MSDS Preparation Date (mm/dd/yyyy): 09/30/2015

Page 1 of 7

MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product identifier

PORC-A-FILLER

Product Use

: Porcelain chip filler.

Chemical Family

: Mixture of: Resin; Ketones; Aromatic Hydrocarbon; Alcohols; Filler.

Manufacturer part no.

PORC-A-FILLER

Supplier's name and address:

Manufacturer's name and address:

G.F. Thompson Company Ltd.

Refer to Supplier

620 Steven Court Newmarket, ON, Canada

L3Y 6Z2

Information Telephone #

: Monday to Friday, 7:30 am to 5:00 pm, Eastern Standard Time:

(905) 898-2557

(800) 499-3673 (toll free)

24 Hr. Emergency Tel #

: (905) 252-6219 or (416) 786-4336

SECTION 2 - HAZARDS IDENTIFICATION

Classification

WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). WHMIS classification:

Class B2 (Flammable Liquids);

Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material); Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

Labelling: Phrases recommended to appear on a supplier label, can be found in Section 15.

WHMIS symbols required on a supplier label:





Emergency Overview

: White liquid. Solvent odour.

Danger. Flammable liquid and vapour. May be ignited by open flames and sparks. May be harmful if inhaled or swallowed. May cause respiratory irritation. May cause headache, nausea, dizziness and other symptoms of central nervous system depression. Could result in pulmonary edema (fluid accumulation). Causes severe eye irritation. May cause skin irritation. Possible birth defect hazard - contains material that may cause birth defects, based on animal data.

POTENTIAL HEALTH EFFECTS:

Signs and symptoms of short-term (acute) exposure

Inhalation: May cause irritation to the nose, throat and upper respiratory tract. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath)

may be delayed.

Skin

: May cause moderate skin irritation. May be absorbed through the skin.

Eyes

Causes severe eye irritation. May cause corneal injury.

Ingestion

May cause irritation of mouth, throat, and stomach. Symptoms may include pain, headache, nausea,

vomiting, dizziness, drowsiness and other central nervous system effects.

Effects of long-term (chronic) exposure

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Prolonged overexposure may cause liver and kidney effects.

If dusts are formed, inhalation may cause adverse lung effects. Pneumoconiosis, or "dusty lung" disease, may result from chronic exposure to any dust.

Carcinogenic status

: See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards

: May cause birth defects. See TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects

See ECOLOGICAL INECDMATION Section 10

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

		Wt.%	
<u>Ingredients</u>	CAS#		
Acetone	67-64-1	10.00 - 30.00	
Barium sulfate	7727-43-7	10.00 - 30.00	
Xylene	1330-20-7	5.00 - 10.00	
Aluminum oxide	1344-28-1	3.00 - 7.00	
Toluene	108-88-3	1.00 - 5.00	
n-Butyl alcohol	71-36-3	1.00 - 5.00	
sopropyl alcohol	67-63-0	1.00 - 5.00	
Talc	14807-96-6	0.10 - 1.00	

SECTION 4 - FIRST AID MEASURES

Inhalation : Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Get medical attention.

Skin contact : For skin contact, wash with soap and water while removing contaminated clothing. If irritation persists, seek prompt medical attention. Wash contaminated clothing before reuse.

interior persists, seek prompt medical attention. Wash contaminated diothing before feuse

Eye contact : For eye contact, flush with running water for at least 15 minutes, Seek immediate medical attention/advice.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get

medical attention.

Notes For Physician : Treat symptomatically. This product is a CNS depressant.

SECTION 5 - FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability

Flammable liquid and vapour. This material may be ignited by heat, sparks and direct flame. Vapours may be heavier than air and may collect in confined and low-lying areas. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Oxidizing properties : None known.

Explosion data: Sensitivity to mechanical impact / static discharge

: May be sensitive to static discharge. Not expected to be sensitive to mechanical impact.

Suitable extinguishing media : Dry chemical, foam, carbon dioxide and water fog. Do not use water jet, as this may spread burning material.

Special fire-fighting procedures/equipment

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so, Water spray may be useful in cooling equipment exposed to heat and flame.

Hazardous combustion products

 Carbon oxides; Aldehydes; Hydrocarbons; sulfur oxides; unburned alcohols; Other unidentified organic compounds.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions

: All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Refer to protective measures listed in sections 7 and 8. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion

of clean-up.

Environmental precautions Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For

large spills, dike the area to prevent spreading.

Spill response/cleanup

Ventilate area of release. Remove all sources of ignition. Use only non-sparking tools and equipment in the clean-up process. Contain and absorb spilled liquid with non-combustible,

inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Notify the appropriate authorities as required.

SECTION 7 - HANDLING AND STORAGE

Safe Handling procedures

: Use in a well-ventilated area. Wear suitable protective equipment during handling breathing vapour or mist. Avoid contact with skin, eyes and clothing. Keep away from heat, sparks, and open flames. Use proper bonding and grounding techniques when transferring liquid. Avoid contact with incompatible materials. Wash thoroughly after handling. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Storage requirements

: Store in a cool, dry, well-ventilated area. Store away from incompatibles and out of direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area. Keep out of the reach of children.

