

SAFETY DATA SHEET.

Issuing date 26-Aug-2015

Revision Date 05-Jan-2017

Version 1.04

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<u>Product identifier</u> Product name	D7 PART 1
Recommended use of the chemical and restrictions on use	
Product code	A-0284
<u>Product Type</u> Synonyms	Non-flammable liquid None
Supplier's details	No information available. No information
Recommended Use Uses advised against	available
Manufactured For: Decon7 Systems, LLC 8541 E. Anderson Dr. #106 Scottsdale, Az 85255	
Emergency telephone number Chemical Emergency Phone	Chemtrec 1-800-424-9300 CCN681371
Number Company Emergency Phone Number	480-339-2860

A-0284 - PART 1 QUAT BULK

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

GHS Label elements, including precautionary statements

	Emergency Overview	
WARNING	· · · · · · · · · · · · · · · · · · ·	
Hazard Statements Causes skin irritation Causes serious eye irritation		
Appearance Clear	Physical state Liquid	Odor Mild

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse If skin irritation occurs: Get medical advice/attention

Hazards not otherwise classified (HNOC)

None

Other information

17.04671% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
PROPYLENE GLYCOL	57-55-6	20-30
POTASSIUM BICARBONATE	298-14-6	10-20
QUAT.AMMONIUM COMPOUNDS C12-16	68424-85-1	3.20
DIBUTYLENE GYCOL N-BUTYL ETHER	112-34-5	1-10
QUATERNARY AMMONIUM COMPOUNDS	68607-29-4	1-10
ISOBUTYL ALCOHOL	78-83-1	1-10

POTASSIUM HYDROXIDE	1310-58-3	0.765

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES			
First aid measures for different exposure routes			
General advice	Avoid contact with eyes, skin, and clothing. Avoid breathing, vapors, mist, or gas.		
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek immediate medical attention/advice.		
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Get medical attention immediately if symptoms occur.		
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.		
Ingestion	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person.		
Most important symptoms/eff	fects, acute and delayed		
Main Symptoms	Not applicable.		
Indication of immediate medical attention and special treatment needed, if necessary			
Notes to physician	Treat symptomatically.		
5. FIRE-FIGHTING MEASURES			

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

Specific hazards arising from the chemical

No information available.

Explosion Data Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge none.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

Environmental precautions

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Environmental precautions	Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.
Methods and materials for cont	ainment and cleaning up
Methods for Containment	Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.
	7. HANDLING AND STORAGE
Precautions for safe handling	

Advice on safe handling	Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.
Conditions for safe storage, inclu	iding any incompatibilities
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children.
Incompatible products	Strong acids, alkalis, or oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
DIBUTYLENE GYCOL N-BUTYL ETHER 112-34-5	TWA: 10 ppm inhalable fraction and vapor	-	-
ISOBUTYL ALCOHOL 78-83-1	TWA: 50 ppm	TWA: 100 ppm TWA: 300 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 150 mg/m ³	IDLH: 1600 ppm TWA: 50 ppm TWA: 150 mg/m ³
POTASSIUM HYDROXIDE 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

ACGIH: (American Conference of Governmental Industrial Hygienists) OSHA: (Occupational Safety & Health Administration) NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures	Showers
	Eyewash stations
	Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Safety glasses with side-shields.
Skin and body protection	Chemical resistant apron. Protective gloves.

Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Handle in accordance with good industrial hygiene and safety practice.		
Hygiene measures			
	9. PHYSICAL AND CHEMIC	CAL PROPERTIES	
Physical and chemical propertie	<u>s</u>		
Physical state	Liquid		
Appearance	Clear	Odor	Mild
Color	clear	Odor Threshold	No information available
Property_	Values	Remarks • Methods	_
рН	10.5		
Melting/freezing point	No information available		
Boiling point/boiling range	No information available		
Flash Point	> 93 °C / > 200 °F		
Evaporation rate	No information available		
Flammability (solid, gas) Flammability Limits in Air	No information available		
upper flammability limit	No information available		
lower flammability limit	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	1.091		
Water solubility	Soluble in water		
Partition coefficient: n-octanol/w			
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Viscosity	No information available		
Explosive properties	No information available		
Other information			
VOC Content(%)	3.4		

