Safety Data Sheet

according to JIS Z 7253 : 2019

Issue date: 2022.08.22 Revision date: 2022.08.22 Version No: 1.0 SDS Number: P2022081602

1. Chemical product and company identification

Substance name : Delta Cassette Storage Solution

Recommended use of the chemical and restrictions on use

Recommended use : Delta membrane cassette.

Company information

Pall Corporation 225 Marcus Boulevard Hauppauge, NY 11788, USA

Telephone: +1 631-994-3735 Email: michael_diorio@pall.com

www.pall.com

Emergency telephone number

Emergency number : International: +1-703-527-3887

2. Hazards identification

GHS classification

Health hazards

Serious eye damage/eye

Category 2

irritation

Hazard pictograms (GHS JP)



GHS Signal word : Warning

Hazard statements (GHS JP) : Causes serious eye irritation. (H319)

Precautionary statements (GHS JP)

Prevention : Wash hands, forearms and face thoroughly after handling. (P264)

Wear protective gloves/protective clothing/eye protection/face

protection. (P280)

Response : IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing. (P305+P351+P338)

If eye irritation persists: Get medical advice/attention.

(P337+P313)

3. Composition/information on ingredients

Distinction of substance or : Mixture

mixture

Name	Concentration (%)	Formula	Reference number in the gazette list		CAS-No.
			CSCL No.	ISHL No.	

Ethyl alcohol	5	С2Н6О	(2)-202	-	64-17-5
Acetic acid, sodium salt (2:1)	1	C4H7NaO4	(2)-692	-	126-96-5

4. First aid measures

First aid measures

First-aid measures after

inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin

contact

: Wash skin with plenty of water.

First-aid measures after eye

contact

: 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.

First-aid measures after

ingestion

: Call a poison center or a doctor if you feel unwell.

Most Important Symptoms/Effects

Symptoms/effects after eye

contact

: Eye irritation.

Notes to physician

Note to physician : Treat symptomatically.

5. Fire fighting measures

Suitable extinguishing media

: Water spray, Dry powder, Foam, Carbon dioxide

Unsuitable extinguishing media

: No data available

Hazardous decomposition

: Toxic fumes may be released

products in case of fire

Protective equipment for

firefighters

: Do not attempt to take action without suitable protective $% \left(1\right) =\left(1\right) \left(1\right)$

equipment.

Self-contained breathing apparatus. Complete protective clothing.

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures

For non-emergency personnel

Emergency procedures

: Ventilate spillage area.

Avoid contact with skin and eyes.

For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective

equipment.

For further information refer to section 8: "Exposure

controls/personal protection".

Environmental precautions

Environmental precautions : Avoid release to the environment.

Methods and Equipment for Containment and Cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

7. Handling and storage

Hand I ing

Technical measures : No data available

Precautions for safe handling : Ensure good ventilation of the work station.

Avoid contact with skin and eyes. Wear personal protective equipment.

Prevents handling of : No data available

incompatible substances or

mixtures

Hygiene measures : Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

Storage

Storage conditions : Store in a well-ventilated place.

Keep cool.

Material used in : No data available

 ${\tt packaging/containers}$

8. Exposure controls / Personal protection equipment

Appropriate engineering : Ensure good ventilation of the work station

controls

Protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory

equipment (EN 136/140/145)

Hand protection : Protective gloves
Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Environmental exposure controls : Avoid release to the environment.

9. Physical and chemical properties

Physical state : Liquid [Transparent]

Colour : Transparent

0dour : Citric acid, alcohol. No data available Melting point : No data available Freezing point No data available : No data available Boiling point : No data available Flash point Auto-ignition temperature No data available Decomposition temperature : No data available : No data available Flammability : No data available Vapour pressure Relative density : No data available

Density : 1.042

Relative gas density : No data available Solubility : No data available

Partition coefficient n-: No data available

octanol/water (Log Pow)

Explosive limits (vol %) : No data available Viscosity, kinematic No data available No data available Particle size Particle size distribution No data available Particle shape No data available Particle aspect ratio : No data available Particle specific surface area : No data available

Stability and reactivity

Reactivity : The product is non-reactive under normal conditions of use, storage

and transport.

Chemical stability Stable under normal conditions.

Possibility of hazardous No dangerous reactions known under normal conditions of use.

reactions

Conditions to avoid

: None under recommended storage and handling conditions (see section 7).

Incompatible materials No data available

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition

products should not be produced.

