

THE AROMAVERSE-FZCO

**** MATERIAL SAFETY DATA SHEET ****

CITRAL

Section 1 - Chemical Product and Company Identification

MSDS Name : Citral

Synonyms : 3,7-Dimethyl-2,6-octadienal

Company Identification THE AROMAVERSE-FZCO

A6-3648479202, Premises No. A6-003-B ,
IFZA Business Park, DDP. DUBAI, UNITED ARAB EMIRATES.

Email: info@aromaverse.net

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	%	EINECS#	
5392-40-5	Citral	99%Min	226-394-6	

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Skin Corr./Irrit. 2
Eye Dam./Irrit. 2
Skin Sens. 1

H319, H315, H317

According to BASF current knowledge and application of the criteria given in Annex I of Regulation (EC) No. 1272/2008, the following classification exceeding the classification given in Regulation (EC) No 1272/2008, Annex VI, Table 3.1 is required.

Skin Corr./Irrit. 2
Eye Dam./Irrit. 2
Skin Sens. 1B



H319, H315, H317

According to Directive 67/548/EEC or 1999/45/EC

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For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:



Signal Word:
Warning

Hazard Statement:

- | | |
|------|--------------------------------------|
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |

Precautionary Statements (Prevention):

- | | |
|------|--|
| P280 | Wear protective gloves and eye/face protection. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P264 | Wash with plenty of water and soap thoroughly after handling. |

Precautionary Statements (Response):

- | | |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. |
| Remove | contact lenses, if present and easy to do. Continue rinsing. |

- | | |
|-------------|--|
| P333 + P311 | If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician. |
|-------------|--|

- | | |
|-------------|---|
| P303 + P362 | IF ON SKIN (or hair): Wash with plenty of soap and water. |
|-------------|---|

- | | |
|-------------|--|
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |
|-------------|--|

- | | |
|-------------|--|
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
|-------------|--|

- | | |
|-------------|---|
| P337 + P311 | If eye irritation persists: Call a POISON CENTER or doctor/physician. |
|-------------|---|

Precautionary Statements (Disposal):

- | | |
|------|---|
| P501 | Dispose of contents/container to hazardous or special waste collection point. |
|------|---|



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According to BASF current knowledge and application of the criteria given in Annex I, Regulation (EC) No 1272/2008 [CLP]

Pictogram:



Signal Word:

Warning

Hazard Statement:

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H317 May cause an allergic skin reaction.

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- P280 Wear protective gloves and eye/face protection.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.
P303 + P362 IF ON SKIN (or hair): Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P337 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.

Precautionary Statements (Disposal):

- P501 Dispose of contents/container to hazardous or special waste collection point.

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: 3,7-DIMETHYL-2,6-OCTADIEN-1-AL



2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or

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mixture. The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

POTENTIAL HEALTH EFFECTS

Eye	May cause irritation in the eyes
Skin	May cause irritation on the skin
Ingestion	Not Available
Inhalation	Not Available
Chronic	Not Known

Section 4 - First aid Measures

Eyes	Rinse immediately with plenty of water for 10 minutes at least.
Skin	Wash thoroughly with soap and water; flush with plenty of water.
Ingestion	Wash the mouth with water; seek medical advice immediately.
Inhalation	Move from exposure site to fresh air and keep at rest.
Notes to Physician	Treat symptomatically.

Section 5 - Fire Fighting Measures

General Information	Closed containers may build up pressure at elevated temperatures. If possible, containers should be cooled with a water spray.
Extinguishing Media	CO ₂ , foam, dry chemicals.

Section 6 - Accidental Release Measures

General Information	Prevent any contact with hot surfaces. Do not approach facing the wind.
Spills/Leaks	Contain spilled material. Cover with an inert, non-combustible, inorganic absorbent material.



Section 7 - Handling and Storage

Handling	Apply according to good manufacturing and industrial hygiene practices with proper ventilation.
Storage	Store in cool, dry and ventilated area away from heat sources and protected from light in tightly closed original container.

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Section 8 - Exposure Controls, Personal Protection

Engineering Controls Ensure good ventilation of the work station.

