

WWW.DECONSOLUTIONS.COM
 AUTHORIZED SANDIA LICENSEE
 DISTRIBUTED FROM: 4725 OAKLAND ST.
 DENVER, COLORADO 80239

PHONE: 303-373-2696
 MSDS NO: SNL872-520-0627
 MSDS DATE: 12-02-04
 REVISED: May 19, 2010

IDENTIFICATION, COMPOSITION AND INGREDIENTS			
PRODUCT NAME:	MDF-500 – Part A.		
BRAND:	MDF-500		
COMPOSITION:	Biodegradable mixture of cationic detergents and fatty alcohols		
HAZARD RATING:	Health: 1; Flammability: 0; Reactivity: 0. (NFPA)		
ACTIVE INGREDIENTS:	%	OSHA PEL ACGIH	
Quaternary Alkyl (50% C ₁₄ , 40% C ₁₂ 10% C ₁₆) Dimethyl Benzyl ammonium chloride (CAS 68424-85-1)	3.2	Not Established	
INERT INGREDIENTS	96.8		
TOTAL	100		
PHYSICAL DATA			
APPEARANCE:	Yellowish clear liquid	SOLUBILITY IN WATER:	Complete
ODOR:	Sweet	SPECIFIC GRAVITY:	1.17
EVAPORATION RATE:	1 (water=1)	pH of CONCENTRATE:	10.6
VAPOR PRESSURE:	Unknown	BOILING POINT:	212° F.
FIRE AND EXPLOSION DATA			
FLAMMABILITY:	Not flammable		
EXTINGUISHING MEDIA:	As for surrounding fire		
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None		
SPECIAL FIRE FIGHTING PROCEDURES:	None		
EXPLOSION LIMITS:	N/A		
FIRST AID EMERGENCY PROCEDURES			
EYE CONTACT:	Flush eye with cool running water for at least 15 minutes. Call a Physician.		
SKIN CONTACT:	Flush with cool running water. If irritation develops, call a Physician.		
INGESTION:	Drink promptly several glasses of water or milk. Call a Physician.		
BREATHING:	Move to fresh air. If breathing becomes heavy seek medical attention		
SPECIAL PROTECTION INFORMATION			
PROTECTIVE GLOVES:	Recommended (rubber or PVC) when working with concentrate Part A		
EYE PROTECTION:	Recommended (goggles, safety glasses) when working with concentrate Part A.		
LOCAL EXHAUST:	None required for local exhaust, normal dilution ventilation is acceptable.		
OTHER EQUIPMENT:	None required		
REACTIVITY DATA			
INCOMPATIBLE MATERIALS:	Anionic materials		
STABILITY:	Product is stable		
POLYMERIZATION:	Will not occur		
DECOMPOSITION PRODUCTS:	Thermal decomposition may give off nitrous oxides and ammoniac vapors and carbon dioxide during a fire.		
SPILL OR LEAK PROCEDURES AND DISPOSAL			
SPILL:	Contain spill; flush with large excess of water. Avoid large discharges; sorbents may be used.		
DISPOSAL:	Remove material or dispose in accordance with all applicable federal, state and local regulations. Material collected with absorbent may be disposed of in permitted landfill		
TRANSPORTATION INFORMATION			
DOT:	The product is non-hazardous under DOT Regulations. No special handling procedures are required.		
ADDITIONAL INFORMATION			
<p>This MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health.</p> <p>The information contained herein has been compiled from sources considered by Modec, Inc. to be dependable and is accurate to the best of the Company's knowledge. No guarantee of accuracy is made. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions and disposal considerations. The information relates to the specific materials designated herein, and does not relate to the use in combination with any other material or other process. The listed hazard data herein may reflect the hazards related to the formulation as a whole or to individual components at 100% concentration. Therefore, certain warnings and hazard statements contained on this MSDS may not be applicable to or included in the package labeling.</p> <p>SARA requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372. This Information must be included in all MSDS's that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are: NONE</p>			



