



X100DR (AFCO 4369)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision Date: 4/17/2018

Version: 1.2

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: X100DR (AFCO 4369)

Product Code: AFCO 4369

Intended Use of the Product

Use of the Substance/Mixture: Solvent/surfactant based gel cleaner/emulsifier for use in food processing plants. For professional use only.

Name, Address, and Telephone of the Responsible Party

Company

Alex C. Fergusson, LLC.
800 Development Avenue
Chambersburg, PA 17201
T 800-345-1329

www.afcocare.com

Emergency Telephone Number

Emergency number : 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Flam. Liq. 3 H226
Acute Tox. 5 (Oral) H303
Skin Irrit. 2 H315
Eye Dam. 1 H318
Aquatic Acute 2 H401
Aquatic Chronic 3 H412

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H226 - Flammable liquid and vapor
H303 - May be harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements (GHS-US)

: P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, ventilating, and lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

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clothing. Rinse skin with water/shower.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P312 - Call a POISON CENTER/doctor/physician if you feel unwell.
P321 - Specific treatment (see section 4).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P370+P378 - In case of fire: Use appropriate media for extinction.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. Flammable gas.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Alcohols, C9-11, ethoxylated	(CAS No) 68439-46-3	50-60	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Ethyl alcohol	(CAS No) 64-17-5	20-30	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 Aquatic Acute 2, H401
Water	(CAS No) 7732-18-5	20-30	Not classified
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	(CAS No) 68424-85-1	1-5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1-Decanaminium, N,N-dimethyl-N-octyl-, chloride	(CAS No) 32426-11-2	0.1-1	Skin Corr. 1B, H314 Eye Dam. 1, H318
1-Octanaminium, N,N-dimethyl-N-octyl-, chloride	(CAS No) 5538-94-3	0.1-1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute 1, H400
Didecyldimethylammonium chloride	(CAS No) 7173-51-5	0.1-1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation persists. Wash contaminated clothing before reuse.

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Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye damage. Causes skin irritation.

Inhalation: Inhalation of large amounts may cause respiratory irritation.

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye damage.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Not available

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam, dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Flammable liquid and vapor.

Explosion Hazard: May form flammable/explosive vapor-air mixture.

Reactivity: When heated to decomposition, emits toxic fumes. Flammable gas.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂), nitrogen oxides.

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid breathing (vapors, mist, spray). Avoid all contact with skin, eyes, or clothing. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: When heated to decomposition, emits toxic fumes. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

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Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high temperatures, heat, ignition sources, incompatible materials.

Incompatible Materials: Strong oxidizers.

Special Rules on Packaging: Keep only in original container.

Specific End Use(s)

Solvent /surfactant based gel cleaner/emulsifier for use in food processing plants .For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Ethyl alcohol (64-17-5)		
Mexico	OEL TWA (mg/m ³)	1900 mg/m ³
Mexico	OEL TWA (ppm)	1000 ppm
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1900 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
Ontario	OEL STEL (ppm)	1000 ppm
Québec	VEMP (mg/m ³)	1880 mg/m ³
Québec	VEMP (ppm)	1000 ppm

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined area. If user operations generate fumes, vapors, gas, or spray use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or regulatory limits.

Personal Protective Equipment: Protective goggles. Protective clothing. Gloves.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: A respirator is not needed under normal and intended conditions of product use. Whenever worker exposure may exceed established regulatory exposure limits, use a NIOSH-approved respirator.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear, colorless
Odor	: Alcohol
Odor Threshold	: Not available
pH	: 5.5 - 7.0
Relative Evaporation Rate (butylacetate=1)	: Not available

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Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: (33C) 92 F
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Specific Gravity	: 0.97
Solubility	: Complete.
Partition coefficient: n-octanol/water	: Not available
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Static discharge may present an explosion hazard.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: When heated to decomposition, emits toxic fumes. Flammable gas.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Heat. Ignition sources. Combustible materials. Incompatible materials.

Incompatible Materials: Strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂), nitrogen oxides. May release flammable gases. Toxic gases.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation. **pH:** 5.5 - 7.0

Serious Eye Damage/Irritation: Causes serious eye damage. **pH:** 5.5 - 7.0

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation of large amounts may cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Causes skin irritation.

