1. Product and Company Identification

Identity (as used on label & list):

Decon7 Part 1

Product Description:

Water Soluble Surfactants and Water

Intended Use:

Disinfectant, Mildewstat, Virucide, only for use when added to

Decon7 Part 2

Supplier Details:

Decon7 Systems LLC

7575 E Redfield Rd Ste 235

Scottsdale, AZ 85260

480-339-2858

Emergency Telephone

Number (with hours of operation)

1-800-424-9300 (24/7)

2. Hazards Identification

Hazardous Classification:

Pictogram:



Signal word:

Danger

Hazard Statement: Causes skin burns, causes eye injury, harmful if swallowed or inhaled

Under conditions of intended use this product is not considered hazardous and does not pose a risk to health.

Overview; Ingredients not listed as a carcinogen by IARC, NTP, or OSHA

DOT Hazard Class:

Not Applicable

Threshold Value Limit (TLV):

Not Determined

Signs and Symptoms of Exposure:

Eyes

Will cause irritation and inflammation characterized by redness, watering, and itching; depending on

length of exposure, solution concentration and first aid measures provided.

Skin

Causes skin irritation characterized by reddening. Prolonged contact with product may cause

discomfort, no adverse effects expected form absorption of material through skin.

Ingestion

Not expected to be a primary route of exposure, will produce gastrointestinal discomfort.

Inhalation

Not expected to be a primary route of exposure, vapors or mists in unusually high concentration, in

poorly ventilated areas may cause irritation of nose and throat characterized by coughing.

3. Composition/ Information on Ingredients

Component	CAS-No.	%Wt.
Alky-Dimethyl-benzylammoniun chloride	68424-85-1	3.2
Pentamethyl-N-Alkyl Trimethylene	68607-29-4	1.0
diammonium Chloride		

Diethylene Glycol Monobutyl Ether	112-34-8	1.6
1-Dodecanol	112-53-8	0.8
Isobutanol	78-83-1	1.0
Propylene Glycol	57-55-6	20.0
Potassium Hydroxide	1310-58-3	3.2
Potassium Bicarbonate	248-14-6	10.0
Water	Balance	

4. First Aid Measures

Inhalation: Remove to fresh air. If irritation persists, seek medical attention. If breathing has stopped, assist

ventilation with a mechanical device or use rescue breathing with a pocket mask.

Skin:

Wash skin with water.

Eves:

Flush with water for 15 minutes. If eye irritation persists, seek medical attention.

Ingestion:

If swallowed, get immediate medical attention or advice. If victim is conscious and able to swallow,

give large amounts of water. Do not give anything by mouth to the person who is unconscious or

convulsing. Do not induce vomiting unless directed by a physician.

5. Fire Fighting Measures

Flash Point	Not Applicable
Auto Ignition Temperature:	Not Applicable
Flammable Limits	Not Applicable
Classification	Not Flammable
Extinguishing Media	Not Applicable

Special Fire Fighting Procedures: NFPA Code: Health 1, Fire 0, Reactivity 0

Use water spray to cool fire-exposed surfaces to prevent over-pressure of containers and to protect personnel. Use air-supplied breathing equipment for enclosed areas.

6. Accidental Release Measures

Containment Procedures Stop flow of material if without risk. Dike spill with inert absorbent. Block any

potential routes to water systems, sewers, streams, lakes, etc.

Clean-Up Procedures Wear appropriate protective equipment and clothing. Absorb with inert absorbent,

shovel material into appropriate container for disposal.

Evacuation Procedures Keep unnecessary personnel away.

7. Handling and Storage

Handling Procedures Avoid contact with skin and eyes. Observe good industrial hygiene practices and wash

thoroughly after handling.

Technical Measures

Work practices should minimize contact.

Technical Precautions

Local exhaust is normally not required unless the process produces a mist.

Storage Procedures

Store in tightly closed original container, in well ventilated place, away from strong acids.

Prevent from freezing. If frozen, move to warn area.

8. Exposure Controls/ Personal Protection

SAFETY DATA SHEET Decon7 Part 1

Ventilation Engineering Controls:

Ventilation should effectively remove and prevent any buildup of

any vapor or mist generated from the use of this product

Personal Protection Equipment (PPE)

Respiratory Protection:

If ventilation is not sufficient to effectively prevent buildup of aerosols

or vapors, appropriate NIOSH/MSHA rated respiratory protection must

be provided.

Skin Protection:

Use Impervious gloves. Use of impervious apron and boots are

recommended

Eye/Face Protection:

Wear safety glasses, chemical goggles or a full face shield.

Other Protective Clothing /

Equipment:

None.