11. Toxicological information

Acute toxicity (oral) : Not classified (Based on available data, the classification

criteria are not met)

: Not classified (Based on available data, the classification Acute toxicity (dermal)

criteria are not met)

: Not classified (Based on available data, the classification Acute toxicity (inhalation)

criteria are not met)

Ethyl alcohol (64-17-5)	
LD50 oral rat	15010 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 14450 - 15560
LC50 Inhalation - Rat	133.8 mg/l/4h
LC50 Inhalation - Rat (Dust/Mist)	> 99999 mg/l

Acetic acid, sodium salt (2:) (126–96–5)
LD50 oral rat	5600 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation : Not classified (Based on available data, the classification

criteria are not met)

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory sensitization : Not classified (Based on available data, the classification

criteria are not met)

Skin sensitization : Not classified (Based on available data, the classification

criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification

criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification

criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification

criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification

criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification

criteria are not met)

Aspiration hazard : Not classified (Based on available data, the classification

criteria are not met)

12. Ecological information

Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor

to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute)

: Not classified (Based on available data, the classification $% \left(1\right) =\left(1\right) +\left(1$

criteria are not met)

Hazardous to the aquatic environment, long-term (chronic)

: Not classified (Based on available data, the classification $% \left(1\right) =\left(1\right) \left(1\right$

criteria are not met)

Ethyl alcohol (64-17-5)	
LC50 - Fish [2]	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 - Other aquatic organisms [1]	5012 mg/l waterflea
EC50 - Other aquatic organisms [2]	275 mg/l
ErC50 algae	275 mg/l Source: ECHA
Partition coefficient n-octanol/water (Log Pow)	-0.35 (at 24 ° C (at pH 7.4)

Persistence and degradability

Delta Cassette Storage Solution	
Persistence and degradability	No data available
Ethyl alcohol (64-17-5)	
Persistence and degradability	Not established.

Bioaccumulative potential

Delta Cassette Storage Solution			
Bioaccumulative potential	No data available		
Ethyl alcohol (64-17-5)			
Bioaccumulative potential	Not established.		
Partition coefficient n- octanol/water (Log Pow)	-0.35 (at 24 $^{\circ}$ C (at pH 7.4)		

Mobility in soil

Delta Cassette Storage Solution	
Mobility in soil	No data available

Ethyl alcohol (64-17-5)	
Partition coefficient n-	-0.35 (at 24 $^{\circ}$ C (at pH 7.4)
octanol/water (Log Pow)	

Hazardous to the ozone laver

Ozone : No data available

Other adverse effects : No additional information available

13. Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed

collector's sorting instructions.

14. Transport information

International Regulations Overland transport(UN RTDG)

UN-No. (UN RTDG) : Not Regulated Proper Shipping Name (UN RTDG) : Not Regulated Packing group (UN RTDG) : Not Regulated Transport hazard class(es) (UN : Not Regulated

RTDG)

Transport by sea (IMDG)

UN-No. (IMDG) : Not Regulated
Proper Shipping Name (IMDG) Not Regulated
Packing group (IMDG) : Not Regulated
Transport hazard class(es) : Not Regulated

(IMDG)

Air transport(IATA)

UN-No. (IATA) : Not Regulated Proper Shipping Name (IATA) : Not Regulated Packing group (IATA) : Not Regulated Transport hazard class(es) : Not Regulated

(IATA)

Marine pollutant : Not Regulated

Regulations in Japan

Other information : No supplementary information available

15. Regulatory information

National law

Industrial Safety and Health Law

Dangerous or Harmful Substances for Labeling of Chemical Name etc. (Act Art.57 Para.1, Enforcement Order, Art.18 Item 1 and

2, Appended Table No.9)

Dangerous Substances, Flammable Substances (Enforcement

Order, Art., Appended Table 1, Item 4)

Dangerous or Harmful Substances for Notification of Chemical Name etc. on SDS (Act, Art. 57-2, Enforcement Order, Art. 18-2

Item 1 and 2, Appended Table 9)

Ethanol (Ordinance number : 61) (under 5%)

Act on the	Prohibitio	on of	
Chemical W	leapons and	Control,	of
Specific C	Chemicals		

Air Pollution Control Law

Law Relating to Prevention of Marine Pollution and Maritime Disasters

Foreign Exchange and Foreign Trade Control Act

Law for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes (Basel Convention) : Organic Chemical Substances (Act, Art.29-1, Enforcement Order, Art.4-1)

: Volatile Organic Compounds (Act, Art. 2, Para. 4) (Environment Agency Notification to Prefectures)

: Oily mixture (Ordinance for Enforcement, Art. 2-2)
Harmless Substances (Enforcement Order, Art. Appended Table 1-2)
Hazardous liquid substances (class X substances) and oily
mixtures (Enforcement Ordinance Appendix 1 No. 1 a (81))
Harmful Liquid Substances (Group Z), (Enforcement Order, Art. Appended Table 1)

Approval for Item 2-2 (Import Trade Control Order, Art. 4, Para. 1, Item 2)
Export Trade Control Order, Appended Table 1, Para. 16
Export Approval (Export Trade Control Order, Appended Table

Specified hazardous waste (Act, Art.2, Para.1-1 (a), Ministerial Ordinance No.12 of June 18, 2018)

16. Other information

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