SAFETY DATA SHEET

1. Identification

Product identifier Irathane 155 Orange - Side B

Other means of identification

FW55965B SKU# Recommended use Not available. None known. Recommended restrictions

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Holcim Solutions and Products US, LLC Company name **Address** 26 Century Boulevard, Suite 205

Nashville, Tennessee 37214

Telephone 1-800-878-7876 •

Website www.holcimfuturacoatings.com

Contact person EHS Department

For Chemical Emergency **Emergency phone number**

Spill, Leak, Fire, Exposure, or Incident

CHEMTREC:

Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1-703-527-3887

(collect calls accepted)

2. Hazard(s) identification

Flammable liquids Category 2 Acute toxicity, dermal Category 4 Physical hazards Health hazards Acute toxicity, inhalation Category 4 Serious eye damage/eye irritation Category 2A

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated

exposure

Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment,

long-term hazard

Not classified.

Label elements

Environmental hazards

OSHA defined hazards



Signal word Danger

Hazard statement Highly flammable liquid and vapor. Harmful in contact with skin. Causes serious eye irritation.

Harmful if inhaled. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Category 2

Category 2

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly

closed. Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary

measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective

gloves/protective clothing. Wear protective gloves/eye protection/face protection.

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If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Response

If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire:

Use appropriate media to extinguish. Collect spillage.

Storage Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place.

Keep cool. Store locked up.

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

Hazard(s) not otherwise classified (HNOC) Supplemental information Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

87.97% of the mixture consists of component(s) of unknown acute hazards to the aquatic

environment. 87.97% of the mixture consists of component(s) of unknown long-term hazards to

the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ETHYL ACETATE		141-78-6	60 - 100
Silicon Dioxide		112945-52-5	1 - 5
Titanium Dioxide		13463-67-7	1 - 5
Zeolites		1318-02-1	1 - 5
Other components below reportable levels			15 - 40

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

4. First-aid measures

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or Inhalation

artificial respiration if needed. Call a physician if symptoms develop or persist.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical

advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash

contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Rinse mouth. Get medical advice/attention if you feel unwell. Ingestion

Most important symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

Do not use water iet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

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Special protective equipment and precautions for firefighters

Fire fighting

equipment/instructions

Specific methods General fire hazards Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

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

Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. 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. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. 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. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage. including any incompatibilities Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

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8. Exposure controls/personal protection

Occupational exposure limits

PEL	1400 mg/m3	
	. 100 mg/mo	
	400 ppm	
PEL	15 mg/m3	Total dust.
R 1910.1000)		
Туре	Value	
TWA	0.8 mg/m3	
	20 mppcf	
Values		
Туре	Value	Form
TWA	400 ppm	
TWA	10 mg/m3	
TWA	1 mg/m3	Respirable fraction.
Chemical Hazards		
Туре	Value	
TWA	1400 mg/m3	
	400 ppm	
TWA	6 mg/m3	
	Type TWA Values Type TWA TWA TWA TWA Chemical Hazards Type TWA	PEL 15 mg/m3 Type Value TWA 0.8 mg/m3 20 mppcf Values Type Value TWA 400 ppm TWA 10 mg/m3 TWA 1 mg/m3 Chemical Hazards Type Value TWA 1400 mg/m3 400 ppm

Biological limit values

Appropriate engineering

controls

Explosion-proof general and local exhaust ventilation. 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. Eye wash

fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Chemical respirator with organic vapor cartridge and full facepiece. Eye/face protection

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

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

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. 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.

9. Physical and chemical properties

Liquid. **Appearance** Liquid. Physical state Liquid. **Form**

Color Gray or Orange Odor Strong. Solvent. **Odor threshold** Not available.

7 - 8 @ 5 Percent Solution Hq

Melting point/freezing point Not available.

Initial boiling point and boiling

range

> 170 °F (> 76.67 °C)

24.0 °F (-4.4 °C) Flash point

Evaporation rate > 1 BuAc Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

(%)

Not available.

