

Additive Technologies, LLC

1515 West 2200 South, Suite C
Salt Lake City, Utah 84119 USA
Tel: 300-300-6525
Fax: 801-340-0217
msds@additivetech.com
MSDS on-line: www.additivetech.com

MATERIAL SAFETY DATA SHEET

CleanSafe® X278

Heavy-Duty Industrial Cleaner and Degreaser

MSDS No: 3005
Ver. No: 5
Ver. Date: 2/13/2008

CUSTOMER SERVICE:

303-300-6525

24-HOUR EMERGENCY NUMBERS:

CHEMTREC: 1-800-424-9300

INTERNATIONAL: 1-703-527-3887

National Fire Protection Association

1	Health
0	Flammability
0	Reactivity
	Special

Protective Equipment:



SECTION 1

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product/Chemical Name: CleanSafe X278
Product Description: General Purpose, Heavy-Duty Cleaner/Degreaser.
Chemical Name: Mixture
Chemical Family: Moderately alkaline aqueous solution.
Chemical Formula: Mixture
CAS Registry: Mixture
Other Designations: None
General Use: Heavy-duty industrial cleaning.
Manufacturer: Additive Technologies, LLC
1515 West 2200 South, Suite C
Salt Lake City, Utah 84119 USA
Tel: 300-300-6525 Fax: 801-972-0707
Hours of operation: Mon-Fri 8:00am-5:00pm MST
24-hour Emergency Number: CHEMTREC: 1-800-424-9300
24-hour International Emergency Number: 1-703-527-3887

SECTION 2

COMPOSITION / INFORMATION ON INGREDIENTS

Cleansafe X278 contains no hazardous ingredients. The following is given for information only.

<u>INGREDIENT</u>	<u>CAS No</u>	<u>% WT</u>	<u>OSHA PEL</u>	<u>TWA</u>	<u>STEL</u>
Proprietary Non-Hazardous Ingredients and Water	Not applicable	100%	Not applicable	Not applicable	Not applicable

SECTION 3

HAZARDOUS IDENTIFICATION

Health: 1
Flammability: 0
Reactivity: 0
Special: 0
0 = minimal 1= slight 2=moderate 3= serious 4= severe

HMIS

H # 1

F # 0

R # 0

PPE†

†Sec. 8

Route(s) of Entry

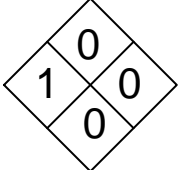
Inhalation: May cause minor irritation of respiratory system.
Skin: May cause minor skin irritation with some individuals susceptible to sensitization.
Ingestion: May cause some discomfort and diarrhea.

Eyes:	May cause minor irritation of eyes in some individuals.
Target Organs:	None known
Effects of overexposure:	Acute: Minor irritant to eyes. Chronic: None known.
Signs and Symptoms of Exposure:	Redness and/or stinging sensation in eyes or on skin. Minor eye or skin irritation may occur with some people.
Medical Conditions Generally Aggravated by Long-Term Exposure:	None expected.
Chronic Effects:	None known
Carcinogenicity	
NTP:	None known
IARC Monographs:	None known
OSHA Regulations:	None known
ACGIH	None known

SECTION 4	FIRST AID MEASURES
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Emergency and First Aid Procedures:	Eye contact:	If product contacts eyes, flush immediately with water for several minutes.
	Skin contact:	If product contacts skin, rinse with water for several minutes within a reasonable period of time after contact occurs.
	Ingestion:	If product is ingested, drink several glasses of water. Do not induce vomiting. Consult a physician.
	Inhalation:	If product is inhaled, remove to fresh air. Obtain medical attention.
Note to Physicians:	Treat symptomatically	
Special Precautions/Procedures:	None known	

SECTION 5	FIRE-FIGHTING MEASURES
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Unusual Fire Fighting procedures:	None required	NFPA 
Flash Point:	None detected	
Flash Point Method:	Pensky Martens	
Burning Rate:	Does not burn	
Autoignition Temperature:	Not available	
Flammable limits in air (% by volume):	Not applicable	
LEL:	Not applicable	
UEL:	Not applicable	
Flammability Classification:	Not flammable	
Extinguishing Media:	Compatible with all media	
Unusual Fire or Explosion Hazards:	None known	
Fire-Fighting Instructions:	Do not release runoff from fire control methods to sewers or waterways.	
Fire-Fighting Equipment:	Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.	
Unusual Fire Fighting procedures:	Not required	

SECTION 6**ACCIDENTAL RELEASE MEASURES**

Spill/Leak Procedures:	Recover usable material by convenient method; residual may be removed by wipe or wet mop. If necessary, unrecoverable material may be washed to drain with large quantities of water.
Small Spills:	Small spills should be absorbed with a suitable inert material (sand, earth, clay, etc.). Remove the absorbed material and place in an appropriate chemical waste container for disposal.
Large Spills:	Large spills should be diked and pumped.
Containment:	For large spills, dike far ahead of liquid spill for later disposal.
Regulatory Requirements:	Follow applicable OSHA regulations (29 CFR 1910.120).

SECTION 7**HANDLING AND STORAGE**

Handling Precautions	Wear impermeable gloves and other protective clothing to avoid prolonged or repeated skin contact. When handling, wear eye protection.
Storage Requirements:	May be stored in steel, HDPE or stainless steel tanks. Store at temperatures above 30°F and below 150°F.