Symptoms/Injuries After Eye Contact: Causes serious eye damage.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg
Ethyl alcohol (64-17-5)	
LD50 Oral Rat	10470 mg/kg

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LD50 Dermal Rat	20 ml/kg
LC50 Inhalation Rat (mg/l)	124.7 mg/l/4h
Alcohols, C9-11, ethoxylated (68439-46-3)	
LD50 Oral Rat	1400 mg/kg
Didecyldimethylammonium chloride (7173-51-5)	
LD50 Oral Rat	329 mg/kg
LD50 Dermal Rat	2001 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life with long lasting effects.

Ethyl alcohol (64-17-5)	
LC50 Fish 1	9.468 (9.468 - 12.624) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) converted from ml/l
EC50 Daphnia 1	9268 (9268 - 14221) mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	2 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Persistence and Degradability

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Persistence and Degradability	May cause long-term adverse effects in the environment.
Ethyl alcohol (64-17-5)	
Persistence and Degradability	Not established.

Bioaccumulative Potential

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Bioaccumulative Potential	Not established.
Ethyl alcohol (64-17-5)	
Log Pow	-0.32
Bioaccumulative Potential	Not established.

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : ETHANOL SOLUTIONS
Hazard Class : 3
Identification Number : UN1170
Label Codes : 3
Packing Group : II
ERG Number : 127



14.2 In Accordance with IMDG

Proper Shipping Name : ETHANOL SOLUTIONS
Hazard Class : 3
Identification Number : UN1170

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Packing Group : II
Label Codes : 3
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D



14.3 In Accordance with IATA

Proper Shipping Name : ETHANOL SOLUTIONS
Packing Group : II
Identification Number : UN1170
Hazard Class : 3
Label Codes : 3
ERG Code (IATA) : 3L



14.4 In Accordance with TDG

Proper Shipping Name : ETHANOL SOLUTIONS
Packing Group : II
Hazard Class : 3
Identification Number : UN1170
Label Codes : 3



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

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SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard
Water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Ethyl alcohol (64-17-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
1-Octanaminium, N,N-dimethyl-N-octyl-, chloride (5538-94-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
1-Decanaminium, N,N-dimethyl-N-octyl-, chloride (32426-11-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Didcyldimethylammonium chloride (7173-51-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Alcohols, C9-11, ethoxylated (68439-46-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

US State Regulations

Ethyl alcohol (64-17-5)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
U.S. - California - Proposition 65 - Developmental Toxicity	WARNING: This product contains chemicals known to the State of California to cause birth defects.
Ethyl alcohol (64-17-5)	
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - New Jersey - Special Health Hazards Substances List	
U.S. - New York - Occupational Exposure Limits - TWAs	
RTK - U.S. - Pennsylvania - RTK (Right to Know) List	
U.S. - Texas - City of Austin - Aerosol Paint and Glue Restrictions	

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U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
Didcyldimethylammonium chloride (7173-51-5)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
Alcohols, C9-11, ethoxylated (68439-46-3)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

Water (7732-18-5)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Ethyl alcohol (64-17-5)
Listed on the Canadian DSL (Domestic Substances List) inventory.
1-Octanaminium, N,N-dimethyl-N-octyl-, chloride (5538-94-3)
Listed on the Canadian DSL (Domestic Substances List) inventory.
1-Decanaminium, N,N-dimethyl-N-octyl-, chloride (32426-11-2)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Didcyldimethylammonium chloride (7173-51-5)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Alcohols, C9-11, ethoxylated (68439-46-3)
Listed on the Canadian DSL (Domestic Substances List) inventory.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date	: 4/17/2018
Other Information	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation

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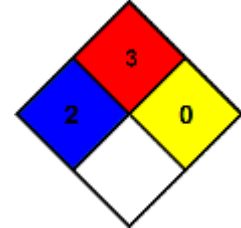
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA Health Hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA Fire Hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA Reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard

Physical : 0 Minimal Hazard

Party Responsible for the Preparation of This Document

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (US, Can, Mex)