SAFETY DATA SHEET

1. Identification

Product identifier	Insulcast 116 FRFC Black - Part A			
Other means of identification				
SKU#	IE118R			
Recommended use	Not available.			
Recommended restrictions	None known.			
Manufacturer/Importer/Supplier	/Distributor information			
Company name	ITW Performance Polymers			
Address	35 Brownridge Road			
	Unit 1			
	Halton Hills, ON L7G 0C6			
Contact person	Customer Service			
Telephone number	215-855-8450			
Fax number	215-855-4688			
Emergency Number	800-424-9300 (CHEMTREC)			
Supplier	Not available.			
2. Hazard identification				
Physical hazards	Not classified.			
Health hazards	Skin corrosion/irritation	Category 2		
	Serious eye damage/eye irritation	Category 2A		
	Sensitization, skin	Category 1		
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 2		
Label elements				
Signal word	Warning			
Hazard statement	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.			
Precautionary statement				
Prevention	Avoid breathing mist/vapours. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.			
Response	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage.			

Storage Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental information 46.4 % of the mixture consists of component(s) of unknown acute oral toxicity. 98.17 % of the mixture consists of component(s) of unknown acute dermal toxicity. 98.17 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. Other hazards None known.

Not available.

3. Composition/information on ingredients

ixtures			
Chemical name	Common name and synonyms	CAS number	%
Epoxy Resin:reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)	Epoxy resin	25068-38-6	30 - 60
Oxirane, Mono[(c12-14-alkyloxy)methyl] Derivatives [alkyl (c12-14) Glycidyl Ether]		68609-97-2	10 - 30
Carbon Black		1333-86-4	< 0.2
Mineral spirits	STODDARD SOLVENT (MINERAL SPIRITS)	8052-41-3	< 0.2
Xylene	XYLENE	1330-20-7	< 0.2
Other components below reportable levels			1 - < 3

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures	
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

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Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
6. Accidental release mea	sures

6. Accidental release measures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear Personal precautions, appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do protective equipment and not touch damaged containers or spilled material unless wearing appropriate protective clothing. emergency procedures Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for	Prevent entry into waterways, sewer, basements or confined areas.		
containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.		
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.		
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.		
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.		
7. Handling and storage			
Precautions for safe handling	Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.		
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).		
8. Exposure controls/pers	onal protection		
Occupational experience limite			

Occupational exposure limits

Components	Туре	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Mineral spirits (CAS 8052-41-3)	TWA	100 ppm	
Xylene (CAS 1330-20-7)	TWA	20 ppm	

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended

Components	Туре	Value	
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m3	
Mineral spirits (CAS 8052-41-3)	TWA	572 mg/m3	
		100 ppm	
Xylene (CAS 1330-20-7)	STEL	651 mg/m3	
		150 ppm	
	TWA	434 mg/m3	
		100 ppm	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Туре	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3 Inhalable	
Mineral spirits (CAS 8052-41-3)	STEL	580 mg/m3	
	TWA	290 mg/m3	
Xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended

Components	Туре	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Mineral spirits (CAS 8052-41-3)	TWA	100 ppm	

Components	Туре	Value	Form	
Xylene (CAS 1330-20-7)	TWA	20 ppm		
Canada. New Brunswick OELs: T Publication (New Brunswick Reg		used on the 1991 and 1997 AC	GIH TLVs and BEIs	
Components	Туре	Value		
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m3		
Mineral spirits (CAS 8052-41-3)	TWA 525 mg/m3			
		100 ppm		
Xylene (CAS 1330-20-7)	STEL	651 mg/m3		
		150 ppm		
	TWA	434 mg/m3		
		100 ppm		
Canada. Ontario OELs. (Control o Components	of Exposure to Biological or Che Type	mical Agents), as amended Value	Form	
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3 Inhalable fract		
Mineral spirits (CAS 8052-41-3)	TWA	100 ppm		
Xylene (CAS 1330-20-7)	STEL	150 ppm		
	TWA	100 ppm		
Canada. Quebec OELs. (Ministry	of Labor - Regulation respecting	g occupational health and saf	ety), as amended	
Components	Туре	Value	Form	
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable dust.	
Mineral spirits (CAS 8052-41-3)	TWA	525 mg/m3		
		100 ppm		
Xylene (CAS 1330-20-7)	STEL	651 mg/m3		
		150 ppm		
	TWA	434 mg/m3		
		100 ppm		
Canada. Saskatchewan OELs (Oo Components	ccupational Health and Safety R Type	egulations, 1996, Table 21), as Value	s amended	
Carbon Black (CAS 1333-86-4)	15 minute	7 mg/m3		
Mineral spirits (CAS 8052-41-3)	15 minute	125 ppm		
	8 hour	100 ppm		
Xylene (CAS 1330-20-7)	15 minute	150 ppm		

Biological limit values

ACGIH Biological Expos	ure Indices (BEI)			
Components	Value	Determinant	Specimen	Sampling Time
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.
Individual protection measures,	such as personal protective equipment
Eye/face protection	Wear safety glasses with side shields (or goggles). Face shield is recommended.
Skin protection Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
9. Physical and chemical p	properties