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, or oxidizing agents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Avoid breathing vapors or mists.
Eye contact	Irritating to eyes. Avoid contact with eyes.
Skin contact	Irritating to skin. Repeated exposure may cause skin dryness or cracking. Prolonged skin contact may defat the skin and produce dermatitis. Avoid contact with skin.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
PROPYLENE GLYCOL 57-55-6	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	-
DIBUTYLENE GYCOL N-BUTYL ETHER 112-34-5	= 5660 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-
ISOBUTYL ALCOHOL 78-83-1	= 2460 mg/kg (Rat)	= 3400 mg/kg (Rabbit)	> 6.5 mg/L (Rat)4 h
POTASSIUM HYDROXIDE 1310-58-3	= 284 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms

May cause mild irritation to eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Eye damage/irritation	Irritating to skin. Irritating to eves.
Irritation	Irritating to eyes and skin.
Sensitization	None known.
Germ Cell Mutagenicity	None known.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive toxicity	This product does not contain any known or suspected reproductive hazards.
Specific target organ systemic toxicity (single exposure)	None under normal use conditions.
Specific target organ systemic	None under normal use conditions.
toxicity (repeated exposure)	
Chronic toxicity	Prolonged skin contact may defat the skin and produce dermatitis.
Target Organ Effects	Central nervous system, Eyes, Respiratory system, Skin.
Aspiration hazard	Not applicable.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity17.04671% of the mixture consists of ingredient(s) of unknown toxicityThe following values are calculated based on chapter 3.1 of the GHS document .ATEmix (oral)9868 mg/kgATEmix (dermal)282041 mg/kgATEmix (inhalation-dust/mist)539.7 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
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PROPYLENE GLYCOL	19000 mg/L EC50	51600 mg/L LC50	-	1000 mg/L EC50 Daphnia
57-55-6	Pseudokirchneriella	Oncorhynchus mykiss 96h		magna 48h Static
	subcapitata 96h	static 41 - 47 mL/L LC50		
		Oncorhynchus mykiss 96h		
		static 51400 mg/L LC50		
		Pimephales promelas 96h		
		static 710 mg/L LC50		
		Pimephales promelas 96h		
DIBUTYLENE GYCOL	100 mg/L EC50	1300 mg/L LC50 Lepomis	-	100 mg/L EC50 Daphnia
N-BUTYL ETHER	Desmodesmus subspicatus	macrochirus 96h static		magna 48h
112-34-5	96h			
ISOBUTYL ALCOHOL	-	1370 - 1670 mg/L LC50	-	1300 mg/L EC50 Daphnia
78-83-1		Pimephales promelas 96h		magna 48h 1070 - 1933
		flow-through 375 mg/L LC50		mg/L EC50 Daphnia magna
		Pimephales promelas 96h		48h Static
		static 1480 - 1730 mg/L		
		LC50 Lepomis macrochirus		
		96h flow-through 1120 -		
		1520 mg/L LC50		
		Oncorhynchus mykiss 96h		
		flow-through		

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	log Pow
ISOBUTYL ALCOHOL 78-83-1	0.79
POTASSIUM HYDROXIDE 1310-58-3	0.65 0.83

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations.

Do not re-use empty containers.

Contaminated packaging

14. TRANSPORT INFORMATION

DOT Ground NOT REGULATED

IATA NOT REGULATED

IMDG NOT REGULATED

15. REGULATORY INFORMATION

International Inventories

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Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
PROPYLENE GLYCOL	Х	X	X	х	Х	Х	X	Х
POTASSIUM BICARBONATE	х	X	Х	х	Х	Х	X	Х
QUAT.AMMONIUM COMPOUNDS C12-18	х	X	Х	х	Х	Х	X	Х
DIBUTYLENE GYCOL N-BUTYL ETHER	х	X	Х	х	Х	Х	X	Х
QUATERNARY AMMONIUM COMPOUNDS	Х	X	Х	Not listed	Х	Х	X	Х
ISOBUTYL ALCOHOL	Х	X	X	Х	Х	Х	Х	Х
POTASSIUM HYDROXIDE	Х	Х	Х	Х	Х	Х	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
DIBUTYLENE GYCOL N-BUTYL ETHER - 112-34-5	112-34-5	1-10	1.0
SARA 311/312 Hazard Categories		·	
Acute Health Hazard	Yes		
Chronic Health Hazard	no		
Fire Hazard	no		
Sudden Release of Pressure Hazard	Yes		
Reactive Hazard	no		

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
POTASSIUM HYDROXIDE 1310-58-3	1000 lb			Х

