

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## DIHYDRO IONONE BETA 4508403

Version 4.0

Revision Date 25 JUL 2013

Print Date 10 OCT 2013

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Sales No. : DIHYDRO IONONE BETA 4508403

Substance name : 4-(2,6,6-TRIMETHYL-1-CYCLOHEXEN-1-YL)BUTAN-2-ONE( MAIN COMPONENT )

Identifier

CAS : 17283-81-7

EINECS : 241-318-1

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

Intended Use Fragrances : Perfumery ingredient

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

Company :

Givaudan Suisse SA  
Chemin de la Parfumerie 5  
CH-1214 VERNIER

Telephone : +41227809111

Telefax : +41227809150

E-mail address : global.msds\_fragrances\_raps@givaudan.com

Responsible/issuing person

#### 1.4 Emergency telephone number

+33172110003

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 2 H411: Toxic to aquatic life with long lasting effects.

##### Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

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# Givaudan®

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Hazard pictograms

:



Hazard statements

:

H411

Toxic to aquatic life with long lasting effects.

Precautionary statements

:

**Prevention:**

P273

Avoid release to the environment.

**Response:**

P391

Collect spillage.

**Disposal:**

P501

Dispose of contents/ container to an approved waste disposal plant.

### Labelling according to EC Directives (67/548/EEC, 1999/45/EC)

Hazard pictograms

:



Dangerous  
for the  
environment

R-phrase(s)

:

R51/53

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

:

S61

Avoid release to the environment. Refer to special instructions/ Safety data sheets.

### 2.3 Other hazards

no data available

## 3. Composition/information on ingredients

### 3.1 Substances

Chemical Name	CAS-No. EINECS-No. / ELINCS No.	Concentration [%]
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4-(2,6,6-TRIMETHYL-1-CYCLOHEXEN-1-YL)BUTAN-2-ONE	17283-81-7 241-318-1	>= 50 - <= 100
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Hydrocarbons : 0 %

### 4. First aid measures

#### 4.1 Description of first aid measures

- General advice : Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
If on skin, rinse well with water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

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

- Symptoms : no data available  
Risks : no data available

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

- Treatment : no data available

### 5. Firefighting measures

#### 5.1 Extinguishing media

- Suitable extinguishing media : Dry chemical  
Alcohol-resistant foam  
Water spray  
Carbon dioxide (CO<sub>2</sub>)
- Unsuitable extinguishing media : no data available

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

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## 6. Accidental release measures

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

Personal precautions : no data available

### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains. If the product contaminates rivers and lakes or drains inform respective authorities.

### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

not applicable

## 7. Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Temperature class : no data available

Fire-fighting class : no data available

Dust explosion class : no data available

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

Requirements for storage : Containers which are opened must be carefully resealed and

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areas and containers : kept upright to prevent leakage.  
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : no data available

Advice on common storage : No materials to be especially mentioned.

German storage class : no data available

Other data : No decomposition if stored and applied as directed.

### 7.3 Specific end uses

Specific use(s) : no data available

## 8. Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : General industrial hygiene practice.

#### Environmental exposure controls

General advice : Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform respective authorities.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state : liquid  
Form : liquid  
Colour : colourless to Pale yellow  
Taste : not determined

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Odour	: Floral, Orris-like, woody, green
Odour Threshold	: 3,2772 ng/l
Flash point	: 110 °C Method: Grabner miniflash closed cup
Lower explosion limit	: not determined
Upper explosion limit	: not determined
Flammability (solid, gas)	: no data available
Oxidizing properties	: no data available
Autoignition temperature	: > 200 °C
Decomposition temperature	: no data available
Molecular Weight	: 194,30 g/mol
pH	: no data available
Melting point	: not determined
Boiling point	: 100 °C at 0,1 hPa
Vapour pressure	: 0,0093 hPa at 20 °C
Density	: 924,97 kg/m <sup>3</sup> at 20 °C
Bulk density	: not applicable
Water solubility	: 48 mg/l
Solubility/qualitative	: no data available
Partition coefficient: n-octanol/water	: log Pow: 4,5 Method: OECD Test Guideline 117
Viscosity, kinematic	: no data available
Relative vapour density	: no data available
Evaporation rate	: no data available
Explosive properties	: no data available

### 10. Stability and reactivity

#### 10.1 Reactivity

none

#### 10.2 Chemical stability

The product is chemically stable.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions., No hazards to be specially mentioned.