Incompatible materials Special packaging materials

Strong oxidizing agents; Acids; Reducing agents; Halogenated compounds. Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

	ACGIH TLV		OSHA PEL	
<u>Ingredients</u>	TWA	STEL	PEL	STEL
Acetone	500 ppm	750 ppm	1000 ppm	N/Av
Barium sulfate	10 mg/m³	N/Av	15 mg/m³ (total dust); 5 mg/m³ (respirable)	N/Av
Xylene	100 ppm	150 ppm	100 ppm	N/Av
Aluminum oxide	1 mg/m³ (respirable)	N/Av	15 mg/m³ (total dust); 5 mg/m³ (respirable)	N/Av
Toluene	20 ppm	N/Av	200 ppm	300 ppm (Ceiling)
n-Butyl alcohol	20 ppm	N/Av	100 ppm	N/Av
sopropyl alcohol	200 ppm	400 ppm	400 ppm	N/Av
Talc	2 mg/m³ (respirable)	N/Av	20 mppcf	N/Av

Ventilation and engineering measures

: Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Respiratory protection

If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Confirmation of which type of respirator is most suitable for the intended application should be obtained from respiratory protection suppliers.

Skin protection

Gloves impervious to the material are recommended. Advice should be sought from glove suppliers. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

Eye / face protection

Safety goggles or glasses as appropriate for the job.

Other protective equipment

Other equipment may be required depending on workplace standards. An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove and wash contaminated clothing before re-use. Do not take contaminated clothing home,

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Liquid. **Appearance**

Odour : Solvent odour.

Odour threshold

: white

: N/Av

pΗ

Boiling point

: N/Av

Specific gravity

: N/Av

Melting/Freezing point

N/Av N/Av

Coefficient of water/oil distribution

: N/Av

Vapour pressure (mmHg @ 20° C / 68° F)

: N/Av

Solubility in water : Insoluble.

Vapour density (Air = 1)

: N/Av

Evaporation rate (n-Butyl acetate = 1)

: N/Av

Volatile organic Compounds (VOC's)

Volatiles (% by weight)

: 30% (by volume)

: N/Av

: - 12°C (10.4°F)

Flash point Flash point Method

: Seta closed cup

Auto-ignition temperature : N/Av Upper flammable limit (% by vol.)

Lower flammable limit (% by vol.) : N/Av

: N/Ap

Flashback observed

: N/Av : N/Ap

Flame Projection Length Absolute pressure of container

Viscosity

: > 500 mm²/sec

: N/Ap

(approximately)

Ingestion: YES

: No additional information.

Section 10: STABILITY AND REACTIVITY

Stability and reactivity

General Information

Stable under the recommended storage and handling conditions prescribed. Refer to

Section 7, HANDLING AND STORAGE, for additional information.

Hazardous polymerization

Will not occur.

Conditions to avoid

Toxicological data

Avoid heat and open flame. Ensure adequate ventilation, especially in confined areas. Keep

out of direct sunlight. Avoid contact with incompatible materials.

Materials To Avoid And Incompatibility

: Strong oxidizing agents; Acids; Reducing agents; Halogenated compounds.

Hazardous decomposition products

None known, refer to hazardous combustion products in Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION

Target organs Eyes, skin, respiratory system, digestive system, central nervous system.

Routes of exposure Inhalation: YES Skin Absorption: YES Skin & Eyes: YES

Irritancy Severe eye irritant. Moderate skin irritant.

There is no available data for the product itself, only for the ingredients. See below

for individual ingredient acute toxicity data.

<u>Ingredients</u>	LCso(4hr) <u>inh, rat</u>	LD50		
		(Oral, rat)	(Rabbit, dermal)	
Acetone	30,000 ppm	5800 mg/kg	> 15,800 mg/kg	
Barium sulfate	N/Av	N/Av	N/Av	
Xylene	6350 ppm	3523 mg/kg	12,180 mg/kg	
Aluminum oxide	N/Av	> 5000 mg/kg	N/Av	
Toluene	7585 ppm	5580 mg/kg	12,125 mg/kg	
n-Butyl alcohol	> 8000 ppm	2510 mg/kg	4200 mg/kg	
sopropyl alcohol	17,000 ppm	4720 mg/kg	12,890 mg/kg	
Talc	N/Av	N/Av	N/Av	

Carcinogenic status

Teratogenicity

No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects Not expected to cause reproductive effects.

This product contains Xylene. Xylene may cause fetotoxic effects at doses which are not maternally toxic, based on animal data.

Contains Toluene. Toluene may cause fetotoxic effects at doses which are not maternally toxic, based on animal data.

This product contains Isopropanol. Isopropanol is no longer considered a developmental toxin. Teratogenic / fetotoxic effects were observed in animals, however the effects were observed in the presence of maternal toxicity or at concentrations where maternal toxicity is expected to occur.

Mutagenicity

Not expected to be mutagenic in humans.

Epidemiology

None known or reported by the manufacturer.

