

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 29/03/2011 Revision date: 19/10/2017

Supersedes 08/08/2011

A0941

Version: 2.0

## **SECTION 1:** Identification of the substance/mixture and of the company/undertaking

#### 1.1. **Product identifier**

Product form : Substance

Trade name : (+)-Cis, Trans-Abscisic acid

EC-No. : 244-319-5 CAS-No. : 21293-29-8 Product code : A0941 Formula : C15H20O4

Synonyms : [S-(Z,E)]-5-(1-hydroxy-2,6,6-trimethyl-4-oxocyclohex-2-en-1-yl)-3-

methylpenta-2,4-dienoic acid

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

### 1.2.1. Relevant identified uses

Main use category : Professional use

: For professional use only. Duchefa Biochemie B.V. products are intended Industrial/Professional use spec

only for "in vitro laboratory" research purposes.

### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Duchefa Biochemie B.V. A. Hofmanweg 71 2031 BH Haarlem - The Netherlands T +31(0)23-5319093 - F +31(0)23-5318027 info@duchefa.nl

#### 1.4. **Emergency telephone number**

Emergency number : Supplier contact information:

> +31(0)23-5319093 (M-F 09:00-17:00) +31(0)6-30109355 (outside office hours)

Organisation/Company	Address	Comment
World Health Organization world	http://apps.who.int/poisoncentres/	Consult website for a local poison centre
directory of poison centres		

### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture 2.1.

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category 2 H319 Specific target organ toxicity — Single exposure, Category 3, H335

Respiratory tract irritation

Full text of hazard classes and H-statements : see section 16

## Adverse physicochemical, human health and environmental effects

No additional information available

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#### 2.2. Label elements

## Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation

H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P280 - Wear protective gloves, protective clothing, face protection, eye

protection

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P305+P351 - IF IN EYES: Rinse cautiously with water for several minutes.

#### 2.3. Other hazards

No additional information available

## **SECTION 3: Composition/information on ingredients**

### 3.1. Substances

Name : (+)-Cis, Trans-Abscisic acid

CAS-No. : 21293-29-8 EC-No. : 244-319-5

Name	Product identifier	%
(+)-Cis, Trans-Abscisic Acid	(CAS-No.) 21293-29-8	>= 98
	(EC-No.) 244-319-5	

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Assure fresh air breathing.

First-aid measures after skin contact : Take off contaminated clothing. Wash skin with mild soap and water. First-aid measures after eye contact : Ensure adequate flushing of eyes by separating eyelids with the fingers.

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

First-aid measures after ingestion : Rinse mouth.

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

No additional information available

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

No additional information available

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## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water.

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

Hazardous decomposition products in : COx. NOx.

case of fire

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including

respiratory protection.

Other information : Prevent fire fighting water from entering the environment.

## SECTION 6: Accidental release measures

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

### 6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing.

Measures in case of dust release : Avoid dust formation.

### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

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

Methods for cleaning up : Sweep up dry powder and dispose properly.

### 6.4. Reference to other sections

No additional information available

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

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

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

Storage conditions : Hygroscopic. Store in dry, well-ventilated area. Store in a closed container.

Light and moisturer sensitive.

Storage temperature : -25 - -15 °C

### 7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

### Hand protection:

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Туре	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN 374

## Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

Dust production: dust mask with filter type P1

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystalline powder.

Molecular mass : 264,3 g/mol

Colour : White to off-white.

Odour : No data available

Odour threshold : No data available

pH : No data available

Relative evaporation rate : No data available

(butylacetate=1)

Relative density

Melting point : 160 - 162 °C Freezing point : No data available **Boiling point** : No data available : No data available Flash point Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapour pressure : No data available Relative vapour density at 20 °C : No data available

Solubility : Readily soluble in water.

: No data available

Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Stable under normal conditions.

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### 10.2. Chemical stability

No additional information available

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Moisture. Light (daylight).

### 10.5. Incompatible materials

Strong oxidizers.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

## **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : May cause skin irritation Serious eye damage/irritation : May cause eye irritation.

Respiratory or skin sensitisation : May cause respiratory irritation.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Other information : See actual entry in RTECS for complete information: RZ2475100.

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Additional information : Prevent entry to sewers and public waters. Avoid release to the environment

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## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Waste treatment methods

: Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.

## **SECTION 14: Transport information**

In accordance with IATA / ADR / IMDG

ADR	IMDG	IATA	
14.1. UN number			
Not applicable	Not applicable	Not applicable	
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	
Not applicable	Not applicable	Not applicable	
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	
Not applicable	Not applicable	Not applicable	
14.4. Packing group			
Not applicable	Not applicable	Not applicable	
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	
No supplementary information available			

### 14.6. Special precautions for user

## . Overland transport

Not applicable

### - Transport by sea

Not applicable

### - Air transport

Not applicable

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

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

### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

- (+)-Cis, Trans-Abscisic acid is not on the REACH Candidate List
- (+)-Cis, Trans-Abscisic acid is not on the REACH Annex XIV List

### 15.1.2. National regulations

## Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

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**Netherlands** 

SZW-lijst van kankerverwekkende

stoffen

SZW-lijst van mutagene stoffen

NIET-limitatieve lijst van voor de voortplanting giftige stoffen –

Borstvoeding

NIET-limitatieve lijst van voor de voortplanting giftige stoffen –

Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting giftige stoffen –

Ontwikkeling

: The substance is not listed

The substance is not listedThe substance is not listed

: The substance is not listed

: The substance is not listed

**Denmark** 

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

## **SECTION 16: Other information**

### Indication of changes:

1.4	Emergency number	Modified	
2	Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]	Removed	Obsolete
2.2	Hazard statements (CLP)	Added	Added H315, H319 and H335
2.2	Precautionary statements (CLP)	Added	Added P280;P302+P352;P305+P351.
5.1	Suitable extinguishing media	Added	Foam
8.2	Hand protection	Modified	Specified material, thickness, et cetera of gloves

### Abbreviations and acronyms:

ATE	Acute Toxicity Estimate
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet

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Data sources

: ECHA (European Chemicals Agency). Supplier. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

### Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H315	Causes skin irritation	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	

### SDS Biochemicals version 2017

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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