SAFETY DATA SHEET

1. Identification

1. Identification			
Product identifier	DEVCON® Brushable Cer	amic Blue Resin	
Other means of identification			
SKU#	0144		
Recommended use	Not available.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier	Distributor information		
Manufacturer			
Company name	ITW Performance Polymers	3	
Address	30 Endicott Street		
	Danvers, MA 01923 United States		
Telephone	Customer Service	978-777-1100	
Website	www.itwperformancepolyme		
E-mail	Not available.		
Contact person	EHS Department		
Emergency phone number	Chemtrec International	800-424-9300	
		703-527-3887	
2. Hazard(s) identification	1		
Physical hazards	Not classified.		
Health hazards	Skin corrosion/irritation		Category 2
	Serious eye damage/eye iri	ritation	Category 2A
	Sensitization, skin		Category 1
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
	$\mathbf{\wedge}$		
	•		
Signal word	Warning		
Hazard statement	Causes skin irritation. May	cause an allergic s	skin reaction. Causes serious eye irritation.
Precautionary statement			
Prevention	Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. 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.		
Storage	Store away from incompatik	ole materials.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	None.		

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%		
Aluminium Oxide		1344-28-1	40 - 60		
Epoxy Resin:reaction Product Bisphenol A And Epichlorohydri (refer To Epichlorohydrin)		25068-38-6	40 - 60		
Other components below report	able levels		10 - 20		
4. First-aid measures					
Inhalation	Move to fresh air. Call a physician if symptom	ns develop or persist.			
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In c eczema or other skin disorders: Seek medical attention and take along these instruc contaminated clothing before reuse.				
Eye contact		nmediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if resent and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.			
Ingestion	Rinse mouth. Get medical attention if sympto	oms 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. Derma 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					
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Cark	oon 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 con	nsider the hazards of other invo	olved materials.		
General fire hazards	No unusual fire or explosion hazards noted.				
6. Accidental release mea	sures				
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep pe appropriate protective equipment and clothing not touch damaged containers or spilled mate Ensure adequate ventilation. Local authorities contained. For personal protection, see section	g during clean-up. Avoid breat erial unless wearing appropria s should be advised if significa	hing mist/vapors. Do te protective clothing.		
Methods and materials for containment and cleaning up containment and cleaning up containment and cleaning up					
	Small Spills: Wipe up with absorbent materia remove residual contamination.	l (e.g. cloth, fleece). Clean sur	face thoroughly to		
Environmental precautions	Never return spills to original containers for re Avoid discharge into drains, water courses or		e section 13 of the SDS		
7. Handling and storage					
Precautions for safe handling	Avoid breathing mist/vapors. Avoid contact w exposure. Provide adequate ventilation. Wea good industrial hygiene practices.				
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away solution SDS).	from incompatible materials (s	ee Section 10 of the		

