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

Manufacturer

ITW Performance Polymers Company name 130 Commerce Drive **Address** Montgomeryville, PA 18936

United States

Telephone Customer Service 215-855-8450

Website www.itwperformancepolymers.com

E-mail Not available. **EHS** Department **Contact person**

Emergency phone number CHEMTREC 800-424-9300

International 703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2

> Serious eye damage/eye irritation Category 2 Sensitization, skin Category 1 Category 2

Environmental hazards Hazardous to the aquatic environment,

long-term hazard

Not classified. **OSHA** defined hazards

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/vapor. Wash thoroughly after handling. Contaminated work clothing must not

be allowed out of the workplace. Avoid release to the environment. Wear eye protection/face

protection. Wear protective gloves.

If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Response

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 before reuse. Collect spillage.

Store away from incompatible materials. Storage

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information 47.49% of the mixture consists of component(s) of unknown acute oral toxicity. 47.49% of the

> mixture consists of component(s) of unknown acute dermal toxicity. 72.72% of the mixture consists of component(s) of unknown acute inhalation toxicity. 98.17% of the mixture consists of

component(s) of unknown acute hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ALUMINA TRIHYDRATE			30 - 60
Epoxy Resin:reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)		25068-38-6	30 - 60
Aluminum Trihydrate		21645-51-2	20 - 40
Oxirane, Mono[(c12-14-alkyloxy)methyl] Derivatives [alkyl (c12-14) Glycidyl Ether]		68609-97-2	10 - 30
Carbon Black		1333-86-4	0.1 - 1
Other components below reportable le	evels		1 - < 3

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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.

Engure that modical paragonal are aware of the material(a)

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

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). 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.

and precautions for firefigh
Fire fighting

equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

Accidental release measures

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

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Methods and materials for containment and cleaning up

Prevent entry into waterways, sewer, basements or confined areas.

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 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/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL. TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

LIC COLLA Table	7 4 1 1 14 4		(00 OFD 4040 4000)
US. USHA Table	2-1 Limits for	' Air Contaminants	(29 CFR 1910.1000)

Components	Туре	Value	
Carbon Black (CAS 1333-86-4)	PEL	3.5 mg/m3	
US. OSHA Table Z-3 (29 CFR 1910	.1000)		
Components	Туре	Value	Form
Aluminum Trihydrate (CAS 21645-51-2)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
US. ACGIH Threshold Limit Value	s		
Components	Туре	Value	Form
Aluminum Trihydrate (CAS 21645-51-2)	TWA	1 mg/m3	Respirable fraction.
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
US. NIOSH: Pocket Guide to Cher	nical Hazards		
Components	Туре	Value	
Carbon Black (CAS 1333-86-4)	TWA	0.1 mg/m3	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) 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 Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Wear appropriate chemical resistant gloves. Hand protection

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

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Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene Always observe good personal hygiene measures, such as washing after handling the material considerations 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 properties

Appearance Liquid. Liquid. Physical state Liquid. **Form** Color Black. Odor Slight.

Odor threshold Not available. Not available. Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

> 200.0 °F (> 93.3 °C) Flash point

Evaporation rate 0.1 BuAc Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. Vapor pressure 5.1 mm Hg

3.6 Vapor density

Not available. Relative density

Solubility(ies)

Solubility (water) Not available. **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** Not available.

Other information

Density 12.95 lb/gal **Explosive properties** Not explosive.

Combustible IIIB estimated Flammability class

Oxidizing properties Not oxidizing.

Specific gravity 1.55 < 1 %

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid Conditions to avoid

temperatures exceeding the flash point. Contact with incompatible materials.

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Strong oxidizing agents. Incompatible materials

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Causes skin irritation. May cause an allergic skin reaction. Skin contact

Causes serious eve irritation. Eye contact

Ingestion Expected to be a low ingestion 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 effects

Acute toxicity Not known.

Test Results Components **Species**

Aluminum Trihydrate (CAS 21645-51-2)

Acute Oral

LD50 Rat > 5000 mg/kg

Carbon Black (CAS 1333-86-4)

Acute Oral

LD50 Rat > 8000 mg/kg

Causes skin irritation. Skin corrosion/irritation

Serious eye damage/eye

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Causes serious eye irritation.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon Black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

This product is not expected to cause reproductive or developmental effects. Reproductive toxicity

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Not an aspiration hazard. **Aspiration hazard**

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

No data is available on the degradability of any ingredients in the mixture. Persistence and degradability

Bioaccumulative potential

Mobility in soil No data available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects potential, endocrine disruption, global warming potential) are expected from this component.

Material name: Insulcast 116 FRFC Black - Part A

13. Disposal considerations

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).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

UN3082 **UN number**

Environmentally hazardous substance, liquid, n.o.s. (Epoxy Resin:--reaction Product Of UN proper shipping name

Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin))

Transport hazard class(es)

9 Class Subsidiary risk Ш Packing group **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.

Allowed with restrictions. Cargo aircraft only

IMDG

UN3082 **UN number**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin:--reaction **UN proper shipping name**

Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)), MARINE POLLUTANT

Transport hazard class(es)

9 Subsidiary risk Ш Packing group

Environmental hazards

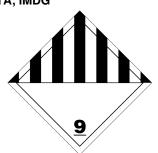
Marine pollutant Yes F-A. S-F **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Not established.

Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

IATA; IMDG



Material name: Insulcast 116 FRFC Black - Part A IE118R Version #: 03 Revision date: 06-25-2018 Issue date: 03-13-2014

Marine pollutant



General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Classified hazard

categories

Yes

Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation Respiratory or skin sensitization

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

California Proposition 65



WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of

California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Carbon Black (CAS 1333-86-4)
Ethyl Acrylate (CAS 140-88-5)
Ethyl Benzene (CAS 100-41-4)
Listed: February 21, 2003
Listed: July 1, 1989
Listed: June 11, 2004

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3,

subd. (a))

Carbon Black (CAS 1333-86-4)

International Inventories

Country(s) or region Inventory name On inventory (yes/no)*

Australia Australian Inventory of Chemical Substances (AICS) 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

(PICCS)

Taiwan Taiwan Chemical Substance Inventory (TCSI) No United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

Philippine Inventory of Chemicals and Chemical Substances

16. Other information, including date of preparation or last revision

New Zealand Inventory

Inventory name

03-13-2014 Issue date 06-25-2018 **Revision date**

Version # 03

Country(s) or region

New Zealand

Philippines

Health: 2 HMIS® ratings Flammability: 1

Physical hazard: 1

NFPA ratings Health: 2

> Flammability: 0 Instability: 1

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.

Product and Company Identification: Product and Company Identification **Revision information**

Hazard(s) identification: Prevention Hazard(s) identification: Response

Accidental release measures: Personal precautions, protective equipment and emergency

procedures

Accidental release measures: Methods and materials for containment and cleaning up

Handling and storage: Precautions for safe handling

Handling and storage: Conditions for safe storage, including any incompatibilities

Exposure controls/personal protection: Appropriate engineering controls

Physical & Chemical Properties: Multiple Properties

Stability and reactivity: Conditions to avoid Ecological information: Persistence / degradability Regulatory information: California Proposition 65

Other information, including date of preparation or last revision: References Other information, including date of preparation or last revision: Disclaimer

Material name: Insulcast 116 FRFC Black - Part A

SDS US

On inventory (yes/no)*

Yes

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).