

SECTION 1: SUBSTANCE IDENTIFICATION AND COMPANY INFORMATION.

1.1 PRODUCT IDENTIFICATION

PRODUCT NAME:	DF-200 HF COMBINED FOR USE.
BRAND:	DF-200 HF PART A COMBINED WITH PART B AND PART C.
COMPOSITION:	Biodegradable mixture of cationic surfactants, non-ionic surfactants, hydrogen peroxide, glycerol diacetate, water and inert ingredients.
NAME OF THE SUBSTANCE 1:	Compound of quaternary ammonium ion compounds, alkyl dimethyl benzyl chloride (50% C14, 40% C12, 10% C16) ammonium
CE NUMBER (EINECS):	270-325-2
CAS NUMBER:	68424-85-1
NAME OF THE SUBSTANCE 2:	Compound of quaternary ammonium pentamethyltallowalkyl-1,3-propane diammonium dichloride
CE NUMBER (EINECS):	271-762-1
CAS NUMBER:	68607-29-4
NAME OF SUBSTANCE 3:	Hydrogen Peroxide
CE NUMBER (EINECS)	231-765-0
CAS NUMBER	7722-84-1
NAME OF SUBSTANCE 4	Glycerol Diacetate
CE NUMBER (EINECS):	246-941-2
CAS NUMBER:	25395-31-7


1.2 IDENTIFIED RELEVANT USES OF THE SUBSTANCE OR MIXTURE AND INADVISABLE USES

IDENTIFIED RELEVANT USES OF THE SUBSTANCE	<p>Product used: DF-200 HF PART A (49%) combined with DF-200 HF PART B (49%) and DF-200 HF PART C (2%) for its application; mix done by the applicator in a spraying device. Product designed to be used exclusively by professionals. Antibacterial, virucide, fungicide, algacide, deodorizer.</p> <p>The product is a cleaner and disinfectant for professional use in hospitals, collective central kitchens, food storage for human consumption, commercial and industrial establishments. It is specially formulated to disinfect hard, nonporous surfaces, the environment, materials, equipment and furniture that are not in contact with food products or animal food, ground, air, HVAC systems, ducts ventilation, filters and hospital waste. In case the product is used on food-contact surfaces, the surfaces will need rinsing with potable water before coming into contact with such foods. This product deodorizes areas where it is difficult to maintain a fresh smell, such as basements, restrooms and other areas exposed to odors.</p> <p>For a complete list of applications, see section 16</p>
INADVISABLE USES	No information available.

1.3 PROVIDER OF THE SAFETY DATA SHEET

PROVIDER:	<p>ADVANCED DECON TECHNOLOGIES, LLC P.O. Box. 8368 SANTA FE. NEW MEXICO. 87504. USA Toll free: +1 877 692 5238 contact@advanceddeconttechnologies.com</p>
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1.4 EMERGENCY TELEPHONE	
	Information updated of the product's composition has been sent to the Toxicology Information Service (National Institute of Toxicology and Forensic Sciences). In case of poisoning, call Toxicology Information Service
POISON CENTER	+1 800-222-1222

SECTION 2: HAZARDS IDENTIFICATION.	
2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE	
CLASSIFICATION BY THE REGULATION CE N.° 1272/2008 (CLP)	Acute Tox. 4-Acute Toxicity Category 4 - H302/332 Skin Corr 2 - Corrosion /skin irritation Category 2 - H315 Eye Dam 2 - Serious eye damage / eye irritation Category 2 - H319
CLASSIFICATION BY THE DIRECTIVE 67/548/CEE (to see the full text of the risk phrases, refer to SECTION 16)	Harmful - R20/22 Irritant - R36/38
2.2 LABEL ELEMENTS	
	<p><i>Labeled by the regulation (CE) n.° 1272/2008 [CLP] Hazard pictograms</i></p> <div align="center">  </div> <p><i>Warning Words:</i> Warning</p> <p><i>Indications of Warning:</i> H302/332 - Harmful if swallowed or inhaled H315 - Causes skin irritation H319 - Causes serious eye irritation</p> <p><i>Precautionary statements:</i> P 261 - Avoid breathing mist / vapours P 280 - Wear gloves (resistant to chemical products [butyl rubber, nitrile and neoprene, polyethylene, polyvinyl chloride]) / protective clothing / eye protection (face shield or safety glasses) P 284 - Wear respiratory protective equipment (air respirator or SCBA) P 301/312 - IF SWALLOWED: Call the TOXICOLOGY INFORMATION SERVICE or doctor if feeling unwell. P 304/340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P 312 - Call the TOXICOLOGY INFORMATION SERVICE or doctor</p>

if feeling unwell.
 P 305/351/338 - IF CONTACT WITH EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if using and easy to remove. Continue rinsing.
 P 322 - Specific Measures
 (See IF SWALLOWED: If victim is able to swallow, give water or milk quickly. DO NOT induce vomiting unless instructed to do so from the toxicology service or a Physician. Do not introduce anything in the mouth to an unconscious person. Use of gastric lavage may be contraindicated because of the high probability of mucosal lesions.
 P 337/313 - If eye irritation persists: consult a Physician.