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	Form		
Aluminium Oxide (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.		
		15 mg/m3	Total dust.		
US. OSHA Table Z-3 (29 C	-		_		
Components	Туре	Value	Form		
Aluminium Oxide (CAS 1344-28-1)	TWA	5 mg/m3	Respirable fraction.		
		15 mg/m3	Total dust.		
		50 mppcf	Total dust.		
		15 mppcf	Respirable fraction.		
US. ACGIH Threshold Lim	it Values				
Components	Туре	Value	Form		
Aluminium Oxide (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.		
In where I through the later of	No biological exposure limits noted for the ingredient(s).				
logical limit values	no biological exposure limits noted ic	or the ingredient(s).			
propriate engineering htrols	Good general ventilation should be us applicable, use process enclosures, l maintain airborne levels below recom established, maintain airborne levels shower.	sed. Ventilation rates should b ocal exhaust ventilation, or ot mended exposure limits. If ex	her engineering controls to posure limits have not been		
propriate engineering htrols ividual protection measure	Good general ventilation should be us applicable, use process enclosures, I maintain airborne levels below recom established, maintain airborne levels shower. s, such as personal protective equipm	sed. Ventilation rates should b ocal exhaust ventilation, or ot mended exposure limits. If ex to an acceptable level. Provid ent	her engineering controls to posure limits have not been le eyewash station and safet		
propriate engineering htrols	Good general ventilation should be us applicable, use process enclosures, I maintain airborne levels below recom established, maintain airborne levels shower.	sed. Ventilation rates should b ocal exhaust ventilation, or ot mended exposure limits. If ex to an acceptable level. Provid ent	her engineering controls to posure limits have not been le eyewash station and safet		
propriate engineering htrols ividual protection measure Eye/face protection Skin protection	Good general ventilation should be us applicable, use process enclosures, I maintain airborne levels below recom established, maintain airborne levels shower. s, such as personal protective equipm Wear safety glasses with side shields	sed. Ventilation rates should b ocal exhaust ventilation, or ot imended exposure limits. If ex to an acceptable level. Provid ent s (or goggles). Face shield is r	her engineering controls to posure limits have not been le eyewash station and safet		
propriate engineering htrols ividual protection measure Eye/face protection	Good general ventilation should be us applicable, use process enclosures, I maintain airborne levels below recom established, maintain airborne levels shower. s, such as personal protective equipm	sed. Ventilation rates should b ocal exhaust ventilation, or ot imended exposure limits. If ex to an acceptable level. Provid ent s (or goggles). Face shield is r	her engineering controls to posure limits have not been le eyewash station and safet		
propriate engineering htrols ividual protection measure Eye/face protection Skin protection	Good general ventilation should be us applicable, use process enclosures, I maintain airborne levels below recom established, maintain airborne levels shower. s, such as personal protective equipm Wear safety glasses with side shields	sed. Ventilation rates should b ocal exhaust ventilation, or ot imended exposure limits. If ex to an acceptable level. Provid ent s (or goggles). Face shield is r gloves.	her engineering controls to posure limits have not been le eyewash station and safet recommended.		
propriate engineering htrols ividual protection measure Eye/face protection Skin protection Hand protection	Good general ventilation should be us applicable, use process enclosures, I maintain airborne levels below recom established, maintain airborne levels shower. s, such as personal protective equipm Wear safety glasses with side shields Wear appropriate chemical resistant	sed. Ventilation rates should b ocal exhaust ventilation, or ot imended exposure limits. If ex to an acceptable level. Provid ent s (or goggles). Face shield is r gloves. clothing. Use of an impervious	her engineering controls to posure limits have not been le eyewash station and safet recommended. s apron is recommended.		
ividual protection measure Eye/face protection Skin protection Hand protection Other	Good general ventilation should be us applicable, use process enclosures, I maintain airborne levels below recom established, maintain airborne levels shower. s, such as personal protective equipm Wear safety glasses with side shields Wear appropriate chemical resistant Wear appropriate chemical resistant	sed. Ventilation rates should b ocal exhaust ventilation, or ot imended exposure limits. If ex to an acceptable level. Provid ent s (or goggles). Face shield is r gloves. clothing. Use of an impervious	her engineering controls to posure limits have not been le eyewash station and safet recommended. s apron is recommended.		

Appearance	Viscous. Liquid.
Physical state	Liquid.
Form	Viscous. Liquid.
Color	Blue.
Odor	Slight.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	608 °F (320 °C) estimated
Flash point	265.0 °F (129.4 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.20 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Oxidizing properties	Not oxidizing.
Specific gravity	1.2 estimated
VOC	0 g/l

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.
Conditions to avoid	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 e	xposure
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	Knowledge about health hazard is incomplete.
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 eff	ects
Acute toxicity	Not known.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	1
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.

Carcinogenicity	Due to partial or complete lack of data the classification is not possible.
IARC Monographs. Overall I	Evaluation of Carcinogenicity
Not listed.	
	d Substances (29 CFR 1910.1001-1053)
Not listed.	ogram (NTP) Report on Carcinogens
Not listed.	by an (NTP) hepoir on Carcinogens
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity -	Due to partial or complete lack of data the classification is not possible.
single exposure	
Specific target organ toxicity -	Due to partial or complete lack of data the classification is not possible.
repeated exposure	
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Chronic effects	Prolonged inhalation may be harmful.
12. Ecological information	n
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
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 consideratio	ns
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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

Not regulated as dangerous goods.

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

% 1.0

Listed.

