SAFETY DATA SHEET

1. Identification

Product identifier Insulcast RTVS Primer 44

Other means of identification

SKU# IS155R

Recommended use Not available.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

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

United States

Telephone Customer Service 215-855-8450

Website www.itwperformancepolymers.com

E-mail Not available.

Contact person EHS Department

Emergency phone number CHEMTREC 800-424-9300

International 703-527-3887

2. Hazard(s) identification

Physical hazardsFlammable liquidsCategory 2Health hazardsSerious eye damage/eye irritationCategory 2AGerm cell mutagenicityCategory 1BCarcinogenicityCategory 1B

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Aspiration hazard

Category 1
Category 2

Environmental hazards Hazardous to the aquatic environment, acute

hazard

Hazardous to the aquatic environment.

Category 2

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes serious

eye irritation. May cause respiratory irritation. May cause genetic defects. May cause cancer.

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Avoid breathing mist/vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish. Collect spillage.

Storage

Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal ard(s) not other

 $\label{local/regional/national/international regulations.} Dispose of contents/container in accordance with local/regional/national/international regulations.$

Hazard(s) not otherwise classified (HNOC)

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.

Supplemental information

91.5% of the mixture consists of component(s) of unknown acute oral toxicity. 91.5% of the mixture consists of component(s) of unknown acute dermal toxicity. 3% of the mixture consists of component(s) of unknown acute inhalation toxicity. 29% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 29% 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	%
Naphtha (petroleum), Heavy Straight-run		64741-41-9	40 - 70
Ethyl Silicate		78-10-4	10 - 30
1-butanol		71-36-3	1 - < 3
Other components below reportable levels			5 - 10

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

4. First-aid measures

InhalationRemove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

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

attention if irritation develops and persists.

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 Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Aspiration may cause pulmonary edema and pneumonitis. Dizziness. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed

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 under observation. Symptoms may be delayed.

General information

Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. 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 jet 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.

Special protective equipment and precautions for firefighters

and precautions for firefighte

equipment/instructions

equipment/instruction
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. Avoid breathing mist/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

Use water spray to reduce vapors or divert vapor cloud drift. 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 product from entering drains.

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.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. 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. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. 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. Avoid contact with eyes. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. 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 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).

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.

Components	Туре	Value
1-butanol (CAS 71-36-3)	PEL	300 mg/m3
		100 ppm
Ethyl Silicate (CAS 78-10-4)	PEL	850 mg/m3
		100 ppm
Naphtha (petroleum), Heavy Straight-run (CAS 64741-41-9)	PEL	400 mg/m3
,		100 ppm
US. ACGIH Threshold Limit Values		
Components	Туре	Value
1-butanol (CAS 71-36-3)	TWA	20 ppm
Ethyl Silicate (CAS 78-10-4)	TWA	10 ppm
US. NIOSH: Pocket Guide to Chemical	Hazards	
Components	Туре	Value
1-butanol (CAS 71-36-3)	Ceiling	150 mg/m3
		50 ppm
Ethyl Silicate (CAS 78-10-4)	TWA	85 mg/m3
		10 ppm
Naphtha (petroleum), Heavy Straight-run (CAS 64741-41-9)	TWA	400 mg/m3
		100 ppm

Biological limit values

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

Exposure guidelines

US - California OELs: Skin designation

1-butanol (CAS 71-36-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

1-butanol (CAS 71-36-3) Skin designation applies.

US - Tennessee OELs: Skin designation

1-butanol (CAS 71-36-3)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

1-butanol (CAS 71-36-3) Can be absorbed through the skin.

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 and safety shower.

Individual protection measures, such as personal protective equipment

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

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

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.

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General hygiene considerations

Observe any medical surveillance requirements. 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

Appearance

Liquid. Physical state **Form** Liquid. Clear. Color

Odor Not available. Not available. Odor threshold Not available. рH Melting point/freezing point Not available.