Page 5 of 7

Synergistic materials

: None known or reported by the manufacturer.

other important hazards

: See Section 2 for additional information.

Conditions aggravated by overexposure

: Pre-existing skin, eye, respiratory and central nervous system disorders.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity

The ecological characteristics of this product have not been fully investigated. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. Contains: Xylene; Toluene.

The acute toxicity of xylene is (ECOTOX):

Toxicity to fish - LC50/96h/rainbow trout = 8.2 mg/L
Toxicity to daphnia - EC50/48h/daphnia = 3.2 - 9.56 mg/L
Toxicity to algae - EC50/72h/algae = 3.2 - 4.9 mg/L

The acute toxicity of toluene is (OECD):

Toxicity to fish - LC50/96h/pink salmon = 5.4 mg/L Toxicity to daphnia - LC50/48h/daphnia = 11.5 mg/L

Other ingredients present in this product are not classified as environmentally toxic.

Mobility

No data is available on the product itself.

Persistence

No data is available on the product itself. Contains: Xylene; Toluene.

Xylene is considered to be inherently biodegradable. Toluene is considered to be readily biodegradable.

Bioaccumulation potential

; No data is available on the product itself. Contains: Xylene; Toluene.

The log Pow for Xylene is 3.12.

The log Kow value for Toluene is 2.65, and its Bioconcentration Factor (BCF) is 90 (OECD).

Other Adverse Environmental effects

: No data is available on the product itself.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for Disposal

Handle waste according to recommendations in Section 7. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not cut, weld, drill or grind on or near this

container.

Methods of Disposal

: Dispose of in accordance with federal, provincial and local hazardous waste laws.

SECTION 14: TRANPORT INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	UN1263	PAINT	3	II.	Å
TDG Additional information	May be shipped gross mass. Und	as Limited Quantity when transported in containers n der the TDGR, refer to Section 1.17 for additional exe	no larger than 5.0 Litres; emption information, if sh	in packages n ipping under tl	ot exceeding 30 his exemption.

SECTION 15 - REGULATORY INFORMATION

Labelling:

Danger. Flammable liquid and vapour This material may be ignited by heat, sparks and direct flame. May be harmful if inhaled or swallowed. May cause respiratory irritation. May cause headache, nausea, dizziness and other symptoms of central nervous system depression. Could result in pulmonary edema (fluid accumulation). Causes severe eye irritation. May cause skin irritation. Possible birth defect hazard - contains material that may cause birth defects, based on animal data.

PRECAUTIONS: Use in a well-ventilated area. Wear suitable protective equipment during handling. Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Keep away from heat, sparks, and open flames. Use proper bonding and grounding techniques when transferring liquid. Avoid contact with incompatible materials. Wash thoroughly after handling. Store in a cool, dry, well ventilated area, away from heat and ignition sources.

FIRST AID: If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing stopped, begin artificial respiration. Get medical attention. For skin contact, wash with soap and water while removing contaminated clothing, If irritation persists, seek prompt medical attention. For eye contact, flush with running water for at least 15 minutes. Seek immediate medical attention/advice. If ingested, do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Refer To Material Safety Data Sheet for further information.

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

SECTION 16 - OTHER INFORMATION

Legend	: ACGIH: American Conference of Governmental Industrial Hygienists
	CAS: Chemical Abstract Services
	ECOTOX: U.S. EPA Ecotoxicology Database
	HSDB: Hazardous Substances Data Bank
	IARC: International Agency for Research on Cancer
	Inh: Inhalation
	LC: Lethal Concentration
	LD: Lethal Dose
	N/Ap: Not Applicable
	N/Av: Not Available
	NIOSH: National Institute of Occupational Safety and Health
	OECD: Organisation for Economic Co-operation and Development
	OSHA: Occupational Safety and Health Administration
	PEL: Permissible exposure limit
	RTECS: Registry of Toxic Effects of Chemical Substances
	STEL: Short Term Exposure Limit
	TDG: Canadian Transportation of Dangerous Goods Act & Regulations
	TLV: Threshold Limit Values
	TWA: Time Weighted Average
	WHMIS: Workplace Hazardous Materials Identification System
References	 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2012.
	International Agency for Research on Cancer Monographs, searched 2012.
	Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2012
	(Chempendium, HSDB and RTECs).
	Material Safety Data Sheets from manufacturer.
Prepared for:	
G.F. Thompson Co. Ltd.	

620 Steven Court Newmarket, ON, Canada, L3Y 6Z2 Telephone: (905) 898-2557 Please direct all enquiries to G.F. Thompson. Prepared by: ICC The Compliance Center Inc. http://www.thecompliancecenter.com

Page 7 of 7

DISCLAIMER OF LIABILITY

This Material Safety Data Sheet was prepared by ICC The Compliance Center Inc using information provided by / obtained from G.F. Thompson Co. Ltd. and CCOHS' Web Information Service. The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and G.F. Thompson Co. Ltd. expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

This Material Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc and G.F. Thompson Co. Ltd.

END OF DOCUMENT