Safety Data Sheet
Virgin Blue Pigmented PTFE Compound

1. Identification

Product identifier	Blue Pigmented PTFE Compound
Product code	N/A
Other means of identification	Polytetrafluoroethylene, Pigmented
Recommended use of the chemical and restrictions on use	Molding and extrusion filler
Manufacturer	
Emergency phone number	CHEMTREC: 613-996-6666

2. Hazard identification

Summary	Avoid breathing fumes while heating. Avoid contact with molten material. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use in a manner that avoids generating dust. Do not ingest. If ingested consult physician immediately and show this Safety Data Sheet. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.
WHMIS 2015/OSHA HCS 2012/GHS	
Not Regulated under WHMIS 2015/GSH	

3. Composition/information on ingredients

Common name	CAS	Weight % content
Polytetrafluoroethylene	9002-84-0	Major
CI Pigment Blue 28	1345-16-0	< 5 %

4. First-aid measures

Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.
Skin contact	Wash skin with warm water and mild soap. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention. In case of contact with melted material: DO NOT attempt to remove molten material. Cool rapidly with cold water and cover with a clean dressing. Seek medical attention immediately.

Eye contact	IMMEDIATELY flush with plenty of water. Remove contact lenses. Flush with water for at least 15 minutes. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention. In case of contact with melted material: DO NOT attempt to remove molten material. Cool rapidly with cold water and cover with a clean dressing. Seek medical attention immediately.
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. If victim is conscious wash out mouth with water. Never give anything by mouth if victim is unconscious or convulsing. Seek medical attention or contact a Poison Centre immediately.
Other	No information available.
Symptoms	Inhalation of thermal decomposition products is harmful. Contact with heated material may cause thermal burns.
Notes to the physician	Treat symptomatically. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

Suitable extinguishing media	Use appropriate extinguisher for surrounding fire.
Specific hazards arising from the chemical	Not flammable. May release irritating, toxic and/or corrosive during fire or when heated to decomposition.
Special protective equipment	Firefighters must wear self-contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.
Special protective actions for fire-fighters	Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	For a large spillage, consult the Department of Environment or the relevant authorities.
Methods and materials for containment and cleaning up	Ventilate well the area. Evacuate unauthorized personnel. Vacuum or sweep up using wet methods and place in an appropriate waste disposal container. Avoid generating dusty conditions. Dispose via a licensed waste disposal contractor.

7. Handling and storage

Precautions for safe handling	Use only in well ventilated area. Avoid breathing fumes while heating. Avoid breathing dust. Use in a manner that avoids generating dust. Avoid contact with molten material. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Do not eat, do not drink and do not smoke during use. Keep containers tightly closed when not used. After use, wash hands with soap and water. Wash contaminated clothing before reuse.
Conditions for safe storage, including any incompatibilities	Store tightly close and in properly labelled container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible materials (see section 10).
Storage temperature	10 to 30°C (50 to 86°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	Hydrogen Fluoride: TLV = 3 ppm Perfluoroisobutylene: TLV = 10 ppb Carbonyl Fluoride: TLV = 2 ppm TWA

Polytetrafluoroethylene	TWA (8h)	Respirable Dust Total	5 mg/m^3	CMRG
		Dust	10 mg/m^3	CMRG
Cobalt Metal	PEL	Dust and Fume (as Co)	0.1 mg/m^3	OSHA
	TWA	Dust and Fume (as Co)	0.02 mg/m^3	ACGIH

Appropriate engineering controls	Provide sufficient mechanical ventilation (general and/or local exhaust) to keep the airborne concentrations of vapors, mists, aerosols, or dust below their respective occupational exposure limits.
Individual protection measures	
Eye	Wear safety glasses. If risk of contact with eyes wear chemical splash goggles.
Hands	Wear nitrile or neoprene gloves. Thermal insulated gloves when handling product at elevated temperatures. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly. Before using, user should confirm impermeability. Discard gloves that show tears, pinholes, or signs of wear.
Skin	Wear normal work clothing covering arms and legs as required by employer code. Personal protective equipment for the body should be selected based on the task being performed and the risks involved.
Respiratory	Respiratory protection equipment (PPE) must be selected, fitted, maintained and inspected in accordance with regulations and CSA Standard Z 94.4 and approved by NIOSH / MSHA. For nuisance exposures use type N95 particle respirator. When heating the product at high temperature (toxic gases emissions) and for an assigned protection factor (APF) up to 10 times the exposure limit: wear a half mask respirator with appropriate cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full-face respirator mask with appropriate cartridges and P100 filters. In case of insufficient ventilation wear positive pressure, supplied-air respirator.
Feet	Wear safety shoes.