OTHER HAZARDS	<i>Unknown</i>
2.3. HAZARD RATING (NFPA)	
HEALTH: 1 / FLAMMABILITY: 0 / REACTIVITY: 0	

SECTION 3: COMPOUND/INFORMATION ABOUT COMPOUNDS

3.1 SUBSTANCE

<i>Type of identifier of the product by article 18, paragraph 2, by the regulation (CE) n.°1272/200</i>	<i>Identification number</i>	<i>Identification name</i>	<i>Content mass% (or grams)</i>	<i>CE number:</i>
CAS Number	68424-85-1	Compound of quaternary ammonium ion compounds, alkyl dimethyl benzyl chloride (50% C14, 40% C12, 10% C16) ammonium.	3% (m/m)	270-325-2
CAS Number.	68607-29-4	Compound of quaternary ammonium pentamethyltallowalkyl-1,3-propane diammonium dichloride	1 % (m/m)	271-762-1
CAS Number	7722-84-1	Hydrogen peroxide	3,95% (m/m)	231-765-0
CAS Number	25395-31-7	Glycerol Diacetate	2% (m/m)	246-941-2

DF-200 HF COMBINED FOR USE: Biodegradable mixture of cationic, non-ionic surfactants hydrogen peroxide, glycerol diacetate and inert ingredients.
 3% of the quaternary ammonium ion compounds, chlorides, alkyl dimethyl benzyl ammonium, 1% of quaternary ammonium pentamethyltallowalkyl-1,3-propane diammonium dichloride, 3,95% of hydrogen peroxide, 2% of Glycerol Diacetate and 90,05% inert ingredients.

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID

IN CASE OF EYE CONTACT:	Flush cautiously with running water for a period of between 15 and 20 minutes. Remove contact lenses, if they are easy to remove. Continue rinsing. If eye irritation persists: consult a Physician.
IN CASE OF SKIN CONTACT:	Take off contaminated clothing and wash before reuse. Wash immediately and abundant for a period of between 15 and 20 minutes. If skin irritation persists: consult a Physician.

IF INHALED:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call the TOXICOLOGY INFORMATION SERVICE or a Physician if feeling unwell.
IN CASE OF INGESTION:	Call the TOXICOLOGY INFORMATION SERVICE or a Physician if feeling unwell. Needs specific measures. If victim is able to swallow, give water or milk quickly. DO NOT induce vomiting unless instructed to do so from the toxicology service or a doctor. Do not introduce anything in the mouth to an unconscious person. Use of gastric lavage may be contraindicated because of the high probability of mucosal lesions.

4.2 MAIN SYMPTOMS AND EFFECTS ACUTE AND DELAYED

IN CASE OF EYE CONTACT:	May cause severe eye irritation
IN CASE OF SKIN CONTACT:	May cause skin irritation.
IF INHALED:	Shortness of breath. May be irritating to mucous membranes and upper respiratory tract.
IN CASE OF INGESTION:	May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

4.3 MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED IMMEDIATELY

MEDICAL NOTE:	IF SWALLOWED: The use of gastric lavage may be contraindicated due to the high probability of injury to the mucous. Treat symptomatically and supportively
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SECTION 5: FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEASURES

Same as those used for surrounding fire.

5.2 SPECIFIC HAZARDS FROM THE SUBSTANCE OR MIXTURE:

Non-flammable substance. No unusual risks of fire and explosion.
In case of fire, the thermal decomposition may give off nitrous oxides and ammoniac vapours and carbon dioxide during the fire.

5.3 PERSONAL RECOMMENDATIONS FOR FIRE FIGHTING:

There is no special procedure for fire fighting.

SECTION 6: MEASURES IN CASE OF ACCIDENTAL RELEASE

6.1 PERSONAL PRECAUTIONS, EQUIPMENT PROTECTION AND EMERGENCY PROCEDURES:

Avoid contact with skin and eyes. Wear protection glasses (face shield or safety glasses).
Wear protective clothing and gloves resistant to chemicals (butyl rubber, nitrile and neoprene, polyethylene; polyvinyl chloride).
Consult the advice in section 8.

6.2 PRECAUTIONS RELATIVE TO THE ENVIRONMENT

Do not discharge waste into drains or watercourses. Dispose of waste according to local regulations. Throw away clothing and other absorbent materials that have been impregnated or strongly contaminated by the product, adequately according to local regulations.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING

Contain spillage, flush with large amount of water. Avoid large discharges; sorbents may be used. Create dams with sand or land to contain the spill.