WWW.DECONSOLUTIONS.COM
 AUTHORIZED SANDIA LICENSEE
 DISTRIBUTED FROM: 4725 OAKLAND ST.
 DENVER, COLORADO 80239

PHONE: 303-373-2696
 MSDS NO: SNL872-520-0627
 MSDS DATE: 12-02-04
 REVISED: 21-April-2010

IDENTIFICATION, COMPOSITION AND INGREDIENTS													
PRODUCT NAME:	MDF-500 – Part B												
BRAND:	MDF-500												
COMPOSITION:	Stabilized Hydrogen Peroxide, water and inert ingredients												
HAZARD RATING:	Health: 0; Flammability: 0; Reactivity: 0. (NFPA)												
ACTIVE INGREDIENTS:	<table border="0"> <tr> <td></td> <td style="text-align: right;">%</td> <td style="text-align: right;">TLV LIMIT IN AIR</td> </tr> <tr> <td>Hydrogen Peroxide (7722-84-1)</td> <td style="text-align: right;">7.95</td> <td style="text-align: right;">1 ppm</td> </tr> <tr> <td>Inert ingredients</td> <td style="text-align: right;">92.05</td> <td></td> </tr> <tr> <td>TOTAL</td> <td style="text-align: right;">100</td> <td></td> </tr> </table>		%	TLV LIMIT IN AIR	Hydrogen Peroxide (7722-84-1)	7.95	1 ppm	Inert ingredients	92.05		TOTAL	100	
	%	TLV LIMIT IN AIR											
Hydrogen Peroxide (7722-84-1)	7.95	1 ppm											
Inert ingredients	92.05												
TOTAL	100												
PHYSICAL DATA													
APPEARANCE:	Clear liquid												
ODOR:	Odorless												
EVAPORATION RATE:	1 (water=1)												
VAPOR PRESSURE:	23.3 MM HG @ 30 (C)												
SOLUBILITY IN WATER:	Complete												
SPECIFIC GRAVITY:	1.008 g/cm3												
pH of CONCENTRATE:	2.275												
BOILING POINT:	108 Celsius												
FIRE AND EXPLOSION DATA													
FLAMMABILITY:	Not flammable												
EXTINGUISHING MEDIA:	As for surrounding fire, water												
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None												
SPECIAL FIR FIGHTING PROCEDURES:	None												
EXPLOSION LIMITS:	N/A												
HEALTH HAZARD DATA –EFFECTS OF OVEREXPOSURE													
ROUTES OF ENTRY:	Eye contact, skin contact, ingestion, inhalation.												
EYE EFFECT:	May cause transient irritation. Rinse immediately with water												
SKIN EFFECT:	May be transiently irritating to skin. Will cause temporary whitening.												
INGESTION:	If swallowed, consult a physician. Do not induce vomiting. Drink a glass of water.												
INHALATION:	Avoid breathing mist. If inhaled, remove to fresh air. Give oxygen if breathing is difficult.												
CARCINOGENICITY:	This product (or components of its mixture) is not listed in IARC Monographs, the NTP 6 th Annual Report or the current ACGIH TLV's as a carcinogen or potential carcinogen.												
FIRST AID EMERGENCY PROCEDURES													
EYE CONTACT:	Flush eye with cool running water for at least 15 minutes. Call a Physician.												
SKIN CONTACT:	Flush with cool running water. If irritation develops, call a Physician.												
INGESTION:	Drink promptly a glass of water. Call a Physician.												
BREATHING:	Move to fresh air. If breathing becomes heavy seek medical attention												
SPECIAL PROTECTION INFORMATION													
PROTECTIVE:	If skin or contamination of clothing is likely, protective clothing should be worn.												
EYE PROTECTION:	Recommended (goggles, safety glasses).												
RESPIRATORY:	Atmospheric levels should be maintained below the exposure limits listed in Section III by using engineering controls. If not feasible, use supplied air respirator.												
LOCAL EXHAUST:	Provide local exhaust, normal dilution ventilation is acceptable. Refer to Industrial Ventilation by ACGIH for a manual of recommended practices.												
OTHER EQUIPMENT:	None required												
REACTIVITY DATA													
INCOMPATIBLE MATERIALS:	Heavy metal ions, alkalis and combustible materials												
STABILITY:	Product is stable at normal temperatures and storage												
POLYMERIZATION:	Will not occur												
DECOMPOSITION PRODUCTS:	Oxygen which supports combustion.												
SPILL OR LEAK PROCEDURES AND DISPOSAL													
SPILL:	Contain spill; flush with large excess of water. Avoid large discharges; sorbents may be used. See prior sections for hazards and exposure controls. Dike with sand or earth to contain spill. Avoid ignition sources. Transfer to approved DOT drum for recovery or disposal.												
DISPOSAL:	Remove material or dispose in accordance with all applicable federal, state and local regulations. Material collected with absorbent may be disposed of in permitted landfill												
TRANSPORTATION INFORMATION													
DOT REGULATIONS:	The product is non-hazardous under DOT Regulations. No special handling procedures are required.												
ADDITIONAL INFORMATION													
SARA requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372. This Information must be included in all MSDS's that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are NONE. This MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health. The information contained herein has been compiled from sources considered by Modec, Inc. to be dependable and is accurate to the best of the Company's knowledge. No guarantee of accuracy is made. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions and disposal considerations. The information relates to the specific materials designated herein, and does not relate to the use in combination with any other material or other process. The listed hazard data herein may reflect the hazards related to the formulation as a whole or to individual components at 100% concentration. Therefore, certain warnings and hazard statements contained on this MSDS may not be applicable to or included in the package labeling.													