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

Aluminium Oxide (CAS 1344-28-1)

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

Aluminium Oxide (CAS 1344-28-1)

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Exp	oort Notification (40 CF	R 707, Subpt. D)		
Not regulated.				
CERCLA Hazardous Substa	nce List (40 CFR 302.4	ł)		
Not listed. SARA 304 Emergency releas	se notification			
Not regulated.				
OSHA Specifically Regulate Not listed.	d Substances (29 CFR	1910.1001-1053)		
Superfund Amendments and Re	authorization Act of 1	986 (SARA)		
SARA 302 Extremely hazard Not listed.				
SARA 311/312 Hazardous	Yes			
chemical	165			
Classified hazard	Skin corrosion or irrita			
categories	Serious eye damage Respiratory or skin se			
SARA 313 (TRI reporting)				
Chemical name		CAS number	% by wt.	
Aluminium Oxide		1344-28-1	40 - 60	
Other federal regulations				
Clean Air Act (CAA) Section	112 Hazardous Air Po	ollutants (HAPs) List		
Not regulated. Clean Air Act (CAA) Section	112(r) Accidental Rel	ease Prevention (40 C	FR 68.130)	
Not regulated.			-	
Safe Drinking Water Act (SDWA)	Contains component(s) regulated under the \$	Safe Drinking Water Act.	
US state regulations				
California Proposition 65				
WARNING: Th Ca		and birth defects or oth	ng Benzene, which is kn ner reproductive harm. F	
California Proposition 6				
Ethyl Acrylate (CAS		Listed: July 1		
Ethyl Benzene (CAS		Listed: June		
Quartz (CAS 14808-	60-7)	Listed: Octob		
California Proposition 6	5 - CRT: Listed date/D	evelopmental toxin		
Toluene (CAS 108-8	8-3)	Listed: Janua	ry 1, 1991.	
International Inventories				
Country(s) or region	Inventory name			On inventory (yes/no)*
Australia	Australian Inventory o	f Chemical Substances	(AICS)	No
Canada	Domestic Substances	List (DSL)		No
Canada	Non-Domestic Substa	inces List (NDSL)		No
China	Inventory of Existing (Chemical Substances ir	ι China (IECSC)	Yes
Europe	European Inventory o Substances (EINECS	f Existing Commercial ()	Chemical	No
Europe	European List of Notif	ied Chemical Substanc	es (ELINCS)	No
Japan	Inventory of Existing a	and New Chemical Sub	stances (ENCS)	No
Korea	Existing Chemicals Li	st (ECL)		No
New Zealand	New Zealand Inventor	ry		Yes
Philippines	Philippine Inventory o (PICCS)	f Chemicals and Chemi	ical Substances	No
Taiwan	. ,	stance Inventory (TCSI	i)	Yes
United States & Puerto Rico		ntrol Act (TSCA) Invent		Yes
*A "Yes" indicates that all compor A "No" indicates that one or more	nents of this product compl	ly with the inventory requir	ements administered by the	

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, including date of preparation or last revision

Issue date	05-29-2019
Revision date	04-29-2020
Version #	02
HMIS® ratings	Health: 2 Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 1 Instability: 0
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.

SAFETY DATA SHEET

1. Identification

1. Identification			
Product identifier	DEVCON® Brushable Cer	amic Blue Harder	ner
Other means of identification			
SKU#	5442		
Recommended use	Not available.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier	/Distributor information		
Manufacturer			
Company name	ITW Performance Polymers	;	
Address	30 Endicott Street Danvers, MA 01923		
	United States		
Telephone	Customer Service	978-777-1100	
Website	www.itwperformancepolyme	ers.com	
E-mail	Not available.		
Contact person Emergency phone number	EHS Department Chemtrec	800-424-9300	
Emergency phone number	International	703-527-3887	
2. Hazard(s) identification	`		
Physical hazards	Not classified.		
Health hazards	Acute toxicity, oral		Category 4
	Acute toxicity, inhalation		Category 4
	Skin corrosion/irritation	·· - · · - ·	Category 1
	Serious eye damage/eye irr	itation	Category 1
Fundamental baranda	Sensitization, skin		Category 1A
Environmental hazards	Not classified. Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
	\triangle		
	L &		
Signal word	Danger		
Hazard statement	0	es severe skin bur	ns and eye damage. May cause an allergic skin
	reaction. Causes serious ey		
Precautionary statement			
Prevention			after handling. Do not eat, drink or smoke when
			vell-ventilated area. Contaminated work clothing ar protective gloves/protective clothing/eye
	protection/face protection.		
Response			pmiting. If on skin (or hair): Take off immediately all
			shower. If inhaled: Remove person to fresh air and se cautiously with water for several minutes.
	Remove contact lenses, if p	resent and easy to	o do. Continue rinsing. Immediately call a poison
		on or rash occurs:	Get medical advice/attention. Wash contaminated
Storage	clothing before reuse.		
Storage	Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.		
Disposal	Dispose of contents/contain	er in accordance	with local/regional/national/international regulations.

