

HEALTH	2
FLAMMABILITY	1
REACTIVITY	0

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product Name	<b>Delta Undecalactone, Natural</b>
Product Number	<b>0329400</b>
CAS-No.	<b>710-04-3</b>

### 1.2 Product Recommended Use

**Flavorings**

### 1.3 Preparation Information

Company	Aurochemicals 7 Nicoll Street Washingtonville, NY 10992
Telephone	845-496-6065
Fax	845-496-6248

### 1.4 Emergency Telephone Number

1-800-535-5053  
International - 1-352-323-3500 collect

## Section 2: HAZARD(s) IDENTIFICATION

### 2.1 Classification of substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)	Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Specific target organ toxicity- Single Exposure (Category 3) Respiratory System, H335
--------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------

### 2.2 GHS Label Elements, Including precautionary statements

Pictogram



Signal Statement

Warning

Hazard Statement(s)

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Precautionary Statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapor/spray
P264	Wash skin thoroughly after handling
P271	Use Only outdoors or in a well ventilated area
P280	Wear protective gloves/eye protection/face protection
P302+P352	IF ON SKIN: Wash with plenty of soap and water
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

	P312	Call a POISON CENTER or doctor/physician if you feel unwell
	P332+P313	If skin irritation occurs: Get medical advice/attention
	P337+P313	If eye irritation persists: Get medical advice/attention
	P362	Take off contaminated clothing and wash before reuse
	P403+P233	Store in a well ventilated place. Keep container tightly closed.
	P405	Store locked up
	P501	Dispose of contents/container to an approved waste disposal plant
<b>2.3 HNOC (Hazards not otherwise classified or not covered by GHS)</b>	None	

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.1 Substances

<b>Synonyms</b>	Undecanoic delta-lactone
Formula	C <sub>11</sub> H <sub>20</sub> O <sub>2</sub>
Molecular Weight	184.28 g/mol
CAS-No	710-04-3
EC-No.	211-915-1

#### Hazardous Components

Component	Classification	Concentration
6-Hexyltetrahydro-2H-pyran-2-one	Skin irritant (2) H315 Eye irritant (2) H319 STOT SE (3) H335	-

For the full text of the H- Statements mentioned in this section, see Section 16

### Section 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

General Advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Inhalation	Provide fresh air; keep at rest and at a comfortable position to breathe. Consult physician
Contact with skin:	Remove contaminated clothing. Rinse skin with cool water then wash with mild soap and warm water. Consult physician
Contact with eyes:	Rinse thoroughly with plenty of water for at least 15 as a precaution. Consult physician.
Ingestion	DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult physician.
Clothing contamination:	Remove contaminated clothing and wash before reuse.

**4.2 Most important symptoms and effects both acute and delayed** See section 2.2 and or section 11

**4.3 Indication of any immediate medical** No data available

attention and special treatment needed.

## Section 5: FIREFIGHTING MEASURES

- |                                                                  |                                                                                                                |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>5.1 Extinguishing Media</b><br>Suitable Extinguishing Media   | Use water spray, alcohol resistant foam, dry chemical or carbon dioxide                                        |
| <b>5.2 Special hazards arising from the substance or mixture</b> | Carbon oxides                                                                                                  |
| <b>5.3 Advice for fire fighters</b>                              | Wear self contained breathing apparatus for firefighting if necessary. Emits toxic fumes under fire conditions |
| <b>5.4 Further information</b>                                   | Use water spray to cool unopened containers.                                                                   |

## Section 6: ACCIDENTIAL RELEASE MEASURES

- |                                                                                |                                                                                                                                        |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>6.1 Personal precautions, protective equipment and emergency procedures</b> | Avoid breathing vapors, mist or gas. Ensure adequate ventilation.                                                                      |
| <b>6.2 Environment precautions</b>                                             | Prevent further leakage or spillage if safe to do so. Do not allow to enter drains or sewage system.                                   |
| <b>6.3 Methods and materials for containment and clean up</b>                  | Contain spillage. Soak up with absorbent material. Sweep up with broom and shovel. Place in a suitable, closed container for disposal. |
| <b>6.4 Specific end use(s)</b>                                                 | Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.                                                   |

## Section 7: HANDLING AND STORAGE

- |                                          |                                                                                                                                                                           |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>7.1 Precautions for safe handling</b> | Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection. Use generally industrial hygiene and safe practices. |
| <b>7.2 Conditions for Safe storage</b>   | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.             |
| <b>7.3 Specific End use(s)</b>           | Flavorings                                                                                                                                                                |