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ISOBUTYL ALCOHOL 78-83-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
POTASSIUM HYDROXIDE 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
ETHANOL - 64-17-5	Carcinogen
	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
PROPYLENE GLYCOL 57-55-6	Х		Х
DIBUTYLENE GYCOL N-BUTYL ETHER 112-34-5	x		x
ISOBUTYL ALCOHOL 78-83-1	Х	X	Х
POTASSIUM HYDROXIDE 1310-58-3	Х	Х	Х

EPA Pesticide Registration Number Not applicable

<u>Canada</u>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION				
NFPA	Health Hazard 2	Flammability 1	Instability 0	Physical and chemical hazards
HMIS	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal protection B
Prepared By Issuing date	Regulatory Affairs 26-Aug-2015			
Revision Date Revision Note	05-Jan-2			
No information available				
Disclaimer The information provide	nd on this SDS is corr	act to the best of our kn	owledge information and	boliof at the date of its

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet



SAFETY DATA SHEET.

Issuing date 21-Jul-2015

Revision Date 05-Jan-2017

Version 1.03

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<u>Product identifier</u> Product name	D7 PART 2
Recommended use of the chemical and restrictions on use	
Product code	A-0266
Synonyms	None
Supplier's details	
Recommended Use Uses advised against	Cleaning product. No information available
Manufactured For: Decon7 Systems, LLC 8541 E. Anderson Dr. #106 Scottsdale, Az 85255	
Emergency telephone number Chemical Emergency Phone Number Company Emergency Phone Number	Chemtrec 1-800-424-9300 CCN681371 480-339-2860

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

GHS Label elements, including precautionary statements

Emergency Overview			
WARNING			
Hazard Statements Causes skin irritation Causes serious eye irritation			
Appearance Clear	Physical state Liquid	Odor Mild	

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/eye protection/face protection.

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

Hazards not otherwise classified (HNOC)

None

Other information

Harmful to aquatic life

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
HYDROGEN PEROXIDE	7722-84-1	7.98

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Avoid contact with eyes, skin, and clothing. Avoid breathing, vapors, mist, or gas.		
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.		
Skin contact	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.		
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.		
Ingestion	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.		
Most important symptoms/effects, acute and delayed			
Main Symptoms	Suspected of damaging fertility or the unborn child.		
Indication of immediate medical attention and special treatment needed, if necessary			
Notes to physician	Treat symptomatically.		

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog.Dry chemical. Carbon dioxide (CO2). Cool containers/tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

In the event of fire, cool tanks with water spray.

Explosion Data Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Use with adequate ventiliation to keep the exposure levels below the OELS.			
Environmental precautions				
Environmental precautions	Report spills as required by local and federal regulations.			
Methods and materials for containment and cleaning up				
Methods for Containment	Prevent further leakage or spillage if safe to do so.			
Methods for cleaning up	Contain liquid and collect with an inter, non-combustible material.			

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Avoid contact with eyes and skin. Avoid breathing vapors or mists. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Do no lay on its side. Store in a cool place.			
Conditions for safe storage, including any incompatibilities				
Technical measures/Storage conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.			
Incompatible products	None known based on information supplied.			
Aerosol Level	1			

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
HYDROGEN PEROXIDE	TWA: 1 ppm	TWA: 1 ppm	IDLH: 75 ppm	
7722-84-1		TWA: 1.4 mg/m ³	TWA: 1 ppm	
		(vacated) TWA: 1 ppm	TWA: 1.4 mg/m ³	
		(vacated) TWA: 1.4 mg/m ³	-	

ACGIH: (American Conference of Governmental Industrial Hygienists) OSHA: (Occupational Safety & Health Administration) NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures	Showers	
	Eyewash stations	
	Ventilation systems.	

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Chemical resistant apron. Protective gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

9. PHYSICAL AND CHEMICAL PROPERTIES

Handle in accordance with good industrial hygiene and safety practice.