SECTION 8**EXPOSURE CONTROLS/PERSONAL PROTECTION**

Engineering Controls Ventilation:	Provide general or local exhaust ventilation systems.
Administrative Controls Respiratory Protection:	Respiratory protection generally is not required. However, if the product is used at elevated temperatures sufficient to generate vapors/mist, use a NIOSH approved organic vapor and gas respirator with mist filter.
Protective Clothing/Equipment:	Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles.
Work and Hygienic Practices:	No special requirements. Wash or rinse hands before touching eyes or contact lenses, and before eating.
Safety Stations:	Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
Contaminated Equipment:	Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.
Comments:	Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9**PHYSICAL AND CHEMICAL PROPERTIES**

Appearance and odor:	Dark blue colored liquid with a slightly bitter or mild detergent odor.
Boiling Point (760 mm Hg):	225°F±2°.
Freezing/Melting Point:	30-32°F
Specific Gravity (@60°F):	1.046-1.065
Vapor Density (air =1):	<1
Percent Volatile by Volume:	NIL
Evaporation Rate (butyl acetate =1):	<1
Solubility in Water (% by wt):	100%
Vapor Pressure (at 20°C):	20mm Hg.
pH:	12.5-13.5

SECTION 10		STABILITY AND REACTIVITY
Stability:	Stable	
Polymerization:	Hazardous polymerization cannot occur.	
Chemical Incompatibilities:	None	
Conditions to Avoid:	Avoid contact with strong acids and strong oxidizers	
Hazardous decomposition products:	This product does not burn, but if involved in a fire small quantities of carbon and nitrogen oxides can be generated in extreme conditions.	
SECTION 11		EXPOSURE TOXICOLOGICAL INFORMATION
Eye Effects:	Irritating to eyes	
Skin Effects:	Can be irritating to skin upon prolonged contact	
Acute Inhalation Effects:	Significant vapors are only generated at elevated temperatures; may irritate nose and respiratory system.	
Acute Oral Effects:	Can cause irritation to mouth, throat and stomach	
Chronic Effects:	None known	
Carcinogenicity:	Neither product nor its ingredients are listed by IARC, NTD or OSHA	
Mutagenicity:	Not mutagenic	
Teratogenicity:	Not Teratogenic	
SECTION 12		ECOLOGICAL INFORMATION
Ecotoxicity:	Not determined	
Environmental Fate:	Decomposes to carbon, oxygen, nitrogen and water.	
Environmental Degradation:	Biodegradable	
Soil Absorption/Mobility:	Not determined	
SECTION 13		DISPOSAL CONSIDERATIONS
Waste disposal method:	Sanitary landfill or incinerate in approved facilities in accordance with local, state and federal regulations.	
Disposal Regulatory Requirements:	As is: RCRA hazardous waste NOS; Unused product D002; solutions may or may not be corrosive. PH of Concentrated X278 may be greater than 12.5, thus it is corrosive per EPA Hazardous Waste Classification. Disposal of regulated quantities should be diluted with water, as recommended: with 2 parts of water, 1 part of X278. Product's pH would then be at a level that does not meet the RCRA criteria for being identified as a hazardous waste by characteristics.	
Container Cleaning and Disposal:	Containers should be cleaned of residual product before disposal, and disposed of in accordance with all applicable laws and regulations.	
SECTION 14		TRANSPORT INFORMATION
DOT Shipping Name:	Cleaning Compound	
Shipping Symbols:	Not applicable	
Hazard Class:	Not applicable	
DOT Identification No.:	Not regulated	
Packing Group:	Not applicable	
Label:	Not applicable	
Special Provisions (172.102):	Not applicable	
Packaging Authorizations		
a) Exceptions:	Not applicable	
b) Non-bulk Packaging:	Not applicable	
c) Bulk Packaging:	Not applicable	
Quantity Limitations		
a) Passenger, Aircraft, or Railcar:	Not applicable	
b) Cargo Aircraft Only:	Not applicable	
Vessel Stowage Requirements		
a) Vessel Stowage:	Not applicable	
b) Other:	Not applicable	

SECTION 15

REGULATORY INFORMATION

EPA Regulations

RCRA Hazardous Waste Number and RCRA
Hazardous Waste Classification:

Unused, diluted product is not classified as a hazardous waste by RCRA criteria.
As is: RCRA hazardous waste NOS; Unused product D002; solutions may or may
not be corrosive. (See section 13 for additional data)

CERCLA Hazardous Substance and CERCLA
Reportable Quantity:

Does not contain any ingredients listed as a CERCLA hazardous substance.

SARA Toxic Chemical and SARA EHS:

Not subject to reporting under SARA Title III Section 313.

OSHA Regulations:

Not a hazardous chemical as defined by the OSHA Hazard Communication
Standard.

State Regulations:

Not regulated; California Prop 65: None

SECTION 16

OTHER INFORMATION

Prepared By: Additive Technologies, LLC, technical department

Additional Hazard Rating Systems: None

**Disclaimer: THE INFORMATION GIVEN HEREIN IS GIVEN IN GOOD FAITH AND FROM SOURCES WE
BELIEVE RELIABLE. BUT NO WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS IS MADE.**

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information may not apply.

CONSULT ADDITIVE TECHNOLOGIES, LLC FOR FURTHER INFORMATION.