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- |                                                                                                  |                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>8.1 Control parameters</b><br>Contains no substances with occupational exposure limit values. |                                                                                                                                                                                                                                                                                  |
| <b>8.2 Exposure Controls</b><br>Appropriate Engineering Controls                                 | Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the day.                                                                                                                                                      |
| <b>Personal protective equipment</b>                                                             | <b>These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. They should not be construed as offering an approval for any specific use scenario.</b> |

Eye/face protection	Wear appropriate eye safety protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)
Skin protection	Wear chemically resistant, Butyl rubber gloves, 0.3mm thick. Use proper glove removal techniques (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.
Body protection	Impervious clothing protecting against chemicals should be selected specifically for the work place, depending on concentration and quantity of the dangerous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
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	Prevent further leakage or spillage if safe to do so. Do not let product enter drains

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a	Appearance	Colorless to Pale Yellow liquid
b	Odor	Milky, butter, coconut-like
c	Odor Threshold	No data available
d	pH	No data available
e	Melting Point /Freezing Point	No data available
f	Boiling Point	152-155°C
g	Flash Point	110°C closed cup
h	Evaporation Rate	No data available
i	Flammability (Solid, Gas)	No data available
j	Upper/lower Flammability Limit	No data available
k	Vapor pressure	No data available
l	Vapor density	No data available
m	Relative density at 25°C	0.956-0.961
n	Solubility	1 ml is soluble in 5 ml 60% alcohol; soluble in alcohol, most fixed oils and propylene glycol; insoluble in glycerol and water
o	Partition coefficient: n-octanol/water	No data available
p	Auto-ignition Temp.	No data available
q	Decomposition Temp.	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 No data available

## Section 10: STABILITY AND REACTIVITY

10.1	Reactivity	No data available
10.2	Chemical Stability	Stable under recommended storage conditions

# Safety Data Sheet

10.3	<b>Possibility of Hazardous reactions</b>	No data available
10.4	<b>Conditions to avoid</b>	No data available
10.5	<b>Incompatible materials</b>	Strong Oxidizing agents, Strong bases
10.6	<b>Hazardous decomposition products</b>	No data available
107	<b>Further Information</b>	No data available

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity

LD50-Oral	No data available
LC50-Inhalation	No data available
LD50-Dermal	No data available
Skin corrosion/irritation	Skin-Rabbit
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ Cell mutagenicity	No data available

#### Carcinogenicity

IARC No component of this product, present 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
Teratogenicity	No data available
Specific target organ toxicity-single exposure (GHS)	No data available
Specific target organ toxicity-repeated exposures (GHS)	No data available
Aspiration Hazards	No data available
Potential Health effects	No data available

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

Synergistic effect	No data available
RTECS:	UQ13200000

## Section 12: ECOLOGICAL INFORMATION

12.1	<b>Toxicity</b>	No data available
12.2	<b>Persistence and degradability</b>	No data available
12.3	<b>Bioaccumulative potential</b>	No data available

12.4	<b>Mobility in soil</b>	No data available
12.5	<b>Results of PBT and vPvB assessment</b>	PBT/vPvB assessment not available as chemical safety assessment not required / not conducted
12.6	<b>Other adverse effects</b>	No data available

## Section 13: DISPOSAL CONSIDERATIONS

13.1	<b>Disposal methods</b>	
	Product:	According to local regulations
	Packaging	According to local regulations

## Section 14: TRANSPORT INFORMATION

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

## Section 15: REGULATORY INFORMATION

Reach No.	A registration number is not available for this substance as its uses are exempted from registration, the annual tonnage not require a registration or the registration is envisaged for a later registration deadline.		
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302		
SARA 313 Components	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	6-Hexyltetrahydro-2H-pyran-2-one	CAS# 710-04-3	Rev. Date:
New Jersey Right to Know components	-Hexyltetrahydro-2H-pyran-2-one	CAS# 710-04-3	Rev. Date:
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.		

## Section 16: OTHER INFORMATION

Full Text of H-Statements referred to under sections 2 and 3

Eye irritant	Eye Irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
STOT SE	Specific target organ toxicity- Single exposure

### HMIS Rating

Health hazard 2

# Safety Data Sheet

Chronic Health Hazard  
Flammability 1  
Physical Hazard 0

## Further Information

Aurochemicals provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Aurochemicals makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Aurochemicals will not be responsible, nor held liable, for damages resulting from use of or reliance upon this information.

<b>Issued by:</b>	<b>Contact Person:</b>
Aurochemicals	Deo N. Persaud
7 Nicoll Street	Revised Date: 8/10/2022
Washingtonville, NY 10992 USA	