SECTION 7: HANDLING AND STORAGE	
7.1 PRECAUTIONS FOR SAFE HANDLING	
RECOMMENDATIONS OF GENERAL MEASURES OF HYGIENE AT WORK	Do not eat, drink nor smoke while using the product. Wash hands with soap and water thoroughly after handling. For cleaning and maintenance of protective clothing, use detergent and hot water. Keep and wash protective clothing separately from other laundry. Use in a well ventilated area.
7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY POSSIBLE INCOMPATIBILITIES	
Keep away from food and beverages, including those for animals. Store in a dry place. The storage temperature can be between -21°F / -6°C and +71°C / +160°F. The optimum storage temperature is between 50° F / 10° C and 119° F / 48° C. Keep out of anionic materials. In case of fire, do not breathe smoke.	
7.3 FINAL(S) SPECIFIC(S) USE(S)	
Unknown	

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION		
8.1 CONTROL PARAMETERS		
<p>PART A- SUBSTANCES: The data of this substances are not available: quaternary ammonium ion compounds, alkyl dimethyl benzyl chloride (50% C14, 40% C12, 10% C16) ammonium (CAS Number: 68424-85-1) and pentamethyltallowalkyl-1,3-propane diammonium dichloride (CAS Number: 68607-29-4). VL 8 hours: ppm not established - mg/m3 not established STEL: ppm not established - mg/m3 not established</p> <p>PART B- SUBSTANCE: Hydrogen peroxide. CAS number: 7722-84-1 VME: 1ppm – 1,5 mg/m3.</p> <p>PART C- SUBSTANCES: Glycerol Diacetate (CAS Number: 25395-31-7) The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.</p>		
8.2 EXPOSURE CONTROLS		
Eye protection / face:	Wear eye protection (face shield or safety glasses needs).	
Skin protection:	Use clothes for protection (long sleeve shirt, long pants, shoes and socks)	
Hand protection:	Wear resistant gloves when using chemical products resistant (butyl rubber, nitrile and neoprene, polyethylene, polyvinyl chloride).	
Respiratory protection:	Atmospheric levels should be maintained below the exposure limits listed on the TLV by using engineering controls. If not feasible, use supplied air respirator, during spraying, wear a supplied air respiratory mask (with approval TC-10C MSHA / NIOSH) or SCBA (with approval n. ° TC13-F MSHA / NIOSH).	
Local exhaust:	Provide local exhaust, normal dilution ventilation is acceptable. Refer to Industrial Ventilation by ACGIH for a manual of recommended practices.	
Date of Document: 02.09.16 Version: V03	SECURITY DATA SHEET BY 453/2010/CE	Page 5 of 9

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
APPEARANCE:	Light yellowish clear liquid
ODOR:	Soap
COLOR:	Light yellowish
EVAPORATION RATE:	1 (water= 1)
INFLAMMABILITY:	Not flammable
VAPOR PRESSURE:	Unknown
SOLUBILITY IN WATER:	Complete
DENSITY:	1.06
CONCENTRATE pH:	9.8
BOILING POINT:	100 °C (212°F)
EXPLOSIVE PROPERTIES:	No risk of explosion
OXIDIZING PROPERTIES:	Non-oxidising

SECTION 10: STABILITY AND REACTIVITY
10.1 REACTIVITY:
There is no known risk of reactivity.
10.2 CHEMICAL STABILITY:
The product is stable. No known hazardous reactions.
10.3 POSSIBILITY OF HAZARDOUS REACTIONS:
There is no risk of polymerization.
10.4 CONDITIONS TO AVOID:
Keep away from food and beverages, including those for animals. Store in a dry place. The storage temperature can be between -21°F / -6°C and +71°C / +160°F. The optimum storage temperature is between 50° F / 10° C and 119° F / 48° C.
10.5 INCOMPATIBLE MATERIALS:
Anionic materials.
10.6 HAZARDOUS DECOMPOSITION PRODUCTS:
In case of fire, thermal decomposition can release nitrogen oxides, ammonia vapor and carbon dioxide.

SECTION 11: TOXICOLOGIC INFORMATION	
11.1 INFORMATION ABOUT TOXICOLOGIC EFFECTS	
Acute oral toxicity	Harmful if swallowed. High likelihood of mucosal lesions.
Acute inhalation toxicity	Harmful if inhaled. Shortness of breath.
Skin Irritation	May cause skin irritation.
Eye irritation	May cause severe eye irritation

Carcinogenicity:	This product is not listed in IARC Monographs, the NTP 6th Annual Report on the current SCGIC TLV's as a carcinogen or potential carcinogen.
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SECTION 12: ECOLOGICAL INFORMATION	
12.1 TOXICITY:	Information not available
12.2 PERSISTENCES AND DEGRADABILITY:	Information not available
12.3 POTENTIAL OF BIOACCUMULATION:	Information not available
12.4 MOBILITY IN FLOOR:	Information not available
12.5 RESULTS OF PBT AND VPVB:	Information not available
12.6 OTHER ADVERSE EFFECTS:	Information not available
12.7 OTHER INFORMATION:	Ecological data are not available. Avoid product spills into drains, floor or watercourses.

