

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 10/31/2022 Revision date: 11/5/2025 Supersedes version of: 3/27/2024 Version: 4.0

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

1.1. Product identifier

Product form : Substance Substance name : Calone 1951 (Fir)

IUPAC name : 7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one

EC-No. : 249-320-4 CAS-No. : 28940-11-6 REACH registration No. : 01-2120734453-58

Product code : 23070
Formula : C10H10O3
Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Professional use, Consumer use

Use of the substance/mixture : Fragrance raw material

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

De Hekserij Spoorstraat 57 8271 RG IJsselmuiden Nederland T +31 383 557 927

hekserij@hekserij.nl, www.hekserij.nl

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 1, Sub-Category 1B H314
Serious eye damage/eye irritation, Category 1 H318
Specific target organ toxicity – Single exposure, Category 3, H336

Narcosis

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause drowsiness or dizziness. Causes severe skin burns and eye damage. Causes serious eye damage.

2.2. Label elements

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

Hazard pictograms (CLP)



GHS05 G

GHS07

Signal word (CLP) : Danger

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Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) : P260 - Do not breathe dust.

P264 - Wash hands thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves, protective clothing, eye protection, face protection. P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or shower.

P304+P340 - IF INHALED: Remove person to fresh air and keep 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. P310 - Immediately call a doctor, a POISON CENTER. P363 - Wash contaminated clothing before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

 Substance type
 : Mono-constituent

 Name
 : Calone 1951 (Fir)

 CAS-No.
 : 28940-11-6

 EC-No.
 : 249-320-4

Name	Product identifier		Classification according to Regulation (EC) No. 1272/2008 [CLP]
7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one	CAS-No.: 28940-11-6 EC-No.: 249-320-4 REACH-no: 01-2120734453- 58	≥ 50	Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H336

Full text of H- and EUH-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 : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a

physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

Self protection of the first-aider : First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after inhalation : None under normal conditions. Dust of the product, if present, may cause respiratory

irritation after excessive inhalation exposure.

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

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 : Water spray. Dry powder. Foam. Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard. Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent

material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe

dust/fume/gas/mist/vapours/spray.

6.1.2. 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".

Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.

Methods for cleaning up : Mechanically recover the product.

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

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

Precautions for safe handling

Hygiene measures

: Not expected to present a significant hazard under anticipated conditions of normal use.

: Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not

breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Storage conditions Packaging materials

: Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

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8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : No data available
Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available

Melting point : 37.9 °C
Freezing point : Not applicable

Boiling point : 267 °C Atm. press.: 99,59 kPa Flash point : 135 °C Atm. press.: 102,41 kPa

Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Flammability (solid, gas) : Non flammable.
Vapour pressure : 0.87 Pa Temp.: 25 °C
Relative vapour density at 20°C : No data available
Relative density : No data available

Density : 1350 kg/m³ Type: 'density' Temp.: 21,6 °C Solubility : Insoluble in water. Soluble in ethanol.

Ethanol: 200 g/l

Partition coefficient n-octanol/water (Log Pow) : No data available

Partition coefficient n-octanol/water (Log Kow) : 1.95

Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

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10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one (28940-11-6)

LD50 oral rat > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline
420 (Acute Oral Toxicity - Fixed Dose Method), Guideline: EU Method B.1 bis (Acute Oral

Toxicity - Fixed Dose Procedure)

Skin corrosion/irritation : Causes severe skin burns.
Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one (28940-11-6)

NOAEL (animal/male, F0/P)

≥ 791 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422
(Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:

NOAEL (animal/female, F0/P)

≥ 922 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422
(Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity

Screening Test), Guideline: other:

STOT-single exposure : May cause drowsiness or dizziness.

7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one (28940-11-6)

STOT-single exposure May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Calone 1951 (Fir) (28940-11-6)

Viscosity, kinematic Not applicable

7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one (28940-11-6)

Viscosity, kinematic Not applicable

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short-term : Not classified

(acute

Hazardous to the aquatic environment, long-term : N

(chronic)

: Not classified.

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7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one (28940-11-6)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 96.2 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

Calone 1951 (Fir) (28940-11-6)		
Persistence and degradability	Not rapidly degradable	
7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one (28940-11-6)		
Persistence and degradability	Not rapidly degradable	

12.3. Bioaccumulative potential

Calone 1951 (Fir) (28940-11-6)	
Partition coefficient n-octanol/water (Log Kow)	1.95

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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal. Disposal must be done

according to official regulations.

Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1759	UN 1759	UN 1759	UN 1759	UN 1759
14.2. UN proper shipping name				
CORROSIVE SOLID, N.O.S. (Calone 1951 (Fir))	CORROSIVE SOLID, N.O.S. (Calone (Fir))	Corrosive solid, n.o.s. (Calone 1951 (Fir))	CORROSIVE SOLID, N.O.S. (Calone 1951 (Fir))	CORROSIVE SOLID, N.O.S. (Calone 1951 (Fir))

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ADR	IMDG	IATA	ADN	RID
Transport document descr	iption			
UN 1759 CORROSIVE SOLID, N.O.S. (Calone 1951 (Fir)), 8, II, (E)	UN 1759 CORROSIVE SOLID, N.O.S. (Calone (Fir)), 8, II	UN 1759 Corrosive solid, n.o.s. (Calone 1951 (Fir)), 8, II	UN 1759 CORROSIVE SOLID, N.O.S. (Calone 1951 (Fir)), 8, II	UN 1759 CORROSIVE SOLID, N.O.S. (Calone 1951 (Fir)), 8, II
14.3. Transport hazard of	class(es)			
8	8	8	8	8
8	8	8	8	8
14.4. Packing group				
II	II	II	II	II
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information	n available			1

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C10 : 274 Special provisions (ADR) Limited quantities (ADR) : 1kg Excepted quantities (ADR) : E2 Packing instructions (ADR) : P002, IBC08 Special packing provisions (ADR) : B4 Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T3 Portable tank and bulk container special provisions

(ADR)

Tank code (ADR) : SGAN, L4BN

Vehicle for tank carriage : AT Transport category (ADR) 2 Special provisions for carriage - Packages (ADR) V11 Hazard identification number (Kemler No.) 80

Orange plates

80 1759

Tunnel restriction code (ADR) : E

Transport by sea

: 274 Special provisions (IMDG) Limited quantities (IMDG) 1 kg Excepted quantities (IMDG) E2 Packing instructions (IMDG) : P002 IBC packing instructions (IMDG) : IBC08 IBC special provisions (IMDG) : B21, B4 Tank instructions (IMDG) Т3 : TP33 Tank special provisions (IMDG) EmS-No. (Fire) : F-A : S-B EmS-No. (Spillage) Stowage category (IMDG) : A

Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

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Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) Y844 PCA limited quantity max net quantity (IATA) 5kg PCA packing instructions (IATA) 859 PCA max net quantity (IATA) 15kg CAO packing instructions (IATA) 863 CAO max net quantity (IATA) : 50kg A3, A803 Special provisions (IATA) ERG code (IATA) 8L

Inland waterway transport

Classification code (ADN) : C10

Special provisions (ADN) : 274

Limited quantities (ADN) : 1 kg

Excepted quantities (ADN) : E2

Equipment required (ADN) : PP, EP

Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : C10 Special provisions (RID) : 274 : 1kg Limited quantities (RID) Excepted quantities (RID) : E2 : P002, IBC08 Packing instructions (RID) Special packing provisions (RID) : B4 : MP10 Mixed packing provisions (RID) Portable tank and bulk container instructions (RID) : T3

(RID)

Tank codes for RID tanks (RID) : SGAN, L4BN

Transport category (RID) : 2
Special provisions for carriage – Packages (RID) : W11
Colis express (express parcels) (RID) : CE10
Hazard identification number (RID) : 80

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

Not applicable

SECTION 15: Regulatory information

Portable tank and bulk container special provisions

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

: TP33

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

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Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
ACGIH	American Conference of Government Industrial Hygienists	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
CAS-No.	Chemical Abstract Service number	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
COD	Chemical oxygen demand (COD)	
CSA	Chemical safety assessment	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
ED	Endocrine disruptor	
EN	European Standard	
EWC	European waste catalogue	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	

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Abbreviations and acronyms:		
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
Log Kow	Partition coefficient n-octanol/water (Log Kow)	
Log Pow	Partition coefficient n-octanol/water (Log Pow)	
MAK	maximum workplace concentration	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
N.O.S.	Not Otherwise Specified	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
OSHA	Occupational Safety Health Administration	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
PPE	Personal protection equipment	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
TF	Technical function	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
TWA	Time Weighted Average	
VOC	Volatile Organic Compounds	
vPvB	Very Persistent and Very Bioaccumulative	
UFI	Unique Formula Identifier	

Full text of H- and EUH-statements:	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.

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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.