Cream Powder (hitox)
Safety Data Sheet

1. Identification of Substance & Company

Product	
Product name	Cream Powder (hitox)
Product code	PHTXTOR, PHTXTORB, PHTXTORPW, RETPHTXTOR1KG, RETPHTXTORB10KG, , RETPHTXTOR25KG, RETPHTXTORB5KG, RETPHTXTORSAMP, TPHTXTOR
HSNO approval	non hazardous
UN number	NA
Proper Shipping Name	NA
DG class	NA
Packaging group	NA
Hazchem code	NA
Uses	Colourant
Company Details	
Company	**Peter Fell LTD**
Address	81 Patiki Rd Avondale Auckland
Telephone	09 828 6460
Email	info@peterfell.co.nz

2. Hazard Identification

Approval

This product is considered non hazardous under the Hazardous Substances and New Organisms Act (HSNO).

Classes Hazard Statements

None

SYMBOLS

None

Other Classifications

Handling and/or processing of this material may generate a dust which can cause irritation of the eyes, skin, nose and throat.

NOTE: this material contains titanium dioxide, particle size <1µm. The toxicity of fine and ultrafine (nanoparticles) particles of titanium dioxide is under review in other jurisdictions, notably in the EU. Fine titanium dioxide (particle size <10µm) is considered to be a suspected carcinogen if inhaled. (IARC group 2B – possibly carcinogenic to humans.

Frequent inhalation of dust over a long period of time may increase the risk of developing chronic lung diseases. This material does not contain crystalline silica.

Precautionary Statements

Precautionary none

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Pigments including any of the following:		
Titanium dioxide	1317-80-2	>90%
Amorphous silica	7631-86-9	<5%
Iron (III) Oxide	1309-37-1	<5%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). If exposed or concern, contact a doctor.

Recommended first aid facilities	Ready access to running water is recommended.

Exposure

Swallowed	Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor if concerned.
Eye contact	If product gets in eyes, wash material from them with running water for several minutes. If symptoms persist, seek medical advice.
Skin contact	Flush immediately with large amounts of water. Remove all contaminated clothing. Contact a doctor if experiencing symptoms
Inhaled	Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	There are no specific risks for fire/explosion for this chemical. It is non-flammable.
Suitable extinguishing substances:	Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.
Unsuitable extinguishing substances:	Unknown.
Products of combustion:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment:	No special measures are required.
Hazchem code:	NA

6. Accidental Release Measures

Containment	There is no current legal requirement for containment of this product.
Emergency procedures	Generally, the containers size will limit a large spill from occurring. If a significant spill occurs: Stop leak if safe or necessary. Isolate area. Collect spill, see below. Transfer to container for disposal. Dispose of according to guidelines below (Section 13).
Clean-up method	This product is not considered flammable or ecotoxic. Small spills do not require any special clean up method. Larger spills (e.g., greater than 10kg) should be mopped up and collected.
Disposal	Avoid the generation of dust. Sweep up carefully or vacuum. Collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	No special protective clothing is normally necessary.

7. Storage & Handling

Storage	Avoid storage of harmful substances with food. Containers should be kept closed in order to minimise contamination. Avoid contact with incompatible substances as listed in Section 10.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. Avoid creation of dusts. See section 8 with regard to personal protective equipment requirements.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m^3 for respirable particulates and 10mg/m^3 for inhalable particulates when limits have not otherwise been established.

	Ingredient	WES-TWA	WES-STEL
NZ Workplace Exposure Stds (2016)	iron (III) oxide	5mg/m^3 (as Fe)	data unavailable
	triiron tetraoxide	5mg/m^3 (as Fe)	data unavailable
	iron oxide yellow	5mg/m^3 (as Fe)	data unavailable
	titanium dioxide	10mg/m^3	data unavailable
	amorphous silice	10mg/m^3	data unavailable

* These workplace exposure standards are also Prescribed Exposure Standards (PES) under the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes	Protective eyewear is not normally necessary when using this product. However, it always prudent to use protective eyewear if dust is likely.
Skin	Protective gloves and clothing are not normally necessary. However, it is prudent to wear gloves when handling chemicals in bulk or for an extended period of time.
Respiratory	Respirator is not required under normal use. Ensure adequate natural ventilation. If product is being used in confined conditions and dust formation is likely, the use of a particulate mask or respirator is recommended.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	Powder, beige
Odour	odourless
pH	6.5-7.5
Vapour pressure	not available
Viscosity	no data
Boiling point	2500-3000°C
Volatile materials	no data
Freezing / melting point	~1840°C
Solubility	insoluble
Specific gravity / density	4.1 (water = 1)
Flash point	not flammable
Danger of explosion	no data
Auto-ignition temperature	no data
Upper & lower flammable limits	no data
Corrosiveness	non corrosive