Liquid.
Liquid.
Liquid.
Black.
Slight.
Not available.
Not available.
Not available.
Not available.
>93.3 °C (>200.0 °F)
0.1 BuAc
Not applicable.
osive limits
Not available.
Not available.
5.1 mm Hg
3.6
Not available.
Not available.
12.95 lb/gal
Not explosive.
Combustible IIIB estimated
Not oxidising.
1.55 <1 %

10. Stability and reactivityReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.Chemical stabilityMaterial is stable under normal conditions.Possibility of hazardous
reactionsNo dangerous reaction known under conditions of normal use.Conditions to avoidAvoid temperatures exceeding the flash point. Contact with incompatible materials.Incompatible materialsStrong oxidising agents.Hazardous decomposition
productsNo hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of e	exposure		
Inhalation	Prolonged inhalation may be harmful.		
Skin contact	Causes skin irritation. May cause an allergic skin reaction.		
Eye contact	Causes serious eye irritation.		
Ingestion	Expected to be a low ingestion	n hazard.	
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.		
Information on toxicological effe	ects		
Acute toxicity	Not known.		
Components	Species	Test Results	
Carbon Black (CAS 1333-86-4)			
Acute			
Oral			
LD50	Rat	> 8000 mg/kg	
Xylene (CAS 1330-20-7)			
<u>Acute</u> Dermal			
LD50	Rabbit	> 43 g/kg	
Oral			
LD50	Rat	3523 - 8600 mg/kg	
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/eye irritation	Causes serious eye irritation.		
Respiratory or skin sensitisation	n		
Canada - Alberta OELs: Irrit	ant		
Carbon Black (CAS 1333	3-86-4)	Irritant	
Respiratory sensitisation	Not a respiratory sensitiser.		
Skin sensitisation	May cause an allergic skin reaction.		
Germ cell mutagenicity	No data available to indicate p mutagenic or genotoxic.	product or any components present at greater than 0.1% are	
Carcinogenicity			
ACGIH Carcinogens			
Carbon Black (CAS 1333-86-4)		A3 Confirmed animal carcinogen with unknown relevance to humans.	
Xylene (CAS 1330-20-7) Canada - Manitoba OELs: carcinogenicity		A4 Not classifiable as a human carcinogen.	
Carbon Black (CAS 1333 Xylene (CAS 1330-20-7)		Confirmed animal carcinogen with unknown relevance to humans. Not classifiable as a human carcinogen.	
Canada - Quebec OELs: Carcinogen category			
Carbon Black (CAS 1333	3-86-4)	Detected carcinogenic effect in animals.	

IARC Monographs. Overall I	Evaluation of Carcinogenicity		
Carbon Black (CAS 1333 Mineral spirits (CAS 8052 Xulana (CAS 1320 20 7)	2-41-3) 3 Not classifiable as to carcinogenicity to humans.		
Xylene (CAS 1330-20-7) US. National Toxicology Pro	3 Not classifiable as to carcinogenicity to humans. pgram (NTP) Report on Carcinogens		
Carbon Black (CAS 1333			
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.		
Specific target organ toxicity - single exposure	Not classified.		
Specific target organ toxicity - repeated exposure	Not classified.		
Aspiration hazard	Not an aspiration hazard.		
Chronic effects	Prolonged inhalation may be harmful.		
12. Ecological information			
Ecotoxicity	Toxic to aquatic life with long lasting effects.		
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.		
Bioaccumulative potential			
Partition coefficient n-octan	ol / water (log Kow)		
Mineral spirits	3.16 - 7.15		
Xylene Mahility in anil	3.12 - 3.2		
Mobility in soil	No data available.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		
13. Disposal consideratio	ns		
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.		
Local disposal regulations	Dispose in accordance with all applicable regulations.		
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.		
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).		
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.		
14. Transport information			

TDG

Not regulated as dangerous goods.

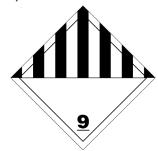
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TA	
UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Epoxy Resin:reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin))
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	9L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

	UN number	UN3082
	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin:reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)), MARINE POLLUTANT
	Transport hazard class(es)	
	Class	9
	Subsidiary risk	-
	Packing group	
	Environmental hazards	
	Marine pollutant	Yes
	EmS	F-A, S-F
	Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
	Fransport in bulk according to	Not established.
-	Annex II of MARPOL 73/78 and	
t	he IBC Code	

IATA; IMDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3) Not listed. Greenhouse Gases Not listed. Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011) Xylene (CAS 1330-20-7) Precursor Control Regulations Not regulated. International regulations Stockholm Convention Not applicable. Rotterdam Convention Not applicable.

Kyoto Protocol		
Not applicable. Montreal Protocol		
Not applicable. Basel Convention		
Not applicable.		
ernational Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information	
Issue date	04-March-2019
Revision date	05-August-2023
Version No.	04
Disclaimer	ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.
Revision information	Physical & Chemical Properties: Multiple Properties