutagenicity Toxicity:

This has not been tested for this product.

Reproductive Toxicity:

This has not been tested for this product.

SUPPLEMENTAL HEALTH INFORMATION:

Material/ CAS Number	Percent	Ingredient Specific Animal Data:
CARBON BLACK 1333-86-4	10 - 30	This product contains carbon black which has been rated an IARC 2B carcinogen due to animal data.

SECTION 12 - ECOLOGICAL INFORMATION

POTENTIAL ENVIRONMENTAL EFFECTS

Ecotoxicity: No information Available.

ENVIRONMENTAL FATE

Mobility: No information available.

Biodegradation: No information available.

Bioaccumulation: No Information Available.

PHYSICAL/CHEMICAL

Hydrolysis: No information available.

Photolysis: No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Provide maximum ventilation, only personnel equipped with proper respiratory and skin and eye protection should be permitted in the area. Take up spilled material with sawdust, vermiculite, or other absorbent material and place in containers for disposal.

Waste material must be disposed of in accordance with federal, state, provincial and local environmental control regulations. Empty containers should be recycled by an appropriately licensed reconditioner/salvager or disposed of through a permitted waste management facility. Additional disposal information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name: NOT AVAILABLE
NOS Technical Name: NOT AVAILABLE
Hazard Class: N.A.
Subsidiary Class(es): N.A.
UN Number: N.A.
Packing Group: N.A.

USA - RQ Hazardous Substances: NOT AVAILABLE
USA-RQ Hazardous Substance NOT AVAILABLE
Threshold Ship Weight:

Marine Pollutant Name: NOT AVAILABLE

SECTION 15 - REGULATORY INFORMATION

INVENTORY STATUS

U.S. TSCA: This product and/or all of its components are listed on the U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.

FEDERAL REGULATIONS

US Regulations

Material/ CAS Number	Percent	CERCLA HS - RQ (LBS)	SARA EHS- TPQ (LBS)	SARA 313
ALUMINUM SULFATE 10043-01-3	10 - 30	5000 lbs	Not Listed	Not Listed
CARBON BLACK 1333-86-4	10 - 30	Not Listed	Not Listed	Not Listed
CALCIUM HYDROXIDE 1305-62-0	5 - 10	Not Listed	Not Listed	Not Listed

SARA 311/312

Health (acute): Yes

Health (chronic): Yes

Fire (flammable): No

Pressure: No

Reactivity: No

WHMIS HAZARD CLASS: - Class D, Division 2, Subdivision A - Class D, Division 2, Subdivision B

STATE/PROVINCIAL REGULATIONS

CALIFORNIA PROP. 65: WARNING: This product contains a chemical known to the State of California to cause cancer.

Additional Information

Material/ CAS Number	Percent	IARC Group 1(Kno wn Human Carc.)	IARC Group 2A (Proba ble Carc.)	IARC 2B (Suspec ted Carc.)	ACGIH Carc.	NTP Known Carc.	OSHA Carc.
CARBON BLACK 1333-86-4	10 - 30	N	N	Y	N	N	Y

Key: IARC- International Agency on the Research of Cancer; ACGIH- American Conference of Governmental Industrial Hygienists; NTP- National Toxicology Program *Denotes chemical as NTP Known Carcinogen; + Denotes NTP Possible Carcinogen; OSHA- Occupational Safety and Health Administration.

SECTION 16 - OTHER INFORMATION

Hazard Rating Systems

NFPA Rating: 3 10

HMIS Rating: 3*10

Rating System: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe, *=Chronic Effects.

HMIS=Hazardous Materials Identification System; NFPA=National Fire Protection Association;

Safe handling of this product requires that all of the information on the MSDS be evaluated for specific work environments and conditions of use.

PREPARED BY: Product Safety Department

**PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272**

**Product ID: T499 (0808)
PRODUCT NAME: FLOCCULANT AGENT**

REASON FOR REVISION: Date. Edition.
Updated MSDS
format.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200), the supplier notification requirements of SARA Title III, Section 313 and other applicable right-to-know regulations.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

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*** END OF MSDS ***