

MSDS

PFKR03S8025
MATERIAL SAFETY DATA SHEET

Product name: RAL 5000 SERIES

Product code: PFKR03S8025

Product date: NOV 18 2009

Print date: 03/14/11

Page 1

Section 1 - Product and Company Identification

Product Name: RAL 5000 SERIES

Company Identification: PRO POWDER SUPPLY
5710 AUBURN BLVD #24
SACRAMENTO, CA 95841

Telephone/Fax: 713.939.4000 / 713.939.4025
Chemtrec International(24hr): 703.527.3887 Collect
Chemtrec USA(24hr): 800.424.9300
Medical Emergency 800.441.3637

Product Class: Coating Powder
Product Number: PFKR03S8

Section 2 - Ingredient Information

Ingredient Name	CAS Number	Percent
BARIUM SULFATE	007727-43-7	15 - 40
1,3,5-Triglycidyl Isocyanurate	002451-62-9	3 - 7
TITANIUM DIOXIDE	013463-67-7	1 - 5
CARBON BLACK	001333-86-4	< 0.5
NUISANCE DUST	N/A	As generated

Section 3 - Hazards Identification

Potential Health Hazards (powder mixture).

May cause skin and eye irritation. May cause irritation of the upper respiratory tract (nose, mouth and/or throat), resulting in sneezing coughing and sore throat. Long-term respiratory exposure exceeding exposure limits may damage the lungs, leading to impairment of lung capacity.

The acute and chronic health effect statements below are for the pure

MSDS

PFKR03S8025

MATERIAL SAFETY DATA SHEET

Product name: RAL 5001

Product code: PFKR03S8025

Product date: NOV 18 2009

Print date: 03/14/11

Page 2

chemicals only, unless noted.

ACUTE HEALTH EFFECTS:

(CARBON BLACK)

May be irritating to the eye & cause conjunctivitis. Prolonged or repeated skin contact may cause irritation.

(1,3,5-Triglycidyl Isocyanurate)

INGESTION: Moderately toxic. Symptoms are not fully known, may include loss of appetite and nose bleeding. INHALATION: Irritating to upper respiratory tract. May cause nosebleeds. EYE CONTACT: Irritating. SKIN CONTACT: Irritating. Can be absorbed through the skin in harmful amounts. Effects similar to ingestion.

A COMMERCIAL POLYESTER POWDER MIXTURE CONTAINING 5% TGIC WAS TESTED IN RATS (SAFEHARM (UK) 1998) FOR ACUTE ORAL TOXICITY WITH THE FOLLOWING RESULTS:

LD50:>5000 mg/Kg (m/f)

(BARIUM SULFATE)

Inhalation of dusts containing barium sulfate may be irritating to the respiratory tract. Contact with the eyes may also cause irritation.

In 1994, US EPA deleted barium sulfate from the category "barium compounds" on the list of toxic chemicals for which reporting is required. The final rule is in 40 CFR Part 372.

(TITANIUM DIOXIDE)

INGESTION: Low oral toxicity. No toxic effects due to ingestion are described in literature. INHALATION: Irritating to upper respiratory tract. EYE CONTACT: Irritating.

CHRONIC HEALTH EFFECTS:

(CARBON BLACK)

In 1978, NIOSH concluded that "carbon black may cause adverse pulmonar & heart changes" & "may pose a cancer risk" due to absorbed polycyclic hydro-carbons. Studies have not shown a significantly increased circulatory malignant or respiratory morbidity among carbon black workers in the U.S. Prop 65 "This chemical is known to the state of California to cause cancer"

(1,3,5-Triglycidyl Isocyanurate)

Irritation of eyes, skin and respiratory tract; loss of appetite, may cause nosebleeds; toxic by ingestion and if absorbed through the skin. Prolonged or repeated contact may cause skin sensitization. TGIC has shown mutagenic activity in laboratory cells culture test and laboratory animals. Based on those studies, TGIC has been classified as

MSDS

PFKR03S8025

MATERIAL SAFETY DATA SHEET

Product name: RAL 5001

Product code: PFKR03S8025

Product date: NOV 18 2009

Print date: 03/14/11

Page 3

"Possible Human Germ Cell Mutagen", and capable of causing permanent heritable damage in reproductive cells on humans. Overexposure can result in toxic effects on liver and lungs.

(BARIUM SULFATE)

Prolonged exposure could cause benign pneumoconiosis called Baritosis.

(TITANIUM DIOXIDE)

Laboratory studies show that inhalation exposure to high levels (250 mg/kg) of Titanium Dioxide causes cancerous tumors in rats. This response occurs at lower exposure levels and may be due to the high levels overwhelming normal lung clearance mechanisms. The relevance of this data to humans is not significant where the TLV is observed.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY OVEREXPOSURE:

(1,3,5-Triglycidyl Isocyanurate)

Respiratory illness & dermatitis may be aggravated by excessive exposure.

PRIMARY ROUTES OF ENTRY:

Inhalation, Dermal, or Ingestion

Section 4 - First Aid Measures

EYE CONTACT

Flush eyes with cool water for 15 minutes, occasionally lifting lids to ensure thorough rinsing. Seek medical assistance.

SKIN CONTACT

Wash thoroughly with soap and water.

INHALATION

Remove from area to fresh air.

INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

Section 5 - Fire Fighting Measures

MEC >= 26g/m3 (see sec. 16)

EXTINGUISHING MEDIA

☒ FOAM ☒ CO2 ☒ DRY CHEMICAL ☒ WATER FOG ☒ DRY SAND

FIRE FIGHTING INSTRUCTIONS

MSDS

PFKR03S8025

MATERIAL SAFETY DATA SHEET

Product name: RAL 5001

Product code: PFKR03S8025

Product date: NOV 18 2009

Print date: 03/14/11

Page 4

Use fully protective equipment with self-contained breathing apparatus. The material has a flammability rating similar to a water-borne coating. Dust generated from this product during handling may create a fire and/or explosion hazard. Minimize dusting during use. Keep all equipment clean and properly grounded to avoid static electricity discharge.

Section 6 - Accidental Release Measures

CLEAN-UP

Clean up spills using an explosion-proof vacuum cleaner, then dispose in accordance with local, state and federal regulations. Avoid sweeping and dust cloud formation.

Section 7 - Handling and Storage

HANDLING

Keep all equipment clean and properly grounded to avoid static electricity discharge. Keep work areas free of dust. Avoid excessive skin contact. Do not ingest or inhale. Keep out of the reach of children.

STORAGE

Keep containers sealed and avoid static electricity discharges.

Section 8 - Exposure Controls / Personal Protection

Occupational Exposure Limits

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
BARIUM SULFATE					
10.00 mg/M3	N/A	N/A	N/A	5.00 mg/M3	
1,3,5-Triglycidyl Isocyanurate					
0.05 mg/M3	N/A	N/A	N/A	N/A	
TITANIUM DIOXIDE					
10.00 mg/M3	N/A	N/A	N/A	10.00 mg/M3	
CARBON BLACK					
3.50 mg/M3	N/A	N/A	N/A	3.50 mg/M3	
NUISANCE DUST					
10.00 mg/M3	N/A	N/A	N/A	N/A	
ENGINEERING CONTROLS					

MSDS

PFKR03S8025

MATERIAL SAFETY DATA SHEET

Product name: RAL 5001

Product code: PFKR03S8025

Product date: NOV 18 2009

Print date: 03/14/11

Page 5

Provide sufficient ventilation in volume and pattern to keep air contamination concentration below applicable OSHA permissible exposure levels or ACGIH's TLV TWA limit.

RESPIRATORS

Use properly fitted NIOSH/MSHA approved gas & vapor respirators, or conventional respirators, or negative pressure respirators or particulate respirators, or FFR (filtering facepiece respirator) to avoid breathing dust.

OTHER CLOTHING

PROTECTIVE GLOVES: Impervious disposable gloves (like nitrile) are recommended.

EYE PROTECTION: Goggles or safety glasses w/side shields recommended.

OTHER PROTECTIVE EQUIPMENT: Protective overalls recommended. Remove and wash soiled clothing.

Section 9 - Physical and Chemical Properties

Spec. Grav., ASTM D5965-96,C:1.49

Section 10 - Stability and Reactivity

Stability: This product is stable

Hazardous Polymerization: Hazardous polymerization will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: Fumes may contain CO, CO2, NO2 or other Nitrogen compounds.

Section 11 - Toxicological Information

Route	Species	Exposure and Dose
1,3,5-Triglycidyl Isocyanurate Oral	Rat, adult	LD50 440. mg/kg
TITANIUM DIOXIDE Oral	Rat, adult	LD50 9500. mg/kg

Section 12 - Ecological Information

None known

Section 13 - Disposal Considerations

MSDS

PFKR03S8025

MATERIAL SAFETY DATA SHEET

Product name: RAL 5001

Product code: PFKR03S8025

Product date: NOV 18 2009

Print date: 03/14/11

Page 6

Manage or dispose in accordance with local, state and federal regulations.

Section 14 - Transport Information

Not Regulated

Section 15 - Regulatory Information

-PROP 65 (CARCINOGEN)

WARNING: This product contains a chemical known to the state of California to cause cancer.

Ingredient Name	CAS Number	Percent
CARBON BLACK	001333-86-4	< 5

-PROP 65 (TERATOGEN)

WARNING: This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

Ingredient Name	CAS Number	Percent
1,3,5-Triglycidyl Isocyanurate	002451-62-9	7

All ingredients in this product are listed in the T.S.C.A. Inventory.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR (Canada)

Weight loss is less than one percent when using US EPA Federal Reference Method 24 (ASTM D2369). This weight loss is mostly water (ASTM D4107) with a trace amount of organic material. This trace amount should be considered Volatile Organic Compound (VOC) Content.

Section 16 - Other Information

HMIS Rating: Health=1* Fire=1 Reactivity=0 PPE=E

NFPA 704 Rating: Health=1 Fire=1 Reactivity=0

Rating Definitions:

Health 1-Slight hazard, irritation possible

Health *-Long term health effects may result from repeated overexposure

MSDS

PFKR03S8025

MATERIAL SAFETY DATA SHEET

Product name: RAL 5001

Product code: PFKR03S8025

Product date: NOV 18 2009

Print date: 03/14/11

Page 7

Fire 1-Slight hazard, needs considerable preheat before combustion will occur

Reactivity 0-Minimal hazard, materials are normally stable

PPE E-ANSI, Z87 approved safety glasses, gloves, negative pressure or particulate respirators

Other Definitions:

MEC (sec. 5) = Minimum Explosive Concentration