None known.

clothing before reuse.

None.

Supplemental information

3. Composition/information on ingredients

Mixtures

Mixtures				
Chemical name	Common name and synonyms	CAS number	%	
Benzyl Alcohol		100-51-6	20 - 40	
Formaldehyde, Polymer With Benzenamine, Hydrogenated		135108-88-2	20 - 40	
Benzene-1,3-dimethaneamine		1477-55-0	10 - 20	
Other components below report	rtable levels		20 - 40	
4. First-aid measures				
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.			
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.			
Eye contact	Immediately flush eyes with plenty of water for present and easy to do. Continue rinsing. Ca			
Ingestion	Call a physician or poison control center imm vomiting occurs, keep head low so that stom			
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.			
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and tre immediately. While flushing, remove clothes ambulance. Continue flushing during transpo observation. Symptoms may be delayed.	which do not adhere to affect	ed area. Call an	
General information	Ensure that medical personnel are aware of t protect themselves. Show this safety data sh			

5. Fire-fighting measures

J J	
Suitable extinguishing media	Foam. 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 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. Do not breathe mist/vapors. 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.
Methods and materials for 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.

7. Handling and storage	
Precautions for safe handling	Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. 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. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in tightly closed container. Store in a well-ventilated place. 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.

US. ACGIH Threshold Limit Components	Values Type	Value		
Benzene-1,3-dimethaneami ne (CAS 1477-55-0)	Ceiling	0.1 mg/m3		
US. NIOSH: Pocket Guide to	Chemical Hazards			
Components	Туре	Value		
Benzene-1,3-dimethaneami ne (CAS 1477-55-0)	Ceiling	0.1 mg/m3		
US. Workplace Environmen Components	tal Exposure Level (WEEL) Gu Type	ides Value		
Benzyl Alcohol (CAS 100-51-6)	TWA	44.2 mg/m3		
		10 ppm		
Biological limit values	No biological exposure limits r	noted for the ingredient(s).		
Exposure guidelines				
US - California OELs: Skin o	lesignation			
	Benzene-1,3-dimethaneamine (CAS 1477-55-0) Can be absorbed through the skin. US - Tennessee OELs: Skin designation			
Benzene-1,3-dimethaneamine (CAS 1477-55-0) Can be absorbed through the skin. US ACGIH Threshold Limit Values: Skin designation				
Benzene-1,3-dimethanea US NIOSH Pocket Guide to	ımine (CAS 1477-55-0) Chemical Hazards: Skin desig	Can be absorbed through the skin. nation		
Benzene-1,3-dimethanea	umine (CAS 1477-55-0)	Can be absorbed through the skin.		
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. Eye wash facilities and emergency shower must be available when handling this product.			
Individual protection measures,				
Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield. 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	Keep away from food and drink. 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 properties

9. Physical and chemical	properties	
Appearance	Liquid.	
Physical state	Liquid.	
Form	Liquid.	
Color	Amber.	
Odor	Ammoniacal.	
Odor threshold	Not available.	
рН	Not available.	
Melting point/freezing point	4.64 °F (-15.2 °C) estimated	
Initial boiling point and boiling range	401.54 °F (205.3 °C) estimated	
Flash point	212.0 °F (100.0 °C) estimated	
Evaporation rate	Not available.	
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.	
Vapor pressure	0.13 hPa estimated	
Vapor density	Not available.	
Relative density	Not available.	
Solubility(ies)		
Solubility (water)	Not available.	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	816.8 °F (436 °C) estimated	
Decomposition temperature	Not available.	
Viscosity	Not available.	
Other information		
Density	1.09 g/cm3 estimated	
Explosive properties	Not explosive.	
Flammability class	Combustible IIIB estimated	
Oxidizing properties	Not oxidizing.	
Specific gravity	1.09 estimated	
VOC	0 g/l	
10 Stability and reactivity		

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	Hazardous polymerization does not occur.
Conditions to avoid	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

Harmful if inhaled.

Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

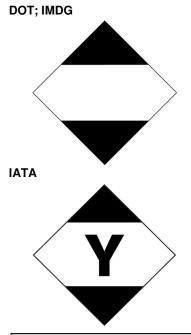
Information on toxicological effects

Acute toxicity	Harmful if inhaled. Harmful if swall	owed.	
Components	Species	Test Results	
Benzyl Alcohol (CAS 100-51-6)			
Acute			
Dermal			
LD50	Rabbit	2000 mg/kg	
Inhalation LC50	Rat	1000 mg/l, 8 Hours	
Oral	nat	1000 mg/l, 0 mours	
LD50	Rat	1230 - 3100 mg/kg	
Skin corrosion/irritation	Causes severe skin burns and eve	Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation	Causes serious eye damage.		
Respiratory or skin sensitizatio	n		
Respiratory sensitization	Due to partial or complete lack of c	data the classification is not possible.	
Skin sensitization	May cause an allergic skin reaction	n.	
Germ cell mutagenicity	Due to partial or complete lack of o	data the classification is not possible.	
Carcinogenicity	Due to partial or complete lack of o	data the classification is not possible.	
• •	Evaluation of Carcinogenicity		
	ed Substances (29 CFR 1910.1001-	1053)	
	ogram (NTP) Report on Carcinoger	ns	
Not listed.			
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.		
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.		
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.		
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.		
Chronic effects	Prolonged inhalation may be harm	ıful.	
12. Ecological informatio	n		
Ecotoxicity		vironmentally hazardous. However, this does not exclude the ills can have a harmful or damaging effect on the environment.	
Persistence and degradability		lability of any ingredients in the mixture.	
Bioaccumulative potential			
Partition coefficient n-octanol / water (log Kow) Benzyl Alcohol 1.1			
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 consideration	ons		
Disposal instructions		sealed containers at licensed waste disposal site. Incinerate the ns in an approved incinerator. Dispose of contents/container in ional/international regulations.	

Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or $=>12.5$, or corrosive to steel] 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	UN2735
UN proper shipping name	Amines, liquid, corrosive, n.o.s, or Polyamines, liquid, corrosive, n.o.s.
	(Benzene-1,3-dimethaneamine), Limited Quantity
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
Packing group	
· ·	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB3, T7, TP1, TP28
Packaging exceptions	154
Packaging non bulk	203
Packaging bulk	241
UN number	UN2735
UN proper shipping name	Amines, liquid, corrosive, n.o.s. (Benzene-1,3-dimethaneamine), Limited Quantity
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	 N-
Environmental hazards	No. 8L
ERG Code	o∟ Read safety instructions, SDS and emergency procedures before handling.
Other information	Read salely instructions, SDS and emergency procedures before nandling.
	Allowed with restrictions.
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
IMDG	
UN number	UN2735
UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.
•••• h•• h••• •••• hh••••3 ••••••	(Benzene-1,3-dimethaneamine), Limited Quantity
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
	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	



15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Toxic Substances Control A	Act (TSCA)
TSCA Section 12(b) Exp	port Notification (40 CFR 707, Subpt. D)
Not regulated.	
CERCLA Hazardous Substa	nce List (40 CFR 302.4)
Not listed.	
SARA 304 Emergency released	se notification
Not regulated.	
	d Substances (29 CFR 1910.1001-1053)
Not listed.	
	eauthorization Act of 1986 (SARA)
SARA 302 Extremely hazard	ious substance
Not listed.	
SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	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
· · ·	112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.	
Safe Drinking Water Act (SDWA)	Not regulated.
US state regulations	
California Proposition 65	
is not known to contain a	Nater and Toxic Enforcement Act of 1986 (Proposition 65): This material ny chemicals currently listed as carcinogens or reproductive toxins. For ww.P65Warnings.ca.gov.

International Inventories

Country(s) 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)	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, including date of preparation or last revision

-	v i i
Issue date	05-29-2019
Revision date	04-29-2020
Version #	02
HMIS® ratings	Health: 3 Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 3 Flammability: 1 Instability: 0
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	Composition/information on ingredients: Component information Stability and reactivity: Conditions to avoid Toxicological information: Aspiration hazard Toxicological information: Carcinogenicity Toxicological information: Mutagenicity Toxicological information: Reproductivity Toxicological information: Respiratory sensitization Toxicological information: Skin contact Toxicological information: Skin contact Toxicological information: Specific target organ toxicity - repeated exposure Toxicological information: Specific target organ toxicity - single exposure