9. Physical and Chemical Properties

Physical State

Appearance and Color

vimetaly

Boiling Point (° F) approximately

Odor

Ammoniacal

Liquid

212° F

Vapor Pressure (mmHg)

equivalent to water

Light yellow to water white liquid

Vapor Density (air= 1) less than

equivalent to water

Solubility in Water

Complete

Specific Gravity (H2O= 1)

approximately

1.09

Burning Properties

Oxides of carbon and nitrogen may be produced after all moisture

is boiled off.

Flammability

Not Flammable

Explosive Properties

Not Explosive

Flashpoint

Not applicable

Auto-ignition temperature Decomposition temperature Not applicable Not applicable

pH of Product

10.7

Evaporation Rate (water= 1)

Viscosity

< 1 ≈ water

10. Stability and Reactivity

Chemical Stability:

This is a chemically stable material.

Conditions to Avoid:

Heat from fire sufficient to overpressure container.

Materials to Avoid:

Strong acids

Hazardous Decomposition or Byproducts:

Material will not decompose in use or storage. Oxides of carbon, nitrogen may be produced after all moisture is boiled off in a fire.

Hazardous Polymerization

Will not occur.

11. Toxicological Information

Eyes

Will cause irritation and conjunctivitis depending on length of exposure, solution concentration

and first aid measures provided.

Skin

Prolonged contact with product may cause discomfort, no adverse effects expected form absorption of

material through skin

SAFETY DATA SHEET

Decon7 Part 1

Ingestion

Not expected to be a primary route of exposure. Rat oral LD₅₀ (of mixed Part 1@49%, Part 2@49%,

Part 3@2%) is greater than 5000milligrams/kilogram of body weight

Inhalation

Vapors or mists in unusually high concentration, in poorly ventilated areas may cause irritation of

nose and throat.

Carcinogenicity:

NTP: No

IARC Monographs: No

OSHA Regulated: No

12. Ecological Information

The product is not expected to be hazardous to the environment.

Mobility:

This product is soluble in water and will spread in water systems

Degradability:

The rate of degradation has not been determined. Surfactant components are inherently

bio-degradable.

13. Disposal Considerations

Waste Material Disposal of in accordance with Local, State and Provincial Environmental Regulations.

Treat container as residue.

14. Transport Information

Not Regulated

15. Regulatory Information

DOT Hazard Class:

Not regulated

EPA Hazardous Substances:

None

SARA 311/312 Hazards:

Immediate (Acute) Health Hazard

SARA Title III:

none

California Proposition 65:

This product does not contain any chemicals known to the State of California

to cause cancer, birth defects or other reproductive harm.

Governmental Inventory

All components comply with TSCA, DSL, AICS, NZIoC, ENCS, KECI,

Status:

PICCS and IECSC.

16. OTHER INFORMATION

US NFPA Codes	Health	Fire	Reactivity	
	1	0	0	
HMIS Codes	Health	Fire	Reactivity	PPE
	1	0	0	Section 8

The information on this SDS reflects the latest information that we have on hazards, properties, and handling of this product under recommended conditions of use. This company believes this information to be accurate and reliable however, the accuracy and completeness is not guaranteed.

1. Product and Company Identification

Identity (as used on label & list):

Decon7 Part 2

Product Description:

Hydrogen Peroxide and Water

Intended Use:

Disinfectant, Mildewstat, Virucide, only for use when added to

Decon7 Part 1

Supplier Details:

Decon7 Systems LLC

7575 E Redfield Rd Ste 235

Scottsdale, Az 85260

480-339-2858

Emergency Telephone

Number (with hours of operation)

1-800-424-9300 (24/7)

2. Hazards Identification

Hazardous Classification:

Pictogram:



Signal word:

Danger

Hazard Statement: Causes skin burns, can cause irreversible eye injury, harmful if swallowed or inhaled

Under conditions of intended use this product is not considered hazardous and does not pose a risk to health.

Overview; Ingredients not listed as a carcinogen by IARC, NTP, or OSHA

DOT Hazard Class:

Not Applicable

Threshold Value Limit (TLV):

Not Determined

Signs and Symptoms of Exposure:

Eyes

Will cause irritation and inflammation characterized by redness, watering, and itching; depending on

length of exposure, solution concentration and first aid measures provided.

Skin

Causes skin irritation characterized by reddening. Prolonged contact with product may cause

discomfort, no adverse effects expected form absorption of material through skin.

Ingestion

Not expected to be a primary route of exposure, will produce gastrointestinal discomfort.

Inhalation

Not expected to be a primary route of exposure, vapors or mists in unusually high concentration, in

poorly ventilated areas may cause irritation of nose and throat characterized by coughing.