Safety glasses

Nitrile gloves

9. Physical and chemical properties

Physical state	Solid powder or pellets	**Flammability**	Non-flammable.
Color	Blue	**Flammability limits**	N/Ap.
Odor	Odorless	**Flash point**	N/Ap.
Odor threshold	N/Av.	**Auto-ignition temperature**	N/Ap.
pH	N/Ap.	**Sensibility to electrostatic charges**	No
Melting point	327 – 342°C (ASTM D 2116)	**Sensibility aux sparks and/or friction**	No

Freezing point	N/Av.	**Vapor density**	N/Ap. (Air = 1)
Boiling point	N/Ap.	**Relative density**	2.0 to 2.5 g/cm^3 (Water = 1)
Solubility	Negligible in water	**Partition coefficient n-octanol/water**	N/Av.
Evaporation rate	N/Ap.	**Decomposition temperature**	380°C (716°F)
Vapor pressure	N/Ap.	**Viscosity**	N/Ap.
Percent Volatile	0%	**Molecular mass**	N/Ap.
N/Av.: Not Available N/Ap.: Not Applicable Und.: Undetermined N/E: Not Established			

10. Stability and reactivity

Reactivity	No information available for this product.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	Hazardous polymerization will not occur under recommended storage.
Conditions to avoid	Avoid generating dusty conditions. Avoid temperatures over 380 °C. Avoid contact with incompatible materials.
Incompatible materials	Alkali metals, alkali earth metals.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition products at elevated temperatures may include the following materials: carbonyl fluoride, carbon monoxide (CO), carbon dioxide (CO2), hydrogen fluoride, perfluoroisobutylene.

11. Toxicological information

Numerical measures of toxicity	Polytetrafluoroethylene	Ingestion	> 2000 mg/kg	Rat	
	Hydrofluoric acid	Inhalation	650 ppm/4h 171 ppm/4h	Rat Mouse	LC50 LC50
	Cobalt Aluminate Blue Spinel	Inhalation Oral	Not Tested > 10,000 mg/kg (Shepherd Color Co. Data)	Rat Rat	LD50 LD50
Likely routes of exposure	Skin, eyes, inhalation.				

Delayed, immediate and chronic effects	**Eye contact**	No known adverse effects under normal use conditions. The mechanical friction can cause eyes irritation. Contact with heated material may cause thermal burns.
	Skin contact	No known adverse effects under normal use conditions. The mechanical friction can cause skin irritation. Contact with heated material may cause thermal burns.
	Inhalation	May cause upper respiratory tract irritation. Inhalation of vapors formed at high temperatures can cause irritation of the upper respiratory tract, pulmonary oedema. Exposure to decomposition fumes from this product may cause polymer fume fever, characterized by malaise, chills, fever, chest pain, dyspnoea, cough.
	Ingestion	May cause gastro-intestinal irritation with nausea and vomiting.
	Respiratory or skin sensitization	Ingredients present at levels greater than or equal to 0.1% of this product are skin or respiratory sensitizers.
	IRAC/NTP	No ingredients listed.
	Carcinogenicity	Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effect.
	Reproductive toxicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause effects on reproduction.
Interactive effects	No information available for this product.	
Other information	In animals, exposure to decomposition fumes from Polytetrafluoroethylene may cause kidney damage. The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg. The acute toxicity estimate (ATE) by inhalation of the dust mixture was calculated to be greater than 5 mg/L/4h. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.	

12. Ecological information

Ecological toxicity	Not Determined
Persistence	Contains an or many ingredients that may be persistent in aquatic environment.
Degradability	No information available for this product. The term biodegradability, as such, is not applicable to inorganic compounds.
Bio accumulative potential	No information available for this product. Bioaccumulation may occur in aquatic and terrestrial animals and plants. There is potential for bioaccumulation in the food chain.
Mobility in soil	No information available for this product.
Other adverse effects	This chemical does not deplete the ozone layer.

13. Disposal considerations

Container 	Important! Prevent waste generation. Use in full. If possible, recycle (reprocess) the product. If possible, recycle the empty container. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary, consult the Department of Environment or the relevant authorities.

14. Transport information

UN Number	UN
UN Proper Shipping Name	Not regulated by TDG (Canada) and DOT (USA).
Environmental hazards	This material is not listed as a marine pollutant.
Special precautions for user	No information available for this product.
TDG - Transportation of Dangerous Goods (Canada)	

Transport hazard class(es)	Not regulated
Packing group	Not regulated
Emergency response guidebook 2012	
IMO/IMDG - International Maritime Transport	
Classification	Not regulated
IATA - International Air Transport Association	
Classification	Not regulated

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying wi h all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Polytetrafluoroethylene	9002-84-0		X		
Cobalt Compound	N/A		X		

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act
- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS	TSCA	CERCLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Priority
Polytetrafluoroethylene	9002-84-0	X								
Cobalt Compound	N/A	X		X			X			

- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act - List of Hazardous Substances
- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

Common name	CAS	Cancer	Reproductive and Developmental Toxicity
Cobalt	N/A	X	

Other regulations	

WHMIS 1988

Non-WHMIS controlled

HMIS

NFPA

16. Other information

Date (YYYY-MM-DD)	2020-01-01
Version	01

Other information	REFERENCES: - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, http://hazmap.nlm.nih.gov/index.php - TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, http://toxnet.nlm.nih.gov/ - Service du répertoire toxicologique de la Commission de la santé et de la sécurité du travail (CSST), http://www.reptox.csst.qc.ca - OECD Existing Chemicals Database, Chemicals Screening Information DataSet (SIDS) for High Volume Chemicals, UNEP publications, http://webnet.oecd.org/HPV/UI/Search.aspx ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health NTP: National Toxicology Program RSST: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System