

Version 4.0

Revision Date 10/30/2013

Ref. 130000027635

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name MSDS Number	:	DuPont <sup>™</sup> StoneTech <sup>®</sup> Professional Klenzall <sup>™</sup> Concentrate 130000027635
Manufacturer	:	DuPont 1007 Market Street Wilmington, DE 19898
Product Information Medical Emergency Transport Emergency	:	1-800-441-7515 (outside the U.S. 1-302-774-1000) 1-800-441-3637 (outside the U.S. 1-302-774-1139) CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

#### **SECTION 2. HAZARDS IDENTIFICATION**

Potential Health Effects	
Skin	: Causes burns.
Eyes	: Corrosive, may cause permanent eye injury if not promptly treated.
Inhalation	: Causes respiratory tract irritation.
Ingestion	: Severe irritation of the mucous membranes causes vomiting, nausea and burns. Aspiration hazard if swallowed - can enter lungs and cause damage.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

mponent		CAS-No.	Concentration
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Water	7732-18-5	85 - 92 %
Alcohol Ethoxylate		1 - 5 %
2-Aminoethanol	141-43-5	1 - 5 %
1-(2-Butoxy-1-methylethoxy)propan-2-ol	29911-28-2	1 - 5 %
Ethoxylated Quaternary Amine		1 - 5 %

#### SECTION 4. FIRST AID MEASURES

Skin contact	: Wash off immediately with soap and plenty of water. Wash contaminated clothing before re-use.
Eye contact	: Rinse immediately with plenty of water for at least 15 minutes. Seek medical advice.
Inhalation	: Move to fresh air. Oxygen or artificial respiration if needed. Symptoms may be delayed. Call a physician immediately.
Ingestion	: Call a physician or poison control centre immediately. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
General advice	: When symptoms persist or in all cases of doubt seek medical advice.

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#### SECTION 5. FIREFIGHTING MEASURES

Flammable Properties Flash point	: does not flash
Thermal decomposition	: > 200 °C (> 392 °F) To avoid thermal decomposition, do not overheat.



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Fire and Explosion Hazard	:	The product itself does not burn. Hazardous decomposition products formed under fire conditions. Hazardous combustion products Carbon dioxide (CO2) Carbon monoxide Other hazardous decomposition products may be formed.
Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Firefighting Instructions	:	Wear self contained breathing apparatus for fire fighting if necessary. Evacuate personnel to safe areas. Do not allow run-off from fire fighting to enter drains or water courses.
SECTION 6. ACCIDENTAL RELEA	AS	E MEASURES
		IEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. DTECTIVE EQUIPMENT during clean-up.
Safeguards (Personnel)	:	Evacuate personnel to safe areas. Use personal protective equipment. Ventilate the area.
Spill Cleanup	:	Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labelled containers.
Accidental Release Measures	:	Do not discharge to streams, ponds, lakes or sewers. Avoid subsoil penetration.
SECTION 7. HANDLING AND STO	OR	AGE
Handling (Personnel)	:	Avoid breathing vapours or mist. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before re-use.
Handling (Physical Aspects)	:	To avoid thermal decomposition, do not overheat. Thermal decomposition can lead to release of irritating gases and vapours. Do not spray near open flame or heated surface.
Storage	:	Keep tightly closed in a dry, cool and well-ventilated place. Protect from freezing.
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ingineering controls	: Use	e only	in area pro	ovided with app	propriate exhaust ventilation.
Personal protective equipment Respiratory protection	: In c		f mist, spra n and prote		exposure wear suitable personal respiratory
Hand protection	: Ado	ditiona	l protectior	ו: Impervious ថ្	gloves
Eye protection	: We	ar safe	ety glasses	s or coverall ch	hemical splash goggles.
Skin and body protection	: Lig	ntweig	ht protectiv	ve clothing	
exposure Guidelines Exposure Limit Values					
2-Aminoethanol PEL:	(OSHA)	)	3 ppm	6 mg/m3	8 hr. TWA
PEL:	(OSHA	)	3 ppm	6 mg/m3	8 hr. TWA
TLV	(ACGIF	)	6 ppm	STEL	
TLV	(ACGIF	)	3 ppm	TWA	
AEL *	(DUPO	NT)	3 ppm	8 & 12	hr. TWA
1-(2-Butoxy-1-methylethox AEL *	y)propa (DUPO		50 ppm	8 & 12	2 hr. TWA

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#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form Color Odor InpH Boiling point/boiling range Specific gravity	:	liquid light yellow mild 11.5 - 12.5 100 ℃ (212 ℉) 1.07
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#### SECTION 10. STABILITY AND REACTIVITY

Stability	: Stable under normal conditions.
Conditions to avoid	: To avoid thermal decomposition, do not overheat.
Incompatibility	: Acids Strong oxidizing agents
Hazardaya dagamposition	· Carbon diavida, Carbon manavida

Hazardous decomposition	: Carbon dioxide , Carbon monoxide
products	Incompletely burned carbon products
	Other hazardous decomposition products may be formed.