#### 10.4 Conditions to avoid

Conditions to avoid : no data available

#### 10.5 Incompatible materials

Materials to avoid : no data available

#### 10.6 Hazardous decomposition products

Hazardous decomposition products : no data available

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Thermal decomposition : no data available

### 11. Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

**Acute oral toxicity** : LD50 rat  
Dose: > 2 000 mg/kg  
Method: OECD Test Guideline 423

**Acute inhalation toxicity** : This information is not available.

**Acute dermal toxicity** : This information is not available.

**Acute toxicity (other routes of administration)** : No data is available on the product itself.

##### Skin corrosion/irritation

Skin irritation : Species: rabbit  
No skin irritation  
Method: OECD Test Guideline 404

##### Serious eye damage/eye irritation

Eye irritation : No data is available on the product itself.

##### Respiratory or skin sensitization

Sensitisation : Maximisation Test guinea pig  
Result: Not sensitizing  
Method: OECD Test Guideline 406

##### Germ cell mutagenicity

Genotoxicity in vitro : Ames test  
negative  
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)

##### Carcinogenicity

Carcinogenicity : No data is available on the product itself.

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### Reproductive toxicity

Reproductive toxicity : No data is available on the product itself.

### Target Organ Systemic Toxicant - Single exposure

Target Organ Systemic Toxicant - Single exposure : No data is available on the product itself.

### Target Organ Systemic Toxicant - Repeated exposure

Target Organ Systemic Toxicant - Repeated exposure : No data is available on the product itself.

### Target Organ Systemic Toxicant - Repeated exposure Aspiration hazard

Aspiration toxicity : No data is available on the product itself.

### Phototoxicity

Phototoxicity : No data is available on the product itself.  
**Further information** : no data available

## 12. Ecological information

### 12.1 Toxicity

Toxicity to fish : no data available  
Toxicity to daphnia and other aquatic invertebrates : no data available  
Toxicity to algae : no data available  
Toxicity to bacteria : no data available  
Toxicity to fish (Chronic toxicity) : no data available  
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : no data available  
  
Acute aquatic toxicity : no data available  
Chronic aquatic toxicity : no data available  
Toxicity Data on Soil : no data available  
Other organisms relevant to the environment : no data available

### 12.2 Persistence and degradability

Biodegradability : Result: Not readily biodegradable.  
69 %

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Method: OECD Test Guideline 301 F

Remarks:

The 10 day time window criterion is not fulfilled.

Result: Inherently biodegradable.

69 %

Method: OECD Test Guideline 301 F

Remarks:

The 10 day time window criterion is not fulfilled.

Result: Inherently biodegradable.

100 %

Method: OECD Test Guideline 302 C

### 12.3 Bioaccumulative potential

Bioaccumulation : no data available

### 12.4 Mobility in soil

Mobility : no data available

Distribution among : no data available

environmental compartments

Additional advice : no data available

Environmental fate and pathways

Physico-chemical : no data available

removability

### 12.5 Results of PBT and vPvB assessment

no data available

### 12.6 Other adverse effects

Biochemical Oxygen : no data available

Demand (BOD)

Dissolved organic carbon : no data available

(DOC)

Chemical Oxygen Demand : no data available

(COD)

Adsorbed organic bound : no data available

halogens (AOX)

Additional ecological : An environmental hazard cannot be excluded in the event of information unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

## 13. Disposal considerations

### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.

Dispose of in accordance with local regulations.

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**14. Transport information****ADR/RID/ADN**

UN number : 3082  
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Trimethyl-cyclohexenyl-butanone, 3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one)  
Transport hazard class(es) : 9  
Packing group : III  
Hazard identification No : 90  
Labels : 9  
Tunnel restriction code : (E)  
Environmentally hazardous : yes

**IATA/CAO**

UN number : 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(Trimethyl-cyclohexenyl-butanone, 3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one)  
Class : 9  
Packing group : III  
Labels : 9  
Environmentally hazardous : yes  
Packing instruction (CAO) : 964  
Packing instruction (PAX) : 964  
Packing instruction (Ltd. Qty.) : Y964

**IMDG**

UN number : 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Trimethyl-cyclohexenyl-butanone, 3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Fire : F-A  
EmS Spillage : S-F  
Marine pollutant : yes  
Trimethyl-cyclohexenyl-butanone 3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one  
IMDG Code Segregation Group : None

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### 15. Regulatory information

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

Water contaminating class : WGK 2 water endangering  
(Germany) Number: 6  
Classification according to appendix 3  
ZDE\_WGK Update: 2005-08-31

#### 15.2 Chemical Safety Assessment

no data available

### 16. Other information

#### Full text of R-phrases referred to under sections 2 and 3

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Full text of H-Statements referred to under sections 2 and 3.

H411 Toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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