



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### NATURAL DELTA-DODECALACTONE

Revision date: 16.08.2023

Product code: 240100

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#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
713-95-1	211-932-4	NATURAL DELTA-DODECALACTONE	100 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg	

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### After inhalation

Provide fresh air.

#### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

#### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

#### After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of water.

### 4.2. Most important symptoms and effects, both acute and delayed

No information available.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

### 5.2. Special hazards arising from the substance or mixture

Non-flammable.

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### General advice

Use personal protection equipment.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

#### For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

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Disposal: see section 13

#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

###### **Advice on safe handling**

No special measures are necessary.

###### **Advice on protection against fire and explosion**

No special fire protection measures are necessary.

###### **Advice on general occupational hygiene**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

##### 7.2. Conditions for safe storage, including any incompatibilities

###### **Requirements for storage rooms and vessels**

Keep container tightly closed.

###### **Hints on joint storage**

No special measures are necessary.

##### 7.3. Specific end use(s)

For Flavour use for food and feed only

#### SECTION 8: Exposure controls/personal protection

##### 8.1. Control parameters

###### **DNEL/DMEL values**

CAS No	Name of agent		
DNEL type	Exposure route	Effect	Value
713-95-1	NATURAL DELTA-DODECALACTONE		
Worker DNEL, long-term	inhalation	systemic	16,4 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	4,67 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	2,9 mg/m <sup>3</sup>
Consumer DNEL, long-term	dermal	systemic	1,67 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	1,67 mg/kg bw/day

###### **PNEC values**

CAS No	Name of agent	
Environmental compartment	Value	
713-95-1	NATURAL DELTA-DODECALACTONE	
Freshwater	0,0024 mg/l	
Freshwater (intermittent releases)	0,024 mg/l	
Marine water	0,00024 mg/l	
Marine water (intermittent releases)	0,0024 mg/l	
Freshwater sediment	0,183 mg/kg	
Marine sediment	0,0183 mg/kg	
Soil	0,0352 mg/kg	

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#### **8.2. Exposure controls**

##### **Individual protection measures, such as personal protective equipment**

###### **Eye/face protection**

Wear eye/face protection.

###### **Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

###### **Skin protection**

Use of protective clothing.

###### **Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

### **SECTION 9: Physical and chemical properties**

#### **9.1. Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:		
		<b>Test method</b>
Melting point/freezing point:	-12 °C	
Boiling point or initial boiling point and boiling range:	288 °C	
Flammability:	not determined	
Lower explosion limits:	not determined	VDI 2263
Upper explosion limits:	not determined	VDI 2263
Flash point:	138 °C	
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
Viscosity / kinematic: (at 40 °C)	20,407 mm <sup>2</sup> /s	
Water solubility: (at 20 °C)	0,148 g/L	
Solubility in other solvents	not determined	
Partition coefficient n-octanol/water:	3,48	
Vapour pressure:	not determined	
Density (at 20 °C):	0,95 g/cm <sup>3</sup>	
Relative vapour density: (at 20 °C)	6,85	

#### **9.2. Other information**

##### **Information with regard to physical hazard classes**

###### **Explosive properties**

The product is not: Explosive. not explosive according to EU A.14

###### **Oxidizing properties**

The product is not: oxidising.

##### **Other safety characteristics**

Evaporation rate:	not determined
Solvent content:	0%
Solid content:	0%

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Viscosity / dynamic:  
(at 40 °C)

19,364 mPa·s

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

##### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

##### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

##### 10.4. Conditions to avoid

none

##### 10.5. Incompatible materials

No information available.

##### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

#### SECTION 11: Toxicological information

##### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

###### Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
713-95-1	NATURAL DELTA-DODECALACTONE				
	oral	LD50 mg/kg	>2000	Rat	REACH registration OECD 423
	dermal	LD50 mg/kg	>2000	Rat	REACH registration OECD 402

###### Irritation and corrosivity

Based on available data, the classification criteria are not met.

###### Sensitising effects

Based on available data, the classification criteria are not met.

###### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

###### STOT-single exposure

Based on available data, the classification criteria are not met.

###### STOT-repeated exposure

Based on available data, the classification criteria are not met.

###### Aspiration hazard

Based on available data, the classification criteria are not met.

##### 11.2. Information on other hazards

###### Endocrine disrupting properties

No information available.

###### Further information

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

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#### SECTION 12: Ecological information

##### 12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
713-95-1	NATURAL DELTA-DODECALACTONE					
	Acute fish toxicity	LC50 mg/l	10,25	96 h	Danio rerio (zebrafish)	REACH registration OECD 203
	Acute algae toxicity	ErC50 mg/l	6,61	72 h	Desmodesmus subspicatus	REACH registration
	Acute crustacea toxicity	EC50	8,8 mg/l	48 h	Daphnia magna (Big water flea)	REACH registration OECD 202
	Acute bacteria toxicity	(EC50	62 mg/l)		Pseudomonas putida	REACH registration

##### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
713-95-1	NATURAL DELTA-DODECALACTONE			
	OECD 301C	77	14	REACH registration
	readily biodegradable			
	OECD 301C	78	28	REACH registration
	readily biodegradable			

##### 12.3. Bioaccumulative potential

The product has not been tested.

##### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
713-95-1	NATURAL DELTA-DODECALACTONE	3,48

##### BCF

CAS No	Chemical name	BCF	Species	Source
713-95-1	NATURAL DELTA-DODECALACTONE	102,1	Fish	REACH registration

##### 12.4. Mobility in soil

The product has not been tested.

##### 12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

The product has not been tested.

##### 12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

No information available.

##### 12.7. Other adverse effects

No information available.

##### Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

#### SECTION 13: Disposal considerations

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#### 13.1. Waste treatment methods

##### **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

##### **List of Wastes Code - residues/unused products**

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes other than those mentioned in 16 03 05

##### **List of Wastes Code - used product**

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes other than those mentioned in 16 03 05

##### **List of Wastes Code - contaminated packaging**

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

##### **Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

#### **SECTION 14: Transport information**

##### **Land transport (ADR/RID)**

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

##### **Inland waterways transport (ADN)**

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

##### **Marine transport (IMDG)**

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

##### **Air transport (ICAO-TI/IATA-DGR)**

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

##### **14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

##### **14.6. Special precautions for user**

No information available.

##### **14.7. Maritime transport in bulk according to IMO instruments**

not applicable

#### **SECTION 15: Regulatory information**

##### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

###### **EU regulatory information**

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Information according to 2012/18/EU  
(SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

**Additional information**

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

**National regulatory information**

Water hazard class (D): 2 - obviously hazardous to water

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,4,6,7,8,9,11,12,13,14,15,16.

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%  
EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
RID: Regulations concerning the international carriage of dangerous goods by rail  
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation  
intérieures)  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
ICAO: International Civil Aviation Organization  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
SVHC: Substance of Very High Concern  
For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>  
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety  
assessment, chapter R.20 (Table of terms and abbreviations).



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#### Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

#### Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	For Flavour use for food and feed only	-	-	-	-	-	-	-	Flavour

LCS: Life cycle stages

SU: Sectors of use

PC: Product categories

PROC: Process categories

ERC: Environmental release categories

AC: Article categories

TF: Technical functions