#### SECTION 11. TOXICOLOGICAL INFORMATION

DuPont <sup>™</sup> StoneTech <sup>®</sup> Professional Klenzall <sup>™</sup> Concentrate				
	Skin irritation	: Corrosive		
	Alcohol Ethoxylate			

Dermal LD50	:	2,000 - 5,000 mg/kg , rabbit
Oral LD50	:	1,100 mg/kg , rat
Eye irritation	:	Severe eye irritation, rabbit
Skin sensitizati	on :	Does not cause skin sensitisation., guinea pig
Repeated dose	toxicity :	Dermal rat

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			Skin effects, Thickening of skin
			Oral rat
			No toxicologically significant effects were found.
	Reproductive toxicity	:	Evidence suggests the substance is not a reproductive toxin in animals.
	Teratogenicity	:	Evidence suggests the substance is not a developmental toxin in animals.
2-Aminoeth	anol Dermal LD50	:	1,017 mg/kg , rabbit
	Oral LD50	:	1,098 mg/kg , rat
	Inhalation	:	An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
	Eye irritation	:	Corrosive, rabbit
	Skin sensitization	:	Does not cause skin sensitisation., guinea pig
	Repeated dose toxicity	:	Oral rat
			No toxicologically significant effects were found.
			Inhalation rat
			No toxicologically significant effects were found.
	Mutagenicity	:	Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
	Reproductive toxicity	:	Animal testing showed no reproductive toxicity.
	Teratogenicity	:	Animal testing showed no developmental toxicity.
1-(2-Butoxy	r-1-methylethoxy)propan-2-ol		
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	Dermal LD50	:	> 2,000 mg/kg , rat
	Oral LD50	:	1,477 mg/kg , rat
	Inhalation 4 h LC50	:	2.04 mg/l , rat
	Eye irritation	:	rabbit irritant
	Skin sensitization	:	human Not a skin sensitizer.
	Repeated dose toxicity	:	Inhalation rat
			No toxicologically significant effects were found.
			Oral - feed rat
			No toxicologically significant effects were found.
			Dermal rat
			No toxicologically significant effects were found.
	Mutagenicity	:	Did not cause genetic damage in cultured bacterial cells. Did not cause genetic damage in cultured mammalian cells. Did not cause genetic damage in animals.
	Teratogenicity	:	Evidence suggests the substance is not a developmental toxin in animals.
Ethoxylated	Quaternary Amine Oral LD50	:	580 mg/kg , rat
	Eye irritation	:	Severe eye irritation, rabbit
	Skin sensitization	:	Does not cause skin sensitisation., guinea pig
	Mutagenicity	:	Did not cause genetic damage in cultured bacterial cells.



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SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity	
Alcohol Ethoxylate 96 h LC50	: Pimephales promelas (fathead minnow) 8.5 - 11 mg/l
48 h EC50	: Daphnia magna (Water flea) 2.7 - 12 mg/l
2-Aminoethanol	
96 h LC50	: Cyprinus carpio (Carp) 349 mg/l
72 h ErC50	: Pseudokirchneriella subcapitata (green algae) 2.5 mg/l OECD Test Guideline 201
72 h NOEC	: Pseudokirchneriella subcapitata (green algae) 1 mg/l OECD Test Guideline 201
48 h	: Daphnia magna (Water flea) 50 mg/l Directive 67/548/EEC, Annex V, C.2.
30 d	: NOEC Oryzias latipes (medaka) 1.2 mg/l OECD Test Guideline 210
21 d	: NOEC Daphnia magna (Water flea) 0.85 mg/I OECD Test Guideline 211
1-(2-Butoxy-1-methylethoxy)propan-2-ol 96 h	: Poecilia reticulata (guppy) 841 mg/l
48 h	: Daphnia magna (Water flea) 1,000 mg/l
Ethoxylated Quaternary Amine 96 h LC50	: Oncorhynchus mykiss (rainbow trout) 24 mg/l
72 h EC50	: Algae 1.6 mg/l
48 h EC50	: Daphnia magna (Water flea) 13 mg/I OECD Test Guideline 202
Environmental Fate	
Alcohol Ethoxylate Biodegradability	: 80 % Readily biodegradable.



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Bioa	ccumulation : I	Bioaccumulation is unlikely.		
2-Aminoethanol Biod	0,	90 % OECD Test Guideline 301 Readily biodegradable.		
Ethoxylated Quaternary Amine Biodegradability		: 11 % Not readily biodegradable.		
SECTION 13. DIS Waste Dispos	SPOSAL CONSIDERATIONS	dance with local and national regulations.		
SECTION 14. TR	ANSPORT INFORMATION			
DOT	UN number	: 2491		
IATA_C	Proper shipping name Class Packing group Labelling No. Reportable Quantity UN number	<ul> <li>Ethanolamine solutions</li> <li>8</li> <li>III</li> <li>8</li> <li>1,000 lbs Potassium hydroxide</li> <li>2491</li> </ul>		
	Proper shipping name Class Packing group	<ul> <li>Ethanolamine solution</li> <li>8</li> <li>III</li> </ul>		
IMDG	Labelling No. UN number Proper shipping name Class Packing group Labelling No.	<ul> <li>8</li> <li>2491</li> <li>ETHANOLAMINE SOLUTION</li> <li>8</li> <li>III</li> <li>8</li> </ul>		
IMDG - pack	ges with <= 5 liters per inner ages with <=5 liters per inner	backaging and <= 30 kg gross may ship as a Consumer Commodity. packaging and <=30 kg gross may ship as Limited Quantity. r packaging and <=1 liter per outer package may ship as Limited 9 / 11		



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Quantity. IATA - limit is 60 liters per package.

#### SECTION 15. REGULATORY INFORMATION

TSCA	: On the inventory, or in compliance with the inventory
SARA 313 Regulated Chemical(s)	: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
CERCLA Reportable Quantity	: 500,000 lbs Based on the percentage composition of this chemical in the product.: Potassium hydroxide
California Prop. 65	: Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known
PA Right to Know Regulated Chemical(s)	: Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): 2-Aminoethanol
NJ Right to Know Regulated Chemical(s)	: Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): 2-Aminoethanol

#### **SECTION 16. OTHER INFORMATION**

	HMIS	
Health Flammability Reactivity/Physical hazard PPE	<ul> <li>3</li> <li>0</li> <li>0</li> <li>Personal Protection rating to be supplied by user depending on use conditions.</li> </ul>	
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