SECTION 13: DISPOSAL CONSIDERATIONS	
13.1 METHODS FOR WASTE TREATMENT	
DISPOSAL OF WASTE PRODUCT.	Do not discharge into drains or waterways. To not pollute the ground, avoid release to the environment. Immediately after emptying the contents, rinse three times or pressure rinse (or equivalent). The triple rinsing should be done as follows. Empty the remaining contents of container and drain for 10 seconds. Fill a quarter of the container with water container. Shake for 10 seconds. Pour into a water tank for later disposal wiped. Let drain for 10 seconds. Repeat two or more times. The elimination of waste is under the owner responsibility. Given the small rate of substance concentration the product is not considered dangerous. Dispose contents properly according to local regulations.
CONTAMINATED CONTAINER DISPOSAL	Do not reuse or refill container. Save the container label. Contaminated packaging can be eliminated as non hazardous waste under the full responsibility of the owner of the waste. Dispose of packaging properly with local, state, national and federal environmental control regulations. Nomenclature: 01 15 02 plastic packaging waste.
LOCAL PROVISIONS.	Remove material or dispose in accordance with all applicable federal, state, national and local regulations

SECTION 14: TRANSPORT INFORMATION.	
OTHER RELEVANT INFORMATION:	The product is not classified as hazardous for any mode of transportation.

You do not need any special handling procedure.
The product is non-hazardous under DOT and IATA Regulations.

SECTION 15: REGULATORY INFORMATION.
15.1 REGULATION AND LEGISLATION IN SAFETY, HEALTH AND ENVIRONMENT SPECIFIC SUBSTANCE OR MIXTURE
Classification by: Directive 67/548/EC (Hazardous substances) and their adaptations. Also taken into account Regulation (EC) n. ° 1272/2008, and their modifications (453/2010 Annex I).
15.2 CHEMICAL SAFETY ASSESSMENT
Information not available

SECTION 16: OTHER INFORMATION	
COMPLETE LIST OF USES	<p>Algaecide / anti-algae preventive or corrective for aquariums and ponds.</p> <p>Algaecide / anti-algae preventive or corrective for private and public pools.</p> <p>Disinfectant for aquariums and ponds.</p> <p>Disinfectant for private pools.</p> <p>Disinfectant for sanitary.</p> <p>Disinfectant for surfaces (floors and walls, among other), materials, equipment and furniture that are not in direct contact with food or food for animals.</p> <p>Disinfectant sanitary (toilet, bathroom).</p> <p>Air disinfection, the air conditioning systems and the ventilation ducts (filters).</p> <p>Disinfection hospital waste.</p> <p>Disinfection of rooms where sick people have been received or been given accommodation, and in which medical treatments or paramedics are provided.</p> <p>Disinfection of medical transport vehicles or transportation of corpses.</p> <p>Disinfection of floors or other substrates (playground, ...).</p> <p>Disinfection of the skin, the legs and hooves of animals except for the nipples and for veterinarian medical use.</p> <p>Disinfection of the nipples, except for medical use veterinarian.</p> <p>Disinfectants for domestic uses for surfaces in contact with food and animal food (sink, countertop, fridge).</p> <p>Antibacterial treatment of warehouses of foodstuffs for human consumption.</p> <p>Antibacterial treatment of collective central kitchens locals and materials, where transformation of food for human consumption is intended for direct delivery, and restaurants.</p> <p>Fungicide to surfaces, materials, equipment and furniture that are not in direct contact with food or food for animals.</p> <p>Fungicide treatment of warehouses of food for human consumption.</p> <p>Fungicide treatment of collective central kitchens locals and materials, where transformation of food for human consumption is intended for direct delivery, and restaurants.</p> <p>Mildewstat treatment of warehouses of food for human consumption.</p> <p>Mildewstat treatment of collective central kitchens locals and</p>



**SECURITY DATA SHEET
DF-200 HF COMBINED FOR USE**

materials, where transformation of food for human consumption is intended for direct delivery, and restaurants.
Virucide treatment of warehouses of food for human consumption.
Virucide treatment of collective central kitchens locals and materials, where transformation of food for human consumption is intended for direct delivery, and restaurants.
Deodorant / odorant neutralizer of odors.
Products for protection of materials and industrial equipment.

FULL TEXT OF RISK PHRASES

R20/22- Harmful by ingestion and inhalation
R36/38 - Causes serious eye irritation and skin irritation

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 Advanced Decon Technologies, LLC 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. 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