10. Stability & Reactivity

Stability	Stable
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
Incompatible groups	Strong acids, strong bases
Substance Specific Incompatibility	None known
Hazardous decomposition products	None known
Hazardous reactions	None known

11. Toxicological Information

Summary

IF IN EYES: dust may be irritating to eyes with tearing, pain and blurred vision.
IF ON SKIN: Repeated skin contact may result in drying out of the skin.
IF INHALED: dust may irritate respiratory system.
CHRONIC TOXICITY: This mixture does contain titanium dioxide, which is classed by IARC as group 2B if particle size <10µm. This mixture also includes amorphous silica.

Supporting Data

Acute	**Oral**	Using LD_{50}'s for ingredients, the calculated LD_{50} (oral, rat) for the mixture is >5,000 mg/kg. Data considered includes: Iron (III) Oxide >10000mg/kg (rat), titanium dioxide
	Dermal	Using LD_{50}'s for ingredients, the calculated LD_{50} (dermal, rat) for the mixture is >5000 mg/kg. Data considered includes: Iron (III) Oxide LDLo 30mg/kg (dog).
	Inhaled	Using LC_{50}'s for ingredients, the calculated LC_{50} (inhalation, rat) for the mixture is >5 mg/L.
	Eye	The mixture is not considered to be an eye irritant. Any irritation may be due to mechanical irritation of the particles.
	Skin	The mixture is not considered to be a skin irritant under HSNO.
Chronic	**Sensitisation**	No ingredient present at concentrations > 0.1% is considered a sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	Iron Oxides are not considered carcinogenic. This mixture does contain titanium dioxide which has been classed by IARC as Group 2B, (possibly carcinogenic to humans). The route of exposure for carcinogenicity is by inhalation of fine particles (<10µm) of titanium dioxide. Amorphous silica is classed group 3 (IARC) – "Unclassifiable as to carcinogenicity in humans". There is no evidence at present that is causes cancer in humans.
	Reproductive / Developmental	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	Inhalation of fine titanium dioxide particles may increase the risk of developing chronic lung disease and skin irriation.
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

This mixture is not considered ecotoxic.

Supporting Data

Aquatic	No evidence of aquatic ecotoxicity. Estimated EC_{50} of the mixture is >100mg/L,
Bioaccumulation	No data
Degradability	No data
Soil	No evidence of soil ecotoxicity.
Terrestrial vertebrate	No evidence of toxicity towards terrestrial vertebrates.
Terrestrial invertebrate	No evidence of toxicity towards terrestrial invertebrates.
Environmental effect levels	No EELs are available for this mixture or ingredients

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Dispose of residue and solutions that cannot be reused to sewer. If this is not possible dilute with water (at least 5 times as much water) and drain.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

14. Transport Information

There are no specific restrictions for this product (not a dangerous good).

UN number:	NA	**Proper shipping name:**	Not regulated for transport.
Class(es)	NA	**Packing group:**	NA
Precautions:	NA	**Hazchem code:**	NA

15. Regulatory Information

This product is not considered hazardous under the Hazardous Substances and New Organisms Act (HSNO).

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

SDS	Not required.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Not required.
Approved handler	Not required.
Tracking	Not required.
Bunding & secondary containment	Not required.
Signage	Not required.
Location test certificate	Not required.
Flammable zone	Not required.
Fire extinguisher	Not required.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	NA
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC_{50}	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Agency
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD_{50}	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC_{50}	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS (SDS)	Material Safety Data Sheet (or Safety Data Sheet)
PES	Prescribed Exposure Standard means a WES or a biological exposure standard

	that is prescribed in a regulation, a safe work instrument or an approval under HSNO (including group standards).
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
EPA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
WES 2016	The NZ Workplace Exposure Standards Effective from 2016, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz.
WES 2002	Workplace Exposure Standards published by the Occupational Safety and Health Service, Department of Labour, January 2002, ISBN 0-477-03660-0. These are the WES referred to under the Group Standard (HSNO approval) and may constitute a PES.
Other References:	Suppliers SDS

Review

Date	Reason for review
April 2017	Not applicable – new SDS

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: ***+64 9 940 30 80.***