3. Composition/Information on Ingredients

Component	CAS-No.	%Wt.	
Hydrogen Peroxide	7722-84-1	7.9	
Water	7732-18-5	92.1	

4. First Aid Measures

Inhalation:

Remove to fresh air. If irritation persists, seek medical attention. If breathing has stopped, assist

ventilation with a mechanical device or use rescue breathing with a pocket mask.

Skin:

Wash skin with soap and water. Seek medical attention if irritation occurs and persists.

Eyes:

Immediately flush with water for 15 minutes, lifting upper and lower lids intermittently. If eye

irritation persists, seek medical attention.

Ingestion:

If swallowed, get immediate medical attention or advice. If victim is conscious and able to swallow, give large amounts of water. Do not give anything by mouth to the person who is unconscious or

convulsing. Do not induce vomiting unless directed by a physician.

5. Fire Fighting Measures

Flash Point	Not Applicable
Auto Ignition Temperature:	Not Applicable
Flammable Limits	Not Applicable
Classification	Not Flammable
Extinguishing Media	Water

Special Fire Fighting Procedures: NFPA Code: Health 1, Fire 0, Reactivity 1, Special OX

Use water spray to cool fire-exposed surfaces to prevent over-pressure of containers and to protect personnel. Use air-supplied breathing equipment for enclosed areas.

Product is non-combustible. On decomposition from excessive heat it will release oxygen which may intensify fire.

6. Accidental Release Measures

Containment Procedures

Stop flow of material if without risk. Dike spill with inert material and dilute with

water. Hold until Hydrogen Peroxide decomposes. Block any potential routes to water

systems, sewers, streams, lakes, etc.

Clean-Up Procedures

Wear appropriate protective equipment and clothing. Combustible materials exposed to Decon7 Part 2 should be rinsed with water to remove Hydrogen Peroxide. Keep

Evacuation Procedures

unnecessary personnel away.

7. Handling and Storage

Handling Procedures

Avoid contact with skin and eyes. Observe good industrial hygiene practices and wash

thoroughly after handling.

Technical Measures

Work practices should minimize contact. Decon7 Part 2 should be stored in vented containers. Avoid excessive heat and contamination. Contamination may cause decomposition and generation of Oxygen gas that may overpressure container. Do not return unused Decon7 Part 2 to original container. Utensils for handling Decon7 Part 2

should only be made of glass, stainless steel, aluminum, or plastic.

Technical Precautions

Local exhaust is normally not required unless the process produces a mist.

Storage Procedures

Store in closed vented original container, in well ventilated place, out of direct sunlight,

away from combustibles. Prevent from freezing. If frozen, move to warm area.

8. Exposure Controls/ Personal Protection

Ventilation Engineering

Ventilation should effectively remove and prevent any buildup of

Controls: SDS DECON7 Part 2

SAFETY DATA SHEET

Decon7 Part 2

any vapor or mist generated from the use of this product

Personal Protection Equipment (PPE)

Respiratory Protection: If ventilation is not sufficient to effectively prevent buildup of aerosols

> or vapors, appropriate NIOSH/MSHA rated self-contained breathing apparatus should be used. Do not use a mask containing oxidizable

elements.

Use Impervious gloves. Use of impervious apron and boots (neoprene, Skin Protection:

nirile, pvc) are recommended.

Eye/Face Protection:

Wear safety glasses, chemical goggles or a full face shield.

Other Protective Clothing /

Equipment:

Avoid exposure of cotton and leather clothing and footwear to this

product. If exposed rinse well before allowing to dry.

9. Physical and Chemical Properties

Physical State

Appearance and Color water white liquid **Boiling Point** 216° F, 102°C Odor

Vapor Pressure @30°C (mmHg) 31

Vapor Density (air= 1) less than

Solubility in Water Specific Gravity (H₂O= 1)

Burning Properties Flammability **Explosive Properties**

Flashpoint Auto-ignition temperature

pH of Product

Evaporation Rate (Butyl Acetate= 1)

Viscosity

Liquid

odorless

equivalent to water

Complete 1.06

Not applicable Not Flammable Not Explosive Not applicable Not applicable 2.5-3.5

< 1 ≈ water

10. Stability and Reactivity

Chemical Stability:

This is a chemically stable material. Excessive heat or contamination could cause product to become unstable.

Conditions to Avoid:

Excessive heat or contamination

Materials to Avoid:

Reducing agents, iron, copper alloys Oxygen which will support combustion.

Hazardous Polymerization

Will not occur.