WWW.DECONSOLUTIONS.COM
 AUTHORIZED SANDIA LICENSEE
 DISTRIBUTED FROM: 4725 OAKLAND ST.
 DENVER, COLORADO 80239

PHONE: 303-373-2696
 MSDS NO: SNL872-520-0627
 MSDS DATE: 12-02-04
 REVISED: 21 April 2010

IDENTIFICATION, COMPOSITION AND INGREDIENTS	
PRODUCT NAME:	MDF-500 - Combined for Use
BRAND:	MDF-500 - Part A combined with Part B
COMPOSITION:	Biodegradable mixture of cationic detergents, hydrogen peroxide and fatty alcohols
HAZARD RATING:	Health: 0; Flammability: 0; Reactivity: 0. (NFPA)
ACTIVE INGREDIENTS:	% OSHA PEL ACGIH
Quaternary Ammonium Compound (CAS 68424-85-1)	1.6 Not Established
Hydrogen Peroxide (7722-84-1)	3.98 1 ppm
INERT INGREDIENTS	94.42
TOTAL	100.0%
PHYSICAL DATA	
APPEARANCE:	Yellowish clear liquid
ODOR:	Sweet
EVAPORATION RATE:	1 (water=1)
VAPOR PRESSURE:	Unknown
SOLUBILITY IN WATER:	Complete
SPECIFIC GRAVITY:	1.11
pH:	9.85
BOILING POINT:	212° F.
FIRE AND EXPLOSION DATA	
FLAMMABILITY:	Not flammable
EXTINGUISHING MEDIA:	As for surrounding fire
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None
SPECIAL FIRE FIGHTING PROCEDURES:	None
EXPLOSION LIMITS:	N/A
FIRST AID EMERGENCY PROCEDURES	
EYE CONTACT:	Flush eye with cool running water for at least 15 minutes. Call a Physician.
SKIN CONTACT:	Flush with cool running water. If irritation develops, call a Physician.
INGESTION:	Drink promptly several glasses of water or milk. Call a Physician.
BREATHING:	Move to fresh air. If breathing becomes heavy seek medical attention
SPECIAL PROTECTION INFORMATION	
PROTECTIVE GLOVES:	Avoid spilling and skin contact.
EYE PROTECTION:	Avoid eye contact, safety glasses recommended
LOCAL EXHAUST:	None required for local exhaust, normal dilution ventilation is acceptable.
OTHER EQUIPMENT:	None required
REACTIVITY DATA	
INCOMPATIBLE MATERIALS:	Anionic materials
STABILITY:	Product is stable
POLYMERIZATION:	Will not occur
DECOMPOSITION PRODUCTS:	Thermal decomposition may give off nitrous oxides and ammoniac vapors and carbon dioxide during a fire.
SPILL OR LEAK PROCEDURES AND DISPOSAL	
SPILL:	Contain spill; flush with large excess of water. Avoid large discharges; sorbents may be used.
DISPOSAL:	Remove material or dispose in accordance with all applicable federal, state and local regulations. Material collected with absorbent may be disposed of in permitted landfill
TRANSPORTATION INFORMATION	
DOT:	The product is non-hazardous under DOT Regulations. No special handling procedures are required.
ADDITIONAL INFORMATION	
<p>This MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health.</p> <p>The information contained herein has been compiled from sources considered by Modec, Inc. to be dependable and is accurate to the best of the Company's knowledge. No guarantee of accuracy is made. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions and disposal considerations. The information relates to the specific materials designated herein, and does not relate to the use in combination with any other material or other process. The listed hazard data herein may reflect the hazards related to the formulation as a whole or to individual components at 100% concentration. Therefore, certain warnings and hazard statements contained on this MSDS may not be applicable to or included in the package labeling.</p> <p>SARA requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372. This Information must be included in all MSDS's that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are: NONE</p>	

