

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 6/30/2023 Version: 1.0

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

1.1. Product identifier Product form : Substance Substance name : Scentenal (Fir) Chemical name : reaction mass of: (1RS, 2RS, 3SR, 6RS, 9SR)-9-methoxytricyclo[5.2.1.0(2,6)]decane-3carbaldehyde; (1RS, 2RS, 3RS, 6RS, 8SR)-8-methoxytricyclo[5.2.1.0(2,6)]decane-3carbaldehyde; (1RS, 2RS, 4SR, 6RS, 8SR)-8-methoxytricyclo[5.2.1.0(2,6)]decane-4carbaldehyde 4,7-METHANO-1H-INDENE-2-CARBOXALD EHYDE, OCTAHYDRO-5-METHOXY-**IUPAC** name EC Index-No. : 605-034-00-5 EC-No. : 429-860-9 REACH registration No. : 01-0000017614-70 : 23146 Product code 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 Use of the substance/mixture

- Professional use,Consumer useFragrance 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 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]	1017	
Skin sensitisation, Category 1 Hazardous to the aquatic environment – Chronic Hazard, Category 2 Full text of H- and EUH-statements: see section 16	H317 H411	
Adverse physicochemical, human health and environmental effects May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.		
2.2. Label elements		

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

Hazard pictograms (CLP)



Signal word (CLP)

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Hazard statements (CLP) : H317 - May cause an allergic skin reaction.	
H411 - Toxic to aquatic life with long lasting effects. Precautionary statements (CLP) : P261 - Avoid breathing dust, fume, gas, mist, spray, vapours.	
P272 - Contaminated work clothing should not be allowed out of the workplace.	
P273 - Avoid release to the environment.	
P280 - Wear protective clothing, eye protection, face protection, protective gloves.	
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.	
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.	
P362+P364 - Take off contaminated clothing and wash it before reuse.	
P391 - Collect spillage.	
P501 - Dispose of contents and container to hazardous or special waste collection po	int, in
accordance with local, regional, national and/or international regulation.	

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients			
3.1. Substances			
Substance type	: Mono-constituent		
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Scentenal (Fir)	EC-No.: 429-860-9 EC Index-No.: 605-034-00-5 REACH-no: 01-0000017614- 70	99 – 100	Skin Sens. 1, H317 Aquatic Chronic 2, H411

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 after inhalation First-aid measures after skin contact	 Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash 	
First-aid measures after eve contact	occurs: Get medical advice/attention. : Rinse eves with water as a precaution.	
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects after skin contact	: May cause an allergic skin reaction.	
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. Carbon dioxide.

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5.2. Special hazards arising from the substance or mixture		
Hazardous decomposition products in case of fire : Toxic fumes may be released.		
5.3. Advice for firefighters		
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		
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing 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".	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containment and cleaning up		
For containment Methods for cleaning up Other information	 Collect spillage. Take up liquid spill into absorbent material. Dispose of materials or solid residues at an authorized site. 	

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling Hygiene measures	 Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment. Contaminated work clothing should not be allowed out of the workplace. 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 Storage conditions : Store in a well-ventilated place. Keep cool.		

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

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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 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

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 Colour	: Liquid : No data available
Odour	: No data available
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: < -20 °C
Freezing point	: No data available
Boiling point	: 268.85 °C
Flash point	: > 100 °C
Auto-ignition temperature	: 220 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable

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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).

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 informatio	n	
11.1 Information on toxicological effects		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	:	Not classified Not classified Not classified
Scentenal (Fir)		
LD50 dermal rabbit		> 2000 mg/kg
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Scentenal (Fir)		
LOAEL (oral, rat, 90 days)		< 500 mg/kg bodyweight/day Species : Rat Duration of exposure : 28 days

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Aspiration hazard

: Not classified

SECTION 12: Ecological information	
12.1. Toxicity	
(acute)	 Toxic to aquatic life with long lasting effects. Not classified Toxic to aquatic life with long lasting effects.
Scentenal (Fir)	
LC50 - Fish [1]	42 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
EC50 - Crustacea [1]	5.5 mg/l Species : Daphnia sp. Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
EC50 72h - Algae [1]	4.4 mg/l ECr50 = 4.4 mg/l Species : Scenedesmus subspicatus Duration of exposure : 48 h OECD Guideline 201 (Alga, Growth Inhibition Test)
NOEC chronic algae	1.25 Species : Scenedesmus subspicatus Duration of exposure : 48 h OECD Guideline 201 (Alga, Growth Inhibition Test)
12.2. Persistence and degradability	

No additional information available

12.3. Bioaccumulative potential	
Scentenal (Fir)	
Partition coefficient n-octanol/water (Log Kow)	2.73
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