Physical and chemical properties

Physical state
Appearance
Color

Liquid Clear clear

Odor Odor Threshold Mild No information available

Property	Values	R
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range	100 °C / 200 °F	
Flash Point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.029	
Water solubility	Practically insoluble	
Partition coefficient: n-octanol/w	vaterNo information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	

Other information

VOC Content(%)

0

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known information			
Inhalation	May cause irritation of respiratory tract.			
Eye contact	Irritating to eyes.			
Skin contact	Irritating to skin.			
Ingestion	Not acutely toxic. Aspiration	n into the lungs during swallowing	g may be harmful.	
Component Information				
Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation	

Remarks • Methods

Information on toxicological effects

Symptoms

Symptoms of overexposure may cause irritation to eyes and skin. Not acutely toxic.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Eye damage/irritation	Irritating to skin. Irritating to eyes.
Sensitization	No information available.
Germ Cell Mutagenicity	No information available.
Carcinogenicity	The table below indicates whether each agency has evaluated a listed ingredient as a
U	carcinogen. There are no known carcinogenic chemicals in this product

earbinegen. There are no known earbinegenie chernicale in the predict.					
Chemical Name	ACGIH	IARC	NTP	OSHA	
HYDROGEN PEROXIDE 7722-84-1	A3	Group 3	-	-	

ACGIH: (American Conference of Governmental Industrial Hygienists) A3 - Animal Carcinogen IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Card	sinogenicity in Humans
Reproductive toxicity	The ingredients are not reproductive hazards.
Specific target organ systemic toxicity (single exposure)	No information available.
Specific target organ systemic toxicity (repeated exposure)	No information available.
Chronic toxicity	Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons.
Target Organ Effects	Eyes, Respiratory system, Skin, Central nervous system, Peripheral Nervous System (PNS), Kidney.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity	0% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated	based on chapter 3.1 of the GHS document
ATEmix (oral)	96828 mg/kg
ATEmix (dermal)	38731 mg/kg
ATEmix (inhalation-dust/mist)	564.8 mg/l
ATEmix (inhalation-vapor)	314840 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
HYDROGEN PEROXIDE 7722-84-1	-	10.0 - 32.0 mg/L LC50 Oncorhynchus mykiss 96h static 18 - 56 mg/L LC50 Lepomis macrochirus 96h static 16.4 mg/L LC50 Pimephales promelas 96h	-	18 - 32 mg/L EC50 Daphnia magna 48h Static

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Contaminated packaging

Waste Disposal Methods	Dispose of in accordance with federal, state, and local regulations.

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground

NOT REGULATED FOR GROUND SHIPMENT.

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
HYDROGEN PEROXIDE	Х	X	X	Х	Х	х	Х	х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302): This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
HYDROGEN PEROXIDE 7722-84-1		1000 lb	

U.S. State Regulations

California Proposition 65

No warning required.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
HYDROGEN PEROXIDE	Х	Х	Х
7722-84-1			

EPA Pesticide Registration Number Not applicable

<u>Canada</u>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION					
NFPA_	Health Hazard 2	Flammability 0	Instability 0	Physical and chemical hazards	
<u>HMIS</u>	Health Hazard 2	Flammability 0	Physical Hazard 0	Personal protection B	
Prepared By	Regulato	ory Affairs			

Issuing date	21-Jul-2015
Revision Date	05-Jan-2017
Revision Note	
No information available	
<u>Disclaimer</u>	
The information provided on the	his SDS is correct t

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet



SAFETY DATA SHEET.

Issuing date 24-Feb-2016

Revision Date 05-Jan-2017

Version 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier Product name	D7 PART 3 DIACETIN
Recommended use of the chemical and restrictions on use	
Product code	A-9387
Synonyms	None
Supplier's details	
Recommended Use Uses advised against	Cleaning product. No information available
Manufactured For: Decon7 Systems, LLC 7575 E. Redfield Rd. #235 Scottsdale, Az 85260	
Emergency telephone number Chemical Emergency Phone Number Company Emergency Phone Number	Chemtrec 1-800-424-9300 CCN681371 480-339-2860
	2. HAZARDS IDENTIFICATION
<u>Classification</u> Not a dangerous substance or mixture	according to the Globally Harmonized System (GHS)
GHS Label elements, including precautionary statements	
	Emergency Overview
The product contains no subs	stances which at their given concentration, are considered to be hazardous to health

Appearance Clear

Physical state Liquid

Odor Mild

Hazards not otherwise classified (HNOC)

None

Other information

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

A-9387 - PART 3 DIACETIN

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight %*	
DIACETIN	25395-31-7	>99	

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Under normal conditions of intended use, this product does not pose a risk to health . Excessive exposure may result in eye, skin, or respiratory irritation.			
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.			
Skin contact	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.			
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.			
Ingestion	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.			
Most important symptoms/effects,	acute and delayed			
Main Symptoms	May cause slight skin irritation and eye irritation.			
Indication of immediate medical attention and special treatment needed, if necessary				
Notes to physician	Treat symptomatically.			