11. Toxicological Information

Hazardous Decomposition or Byproducts:

Eyes Will cause irritation and conjunctivitis depending on length of exposure, solution concentration

and first aid measures provided.

Skin Prolonged contact with product may cause discomfort, no adverse effects expected form absorption of

material through skin

Not expected to be a primary route of exposure. Rat oral LD₅₀ (of mixed Part 1@49%, Part 2@49%, Ingestion

Part 3@2%) is greater than 5000milligrams/kilogram of body weight. Rat oral LD50 of Part 2 alone is

greater than 5000milligrams/kilogram of body weight.

SAFETY DATA SHEET

Decon7 Part 2

Inhalation

Vapors or mists in unusually high concentration, in poorly ventilated areas may cause irritation of

nose and throat.

Carcinogenicity:

NTP: No

IARC Monographs: No

OSHA Regulated: No

12. Ecological Information

The product is not expected to be hazardous to the environment.

Mobility:

This product is soluble in water and will spread in water systems

Degradability:

The rate of degradation has ranges from 8 hr. to 20 days in water, 10-20 hours in air, and

minutes to hours in soil depending upon microbiological activity and metals content.

13. Disposal Considerations

Waste Material Disposal of in accordance with Local, State and Provincial Environmental Regulations. May be diluted, allowing time for decomposition and discharged to suitable treatment system.

Treat container as residue.

14. Transport Information

Not Regulated 1

15. Regulatory Information

DOT Hazard Class:

Not regulated

EPA Hazardous Substances:

None

SARA 311/312 Hazards:

Immediate (Acute) Health Hazard, Fire

TPQ None

SARA Title III:

none

Governmental Inventory

All components comply with TSCA, DSL, AICS, NZIoC, ENCS, KECI,

Status:

PICCS and IECSC.

16. OTHER INFORMATION

US NFPA Codes	Health	Fire	Reactivity	Special
	1	0	1	OX
HMIS Codes	Health	Fire	Reactivity	PPE
	1	0	1	Section 8

The information on this SDS reflects the latest information that we have on hazards, properties, and handling of this product under recommended conditions of use. This company believes this information to be accurate and reliable however, the accuracy and completeness is not guaranteed.

Decon7 Part 3 SAFETY DATA SHEET

Version 3.4 Revision Date 07/09/2014 Print Date 06/22/2015

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name

Diacetin

Product Number

W500615

Brand

Aldrich

CAS-No.

25395-31-7

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company

Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

Telephone

+1 800-325-5832

Fax

+1 800-325-5052

1.4 Emergency telephone number

Emergency Phone #

: (314) 776-6555

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms

Glycerol diacetate

Formula

C7H12O5

Molecular Weight

176.17 g/mol

CAS-No.

25395-31-7

EC-No.

246-941-2

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to the applicable regulations.

4. FIRST AID MEASURES

4.1 Description of first aid measures

lf inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Hygroscopic.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

	and buolo pily si	car and chemical properties
a)	Appearance	Form: clear, viscous liquid Colour: colourless
b)	Odour	no data available
c)	Odour Threshold	no data available
d)	рН	no data available
e)	Melting point/freezing point	no data available
f)	Initial boiling point and boiling range	no data available
g)	Flash point	110 °C (230 °F) - closed cup
h)	Evapouration rate	no data available
i)	Flammability (solid, gas)	no data available
j)	Upper/lower flammability or explosive limits	no data available
k)	Vapour pressure	< 1 hPa (< 1 mmHg) at 20 °C (68 °F)
I)	Vapour density	6.08 - (Air = 1.0)
m)	Relative density	1.17 g/cm3 at 25 °C (77 °F)
n)	Water solubility	no data available
0)	Partition coefficient: n-octanol/water	no data available
p)	Auto-ignition temperature	no data available
q)	Decomposition temperature	no data available
r)	Viscosity	no data available
s)	Explosive properties	no data available
t)	Oxidizing properties	no data available

9.2 Other safety information

Relative vapour density 6.08 - (Air = 1.0)

10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - mouse - 8,500 mg/kg

Inhalation: no data available

Dermal: no data available

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH:

No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: AK3325000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Glycerol 1,3-di(acetate)

CAS-No. 25395-31-7

Revision Date

New Jersey Right To Know Components

CAS-No.

Revision Date

Glycerol 1,3-di(acetate)

25395-31-7

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Rating

Health hazard:

0

Chronic Health Hazard:

U

Flammability: Physical Hazard

1

NFPA Rating

Health hazard:

0

Fire Hazard: Reactivity Hazard: 1

Further information

Copyright 2014 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Preparation Information

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

Version: 3.4

Revision Date: 07/09/2014

Print Date: 06/22/2015