



SAFETY DATA SHEET

Creation Date 16-Nov-2010

Revision Date 10-Mar-2011

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description: γ -Terpinene, stabilized
Cat No. 207500000; 207500050; 207501000
Synonyms 1-Isopropyl-4-methyl-1,4-cyclohexadiene

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
Janssen Pharmaceuticaalaaan 3a
2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
CHEMTREC Phone Number, Europe: 001-703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Aspiration Toxicity	Category 1
Skin Corrosion / irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Flammable liquids.	Category 3

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s) Xn - Harmful
R -phrase(s) R10 - Flammable
R65 - Harmful: may cause lung damage if swallowed
Risk Combination Phrases R36/37/38 - Irritating to eyes, respiratory system and skin

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2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H335 - May cause respiratory irritation
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H304 - May be fatal if swallowed and enters airways
 H226 - Flammable liquid and vapor

Precautionary Statements - EU (§28, 1272/2008)

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCAS	REACH Reg. No.
2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-10191-41-0	EEC No. 233-466-0	0.1	10191-41-0	-	-	-

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3. COMPOSITION/INFORMATION ON INGREDIENTS

1,4-Cyclohexadiene, 1-methyl-4-(1-methylethyl)- 99-85-4	EEC No. 202-794-6	>95100	99-85-4	R10 Xi; R36/37/38 Xn;R65	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Asp. Tox. 1 (H304) Flam. Liq. 3 (H226)	-
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For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures
Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Get medical attention immediately if irritation persists

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes

Ingestion

Clean mouth with water Get medical attention

Inhalation

Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration

Notes to Physician

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media
Suitable Extinguishing Media

Water spray Carbon dioxide (CO₂) Dry chemical chemical foam

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes Do not breathe dust Do not breathe vapors or spray mist Use explosion-proof equipment Use only non-sparking tools

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place Keep container tightly closed Keep away from heat and sources of ignition

Specific End Uses

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location

Personal protective equipment

Eye Protection

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless
odor	sweet
pH	No information available.
Boiling Point/Range	182°C / 359.6°F @ 760 mmHg
Melting Point/Range	No information available.
Flash Point	51°C / 123.8°F
Autoignition Temperature	No information available.
Water Solubility	less than 1%
Specific Gravity	0.847
Molecular Formula	C ₁₀ H ₁₆
Molecular Weight	136.24

10. STABILITY AND REACTIVITY
Reactivity
Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions
Hazardous Polymerization Polymerization can occur.

Hazardous Reactions . No information available.

Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition, Incompatible products.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

 Carbon monoxide (CO). Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION
Information on Toxicological Effects
Acute Toxicity
Component Information
Component

2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-1,4-Cyclohexadiene, 1-methyl-4-(1-methylethyl)-

	LD50 Oral	LD50 Dermal	LC50 Inhalation
	>4 g/kg (rat)		
	3650 mg/kg (Rat)		

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Chronic Toxicity

Carcinogenicity

There are no known carcinogenic chemicals in this product

Sensitization

No information available.

Mutagenic Effects

No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Target Organs

No information available.

Other Adverse Effects

See actual entry in RTECS for complete information The toxicological properties have not been fully investigated.

Endocrine Disruptor Information

None known

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects

No information available.

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Component	log Pow
2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-	>6

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal

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14. TRANSPORT INFORMATION
IMDG/IMO

UN-No 2319
Hazard Class 3
Packing Group III
Proper Shipping Name Terpene hydrocarbons, n.o.s

ADR

UN-No 2319
Hazard Class 3
Packing Group III
Proper Shipping Name Terpene hydrocarbons, n.o.s

IATA

UN-No 2319
Hazard Class 3
Packing Group III
Proper Shipping Name Terpene hydrocarbons, n.o.s

15. REGULATORY INFORMATION
Safety, health and environmental regulations/legislation specific for the substance or mixture
International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-	233-466-0	-		X	X	-	X	-	X	X	98-3-1010 X
1,4-Cyclohexadiene, 1-methyl-4-(1-methylethyl)-	202-794-6	-		X	X	-	X	X	X	X	KE-24405 X

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory Lists

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

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16. OTHER INFORMATION**Text of R phrases mentioned in Section 2-3**

R10 - Flammable

R65 - Harmful: may cause lung damage if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

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Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Safety Data Sheet