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog.Dry chemical. Carbon dioxide (CO2). Cool containers/tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

In the event of fire, cool tanks with water spray.

Explosion Data Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Use with adequate ventiliation to keep the exposure levels below the OELS.

Environmental precautions					
Environmental precautions	conmental precautions Report spills as required by local and federal regulations.				
Methods and materials for containment and cleaning up					
Methods for Containment	Prevent further leakage or spillage if safe to do so.				
Methods for cleaning up	Contain liquid and collect with an inter, non-combustible material.				
	7. HANDLING AND STORAGE				
Precautions for safe handling					
Advice on safe handling	Avoid contact with eyes and skin. Avoid breathing vapors or mists. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Do not lay on its side. Store in a cool place. Keep/Store away from clothing/ combustible materials.				
Conditions for safe storage, incl	luding any incompatibilities				
Technical measures/Storage conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.				
Incompatible products	None known based on information supplied.				
Aerosol Level	1				
8. EXPOSURE CONTROLS/PERSONAL PROTECTION					
Control parameters					
Exposure Guidelines	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962				
	(11th Cir., 1992).				
Exposure controls					
Engineering Measures	Showers Eyewash stations Ventilation systems.				
Individual protection measures, such as personal protective equipment					
Eye/Face Protection	Safety glasses with side-shields.				

Eyerrace Protection	Salety glasses with side-shields.
Skin and body protection	Chemical resistant apron. Protective gloves.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state Appearance Color	Liquid Clear clear	Odor Odor Threshold	Mild
Property_	Values_	Remarks • Methods	
pH	No information available		
Melting/freezing point	No information available		
Boiling point/boiling range	No information available		
Flash Point	140 °C / 284 °F		
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limits in Air			
upper flammability limit	No information available		
lower flammability limit	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	1.191		
Water solubility	Soluble in water		
Partition coefficient: n-octanol/wate	er		
Autoignition temperature	No information available		
Decomposition temperature			
Viscosity	No information available		
Explosive properties			
Other information			

VOC Content(%)

0

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known information
Inhalation	An expected route of exposure.
Eye contact	May cause slight irritation.
Skin contact	Substance may cause slight skin irritation.

Not acutely toxic. Ingestion **Component Information** Information on toxicological effects Symptoms Symptoms of overexposure may cause irritation to eyes and skin. Not acutely toxic. Delayed and immediate effects as well as chronic effects from short and long-term exposure Skin corrosion/irritation irritating to skin . Eye damage/irritation Irritating to eyes. Sensitization Germ Cell Mutagenicity No information available. There are no known carcinogenic chemicals in this product. Carcinogenicity The ingredients are not reproductive hazards. **Reproductive toxicity** No information available. Specific target organ systemic toxicity (single exposure) Specific target organ systemic No information available. toxicity (repeated exposure) **Chronic toxicity** Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. **Target Organ Effects** Eyes, Respiratory system, Skin, Central Nervous System (CNS), Peripheral Nervous System (PNS), Kidney, Aspiration hazard No information available. Numerical measures of toxicity - Product Information 0% of the mixture consists of ingredient(s) of unknown toxicity **Unknown Acute Toxicity** The following values are calculated based on chapter 3.1 of the GHS document ATEmix (oral) 96828 mg/kg 38731 mg/kg ATEmix (dermal) ATEmix (inhalation-dust/mist) 564.8 mg/l ATEmix (inhalation-vapor) 314840 mg/l **12. ECOLOGICAL INFORMATION** Ecotoxicity Persistence and degradability **Bioaccumulation** No information available Other adverse effects 13. DISPOSAL CONSIDERATIONS Waste treatment Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations. **Contaminated packaging** Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground

NOT REGULATED FOR GROUND SHIPMENT.

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
DIACETIN	Х	X	Х	Х	Х	Х	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any known Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

A-9387 - PART 3 DIACETIN

EPA Pesticide Registration Number Not applicable

<u>Canada</u>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. OTHER INFORMATION					
<u>NFPA</u>	Health Hazard 1	Flammability 0	Instability 0	Physical and chemical hazards	
<u>HMIS</u>	Health Hazard 1	Flammability 0	Physical Hazard 0	Personal protection B	
Prepared By	Regulato	ory Affairs			
Issuing date Revision Date Revision Note	24-Feb-2 05-Jan-2				

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End of Safety Data Sheet