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

Vapor density > 1

Not available. Relative density

Solubility(ies)

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

(n-octanol/water)

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

Other information

Density 8.45 lb/gal **Explosive properties** Not explosive.

Flammable IB estimated Flammability class

Oxidizing properties Not oxidizing.

Specific gravity 1.01 VOC 653 g/l

10. Stability and reactivity

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

Material is stable under normal conditions. Chemical stability Possibility of hazardous Hazardous polymerization does not occur.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials

Hazardous decomposition

products

reactions

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by Inhalation

inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.

Skin contact Harmful in contact with skin. Eye contact Causes serious eve irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the

physical, chemical and

toxicological characteristics May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

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Information on toxicological effects

Acute toxicity Harmful if inhaled. Harmful in contact with skin. Narcotic effects.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Silicon Dioxide (CAS 112945-52-5)

3 Not classifiable as to carcinogenicity to humans.

Titanium Dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

Zeolites (CAS 1318-02-1) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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

Specific target organ toxicity - single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects May cause damage to organs through prolonged or repeated exposure. 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 this product.

Bioaccumulative potential

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 considerations

Disposal instructionsCollect 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

DOT

UN number UN1139

UN proper shipping name Coating Solution

Material name: Irathane 155 Orange - Side B FW55965B Version #: 02 Revision date: 08-16-2016 Issue date: 12-08-2015 Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
Packing group ||

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions 149, IB2, T2, TP1, TP8

Packaging exceptions 150
Packaging non bulk 202
Packaging bulk 242

IATA

UN number UN1139

UN proper shipping name Coating Solution

Transport hazard class(es)

Class 3
Subsidiary risk Packing group II
Environmental hazards Yes
ERG Code 3H

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1139

UN proper shipping name Transport hazard class(es) Coating Solution, MARINE POLLUTANT

Class 3 Subsidiary risk -Packing group II

Environmental hazards

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

DOT



IATA; IMDG



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)

ETHYL ACETATE (CAS 141-78-6) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

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)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

ETHYL ACETATE (CAS 141-78-6) Low priority

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

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

(a))

Titanium Dioxide (CAS 13463-67-7)

US. Massachusetts RTK - Substance List

ETHYL ACETATE (CAS 141-78-6)

Silicon Dioxide (CAS 112945-52-5)

Titanium Dioxide (CAS 13463-67-7)

US. New Jersey Worker and Community Right-to-Know Act

ETHYL ACETATE (CAS 141-78-6)

Titanium Dioxide (CAS 13463-67-7)

US. Pennsylvania Worker and Community Right-to-Know Law

ETHYL ACETATE (CAS 141-78-6) Silicon Dioxide (CAS 112945-52-5) Titanium Dioxide (CAS 13463-67-7)

US. Rhode Island RTK

ETHYL ACETATE (CAS 141-78-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

 Benzene (CAS 71-43-2)
 Listed: February 27, 1987

 Carbon Black (CAS 1333-86-4)
 Listed: February 21, 2003

 Ethyl Benzene (CAS 100-41-4)
 Listed: June 11, 2004

 Titanium Dioxide (CAS 13463-67-7)
 Listed: September 2, 2011

US - California Proposition 65 - CRT: Listed date/Developmental toxin

 Benzene (CAS 71-43-2)
 Listed: December 26, 1997

 Toluene (CAS 108-88-3)
 Listed: January 1, 1991

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997

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)	No
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)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Toxic Substances Control Act (TSCA) Inventory

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

 Issue date
 12-08-2015

 Revision date
 08-16-2016

Version # 02

United States & Puerto Rico

HMIS® ratings Health: 2*

Flammability: 3 Physical hazard: 0

NFPA ratings Health: 2

Flammability: 3 Instability: 0

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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 in the sheet was written based on the best knowledge and experience

use. The information in the sheet was written based on the best knowledge and the

currently available.

Yes

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).

Revision information

Composition/information on ingredients: Component information

Fire-fighting measures: Suitable extinguishing media

Fire-fighting measures: Specific methods

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
Physical & Chemical Properties: Multiple Properties
Toxicological information: Carcinogenicity

HazReg Data: International Inventories

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