SAFETY DATA SHEET

1. Identification	
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1. Identification				
Product identifier	Putty Hardener			
Other means of identification				
SKU#	0200C			
Recommended use		Not available.		
Recommended restrictions	None known.			
Manufacturer/Importer/Supplier/	Distributor information			
Manufacturer				
Company name	ITW Performance Polymers 30 Endicott Street			
Address	Danvers, MA 01923			
	United States			
Telephone	Customer Service	978-777-1100		
Website	www.itwperformancepolyme	rs.com		
E-mail	Not available.			
Contact person	EHS Department Chemtrec	800-424-9300		
Emergency phone number	International	703-527-3887		
2 Upperd(a) identification				
2. Hazard(s) identification				
Physical hazards	Not classified.			
Health hazards	Acute toxicity, dermal		Category 4	
	Skin corrosion/irritation		Category 2	
	Serious eye damage/eye irri	tation	Category 1	
	Sensitization, skin		Category 1	
Environmental hazards	Not classified.			
OSHA defined hazards	Not classified.			
Label elements				
	$\wedge \wedge$			
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Signal word	Danger			
Hazard statement	Harmful in contact with skin. serious eye damage.	Causes skin irrita	ation. May cause an allergic skin reaction. Causes	
Precautionary statement	schous cyc damage.			
Prevention	Avoid breathing dust/fume/g	as/mist/vapors/sp	ray. Wash thoroughly after handling. Contaminated	
		lowed out of the w	vorkplace. Wear eye protection/face protection.	
Response			s: Rinse cautiously with water for several minutes.	
	Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.			
Storage	Not available.	•		
Disposal	Dispose of contents/contained	er in accordance v	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	%
Aliphatic Amines		N/A	40 - 60
Benzyl Alcohol		100-51-6	20 - 40
TRIETHYLENETETRAMINE	ТЕТА	112-24-3	20 - 40
Silicon Dioxide	Silica, amorphous, fumed, crystfree	112945-52-5	2.5 - 10
Titanium Dioxide	TITANIUM DIOXIDE	13463-67-7	0.1 - 1
Other components below repo	rtable levels		0.1 - 1
4. First-aid measures			
nhalation	Move to fresh air. Call a physician if symptoms develop or persist.		
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.		
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if		

	present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. 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. Show this safety data sheet to the doctor in attendance. Wash contaminated

clothing before reuse.

5. Fire-fighting measures	
Suitable extinguishing media	Water spray. Alcohol resistant 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	Use water spray to cool unopened containers.
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 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. Following product recovery, flush area with water.
	Small Spills: 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 discharge into drains, water courses or onto the ground.

Handling and storage			
ecautions for safe handling	Do not get this material in contact with e	eves Avoid breathing dust/fum	e/gas/mist/vapors/sprav
scautions for sale liditutilly	Avoid contact with eyes, skin, and cloth adequate ventilation. Wear appropriate after handling. Wash contaminated cloth practices.	ing. When using, do not eat, dr personal protective equipment	ink or smoke. Provide . Wash hands thoroughly
nditions for safe storage, cluding any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).		
Exposure controls/pers	sonal protection		
	e the only constituents of the product whicl uents have no known exposure limits.	h have a PEL, TLV or other rec	commended exposure lim
US. OSHA Table Z-1 Permis Components	ssible Exposure Limits (PEL) for Air Con Type	ntaminants (29 CFR 1910.100 Value	0) Form
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
US. OSHA Table Z-3 Permis Components	ssible Exposure Limits (PEL) for Minera Type	l Dusts (29 CFR 1910.1000) Value	Form
Silicon Dioxide (CAS 112945-52-5)	TWA	0.8 mg/m3	
		20 mppcf	
Titanium Dioxide (CAS 13463-67-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
US. ACGIH Threshold Limit Components	t Values (TLV) Type	Value	Form
Titanium Dioxide (CAS 13463-67-7)	TWA	2.5 mg/m3	Respirable finescale particles
		0.2 mg/m3	Respirable nanoscale particles
NIOSH. Immediately Dange Components	rous to Life or Health (IDLH) Values, as Type	amended Value	
Titanium Dioxide (CAS	IDLH	5000 mg/m3	
13463-67-7)	o Chemical Hazards Recommended Ex	occure Limite (REL)	
Components		Value	
Silicon Dioxide (CAS 112945-52-5)	TWA	6 mg/m3	
US. OARS. Workplace Envi Components	ronmental Exposure Level (WEEL) Guid Type	de Value	
Benzyl Alcohol (CAS 100-51-6)	TWA	44.2 mg/m3	
100-01-0)		10 ppm	
		6 mg/m2	
TRIETHYLENETETRAMIN F (CAS 112-24-3)	TWA	6 mg/m3	
TRIETHYLENETETRAMIN E (CAS 112-24-3)	TWA	1 ppm	
	TWA No biological exposure limits noted for t	1 ppm	
E (CAS 112-24-3)	No biological exposure limits noted for t Occupational Exposure Limits are not re	1 ppm he ingredient(s).	form of the product.

Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.
Individual protection measures, s	such as personal protective equipment
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	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	Paste.
Physical state	Solid.
Form	Paste.
Color	White
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	420.8 °F (216 °C) estimated
Flash point	>199.9 °F (>93.3 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	5.73 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	640 °F (337.78 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.00 g/cm3 estimated
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Specific gravity	1 estimated
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	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Peroxides. Phenols.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

LD50

Oral *Liquid* LD50

Skin corrosion/irritation

Serious eye damage/eye

Respiratory or skin sensitization Respiratory sensitization

irritation

11. Toxicological Informa	ation			
Information on likely routes of	exposure			
Inhalation	No adverse effects due to inhalation are expected.			
Skin contact	Harmful in contact with skin. Causes sk	Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.		
Eye contact	Causes serious eye damage.			
Ingestion	Expected to be a low ingestion hazard.			
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.			
Information on toxicological eff	fects			
Acute toxicity	Harmful in contact with skin.			
Components	Species	Test Results		
Benzyl Alcohol (CAS 100-51-6)				
Acute				
Dermal				
LD50	Rabbit	2000 mg/kg		
Inhalation				
LC50	Rat	> 4.17799999999999999 mg/l, 4 Hours		
Oral LD50	Rat	1220 - 2100 mg/kg		
		1230 - 3100 mg/kg		
Silicon Dioxide (CAS 112945-52-	5)			
<u>Acute</u> Oral				
LD50	Rat	> 22500 mg/kg		
Titanium Dioxide (CAS 13463-67-	-7)			
Acute	,			
Dermal				
LD50	Hamster	>= 10000 mg/kg		
Oral				
LD50	Rat	> 10000 mg/kg		
TRIETHYLENETETRAMINE (CA	S 112-24-3)			
<u>Acute</u>				
Dermal				
Liquid				

1465 mg/kg

1716 mg/kg

 Skin sensitization
 May cause an allergic skin reaction.

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Rat

Rat

Causes skin irritation.

Causes serious eye damage.

Not a respiratory sensitizer.

Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall I	Evaluation of Carcinogenicity	
Silicon Dioxide (CAS 112 Titanium Dioxide (CAS 13 OSHA Specifically Regulate Not listed.	945-52-5) 3 Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
12. Ecological information	۱	
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		
Partition coefficient n-octan Benzyl Alcohol	ol / water (log Kow) 1.1	
Mobility in soil	No data available.	
Other adverse effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.	
13. Disposal consideration	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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable. 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 Act (TSCA)

TSCA Section 12(b) Ex	oport Notification (40	CFR 707, Subpt. D)	
Not regulated.			
CERCLA Hazardous Subst	ance List (40 CFR 30	2.4)	
Not listed.			
SARA 304 Emergency rele	ase notification		
Not regulated.			
OSHA Specifically Regulat	ted Substances (29 C	FR 1910.1001-1053)	
Not listed.			
Superfund Amendments and R		1986 (SARA)	
SARA 302 Extremely haza Not listed.	rdous substance		
SARA 311/312 Hazardous	Yes		
chemical	Tes		
Classified hazard	Acute toxicity (any		
categories	Skin corrosion or in Serious eye damag		
	Respiratory or skin	· ·	
SARA 313 (TRI reporting)			
Not regulated.			
Other federal regulations			
Clean Air Act (CAA) Sectio	on 112 Hazardous Air	Pollutants (HAPs) List	
Not regulated.			
	on 112(r) Accidental R	Release Prevention (40 CFR 68.130)	
Not regulated.			
Safe Drinking Water Act (SDWA)	Not regulated.		
US state regulations			
US. California. Candidate ((a))	Chemicals List. Safer	Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.	
Titanium Dioxide (CAS	13463-67-7)		
California Proposition 65			
		e you to Titanium Dioxide, which is known to the State of California to information go to www.P65Warnings.ca.gov.	
California Proposition	65 - CRT: Listed date	e/Carcinogenic substance	
Titanium Dioxide (CAS 13463-67-7) Listed: September 2, 2011			
International Inventories			

Country(s) or region	Inventory name On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	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)	Yes
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 "Vee" indicates that all some	nexts of this product comply with the invertery requirements administered by the governing country(a)	

*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

Issue date	07-03-2019
Revision date	08-02-2023
Version #	13
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.