Initial boiling point and boiling

240 - 278 °F (115.56 - 136.67 °C)

range

40.0 °F (4.4 °C) Flash point **Evaporation rate** 1.6 BuAc Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%) 45 mm Ha Vapor pressure Not available. Vapor density Not available. Relative density

Solubility(ies)

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

(n-octanol/water)

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

Other information

Density 6.92 lb/gal **Explosive properties** Not explosive.

Flammable IB estimated Flammability class

Not oxidizing. Oxidizing properties

Specific gravity 0.83

VOC 75 - 100 %

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 Hazardous polymerization does not occur.

reactions Conditions to avoid

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

temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Material name: Insulcast RTVS Primer 44 IS155R Version #: 02 Revision date: 07-16-2018 Issue date: 04-22-2017 **Skin contact** No adverse effects due to skin contact are expected.

Eve contact Causes serious eye irritation.

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious

chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Aspiration may cause pulmonary edema and pneumonitis. Dizziness. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause

respiratory irritation.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components Species Test Results

1-butanol (CAS 71-36-3)

Acute

Dermal

LD50 Rabbit 3400 mg/kg

Oral

LD50 Rat 790 mg/kg

Naphtha (petroleum), Heavy Straight-run (CAS 64741-41-9)

Acute

Inhalation

LC50 Rat 61 mg/l, 4 Hours

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 mutagenicity May cause genetic defects.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

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

Specific target organ toxicity -

single exposure

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

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-octanol / water (log Kow)

1-butanol 0.88

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation

potential.

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13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the **Disposal instructions**

> material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations

Hazardous waste code

Dispose in accordance with all applicable regulations.

D001: Waste Flammable material with a flash point <140 F 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

UN number UN1263

UN proper shipping name Transport hazard class(es) Paint related material including paint thinning, drying, removing, or reducing compound

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

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

B1, B52, IB3, T2, TP1, TP29 Special provisions

Packaging exceptions 150 Packaging non bulk 173 Packaging bulk 242

IATA

UN number UN1263

UN proper shipping name Transport hazard class(es) Paint related material including paint thinning, drying, removing, or reducing compound

Class 3 Subsidiary risk _ 3 Label(s) Ш Packing group **Environmental hazards** No.

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

IMDG

UN number UN1263

UN proper shipping name Transport hazard class(es) Paint related material including paint thinning, drying, removing, or reducing compound

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

Environmental hazards

Marine pollutant Nο

Not available. **EmS**

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

the IBC Code

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

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IATA; IMDG



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)

1-butanol (CAS 71-36-3)

Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

1-butanol (CAS 71-36-3) % 1.0

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

1-butanol (CAS 71-36-3) Listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Flammable (gases, aerosols, liquids, or solids)

Classified hazard categories

Acute toxicity (any route of exposure) Serious eye damage or eye irritation

Germ cell mutagenicity

Carcinogenicity

Specific target organ toxicity (single or repeated exposure)

Aspiration hazard

Hazard not otherwise classified (HNOC)

SARA 313 (TRI reporting)

 Chemical name
 CAS number
 % by wt.

 1-butanol
 71-36-3
 1 - < 3</td>

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.

Not regulated.

(SDWA)

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

1-butanol (CAS 71-36-3) Low priority

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

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

Naphtha (petroleum), Heavy Straight-run (CAS 64741-41-9)

Inventory name

International Inventories

Taiwan

country(s).

Country(s) or region

oountily(3) or region	inventory name	On inventory (yes/no)
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
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)	Yes
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

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

Taiwan Chemical Substance Inventory (TCSI)

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

 Issue date
 04-22-2017

 Revision date
 07-16-2018

Version # 02

HMIS® ratings Health: 3* Flammability: 3

Physical hazard: 1

NFPA ratings Health: 3

Flammability: 3 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.

Revision information This document has undergone significant changes and should be reviewed in its entirety.

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On inventory (yes/no)*

Yes