Waste treatment methods

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

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID				
ADR IMDG		ΙΑΤΑ	ADN	RID
14.1. UN number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.2. UN proper shipping	g name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,7-METHANO-1H- INDENE-2- CARBOXALDEHYDE,OCT AHYDRO-5-METHOXY-)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIE N.O.S. (4,7-METHANO- INDENE-2- CARBOXALDEHYDE,O AHYDRO-5-METHOXY	substance, liquid, n.o.s. o, (4,7-METHANO-1H- 1H- INDENE-2- CARBOXALDEHYDE,OCT OCT AHYDRO-5-METHOXY-)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,7-METHANO-1H- INDENE-2- CARBOXALDEHYDE,OCT AHYDRO-5-METHOXY-)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,7-METHANO-1H INDENE-2- CARBOXALDEHYDE,OCT AHYDRO-5-METHOXY-)
Transport document descr	-			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,7-METHANO-1H- INDENE-2- CARBOXALDEHYDE,OCT AHYDRO-5-METHOXY-), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIE N.O.S. (4,7-METHANO- INDENE-2- CARBOXALDEHYDE,O AHYDRO-5-METHOXY 9, III, MARINE POLLUTANT	liquid, n.o.s. (4,7- METHANO-1H-INDENE-2- 1H- CARBOXALDEHYDE,OCT AHYDRO-5-METHOXY-), ICT 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,7-METHANO-1H- INDENE-2- CARBOXALDEHYDE,OCT AHYDRO-5-METHOXY-), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,7-METHANO-1H INDENE-2- CARBOXALDEHYDE,OC AHYDRO-5-METHOXY-), 9, III
14.3. Transport hazard o	lass(es)			
9	9	9	9	9
14.4. Packing group			111	111
14.5. Environmental haz		111	111	111
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary informatio	n available		1	1
14.6. Special precaution	s for user			
Overland transport				
Classification code (ADR) Special provisions (ADR) Limited quantities (ADR) Excepted quantities (ADR) Packing instructions (ADR) Special packing provisions (A Mixed packing provisions (AD Portable tank and bulk contain Portable tank and bulk contain (ADR) Fank code (ADR)	: DR) R) ner instructions (ADR) ner special provisions	M6 274, 335, 375, 601 5I E1 P001, IBC03, LP01, R001 PP1 MP19 T4 TP1, TP29 LGBV		
Vehicle for tank carriage : AT Transport category (ADR) : 3 Special provisions for carriage - Packages (ADR) : V1:		3		

Hazard identification number (Kemler No.)

and handling (ADR)

Special provisions for carriage - Loading, unloading : CV13

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Orange plates 90 3082 Tunnel restriction code (ADR) Transport by sea Special provisions (IMDG) : 274, 335, 969 Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 Packing instructions (IMDG) : LP01, P001 Special packing provisions (IMDG) : PP1 IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP1, TP29 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-F Stowage category (IMDG) : A Air transport PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) : Y964 PCA limited quantity max net quantity (IATA) : 30kgG PCA packing instructions (IATA) : 964 PCA max net quantity (IATA) : 450L CAO packing instructions (IATA) : 964 CAO max net quantity (IATA) : 450L Special provisions (IATA) : A97, A158, A197, A215 ERG code (IATA) : 9L Inland waterway transport Classification code (ADN) : M6 Special provisions (ADN) : 274, 335, 375, 601 Limited quantities (ADN) : 5 L Excepted quantities (ADN) : E1 Carriage permitted (ADN) : T Equipment required (ADN) : PP Number of blue cones/lights (ADN) : 0 **Rail transport** Classification code (RID) : M6 : 274, 335, 375, 601 Special provisions (RID) Limited quantities (RID) : 5L Excepted quantities (RID) : E1 : P001, IBC03, LP01, R001 Packing instructions (RID) Special packing provisions (RID) : PP1 Mixed packing provisions (RID) : MP19 Portable tank and bulk container instructions (RID) : T4 Portable tank and bulk container special provisions : TP1, TP29 (RID) Tank codes for RID tanks (RID) : LGBV Transport category (RID) : 3 Special provisions for carriage - Packages (RID) : W12 Special provisions for carriage - Loading, unloading : CW13, CW31 and handling (RID) Colis express (express parcels) (RID) : CE8 Hazard identification number (RID) : 90

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

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	Scentenal (Fir)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	Scentenal (Fir)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Explosives Precursors Regulation (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 (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:		
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	

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Abbreviations and acronyms:		
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	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	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
H317	May cause an allergic skin reaction.	
H411	Toxic to aquatic life with long lasting effects.	
Skin Sens. 1	Skin sensitisation, Category 1	

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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.