PERSONAL PROTECTIVE EQUIPMENT

Eyes Use safety glasses.

Skin Avoid skin contact. Use chemical resistant gloves as needed.

Respirators Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions

Section 9 - Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form:	liquid	
Colour:	colourless to yellowish	
Odour:	of lemon	
Odour threshold:	< 100 ppm	
pH value:	approx. 7	
	moderately soluble	
Melting point:	< -20 °C	(other)
Boiling point:	approx. 230 °C	(other)
	The substance / product decomposes.	
Flash point:	98 °C	(other)
	Literature data.	
Evaporation rate:	not determined	
Flammability:	not flammable	(other)
Lower explosion limit:	For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
		(DIN 51794)
Ignition temperature:	225 °C	
	Literature data.	



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Vapour pressure:	0.046 hPa (20 °C)	(calculated)
	0.071 hPa (25 °C)	(calculated)
	1.003 hPa (59.29 °C)	(measured)
Density:	0.89 g/cm ³ (20 °C)	
Relative density:	0.89 (20 °C)	(other)
Relative vapour density (air):	not applicable	
Solubility in water:	moderately soluble 0.42 g/l (25 °C)	(other)
Partitioning coefficient n-octanol/water (log K _{ow}):	2.76 (25 °C)	(OECD Guideline 107)
Self ignition:	Based on its structural properties the product is not classified as selfigniting.	Test type: Spontaneous selfignition at room-temperature. (Method: other)
Thermal decomposition:	not determined	
Viscosity, dynamic:	2.15 mPa.s (20 °C)	(calculated (from kinematic viscosity))
	1.46 mPa.s (40 °C)	(calculated (from kinematic viscosity))
Viscosity, kinematic:	2.42 mm ² /s (20 °C)	(OECD 114)
	1.67 mm ² /s (40 °C)	(OECD 114)
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.	(other)
		(other)
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	



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9.2. Other information

pKA:

The substance does not dissociate., Study scientifically not justified.

Surface tension:

(other)

Based on chemical structure, surface activity is not to be expected.

Section 10 - Stability and Reactivity

Chemical Stability

Stable under normal temp and pressure.

Conditions to Avoid

Avoid contact with strong acids, alkali or oxidizing agents.

Incompatibilities with Other Materials

strong acids, alkali or oxidizing agents.

Hazardous Decomposition Products

Carbon Monoxide and carbon Dioxide

Hazardous Polymerization

Not Known.



Section 11 - Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Of low toxicity after single ingestion. Inhalation-risk test (IRT): No mortality within 7 hours as shown in animal studies. The inhalation of a highly saturated vapor-air mixture represents no acute hazard. Of low toxicity after short-term skin contact.

Experimental/calculated data:

LD50 rat (oral): approx. 6,800 mg/kg (BASF-Test)

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rat (by inhalation): 7 h (IRT)
No mortality was observed.

LD50 rat (dermal): > 2,000 mg/kg (BASF-Test)

Irritation

Assessment of irritating effects:
Eye contact causes irritation. Skin contact causes irritation.

Experimental/calculated data:
Skin corrosion/irritation rabbit: Irritant. (BASF-Test)

Serious eye damage/irritation rabbit: Irritant. (BASF-Test)

Respiratory/Skin sensitization

Assessment of sensitization:
Caused skin sensitization in animal studies. Caused sensitization in humans.

Experimental/calculated data:
Guinea pig maximization test guinea pig: skin sensitizing

Germ cell mutagenicity

Assessment of mutagenicity:
The substance was not mutagenic in bacteria. In the majority of tests performed (mammalian cell culture) a mutagenic effect was not found. A mutagenic effect was also not observed in in-vivo assays.

Carcinogenicity

Assessment of carcinogenicity:
Results from a number of long-term carcinogenicity studies are available. Taking into account all of the information, there is no indication that the substance itself is carcinogenic.



Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

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Assessment of teratogenicity:

Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

No data available.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Prolonged repeated exposure caused inflammable degenerative processes in the respiratory tract of rats. Causes irritating effects at esophagus and the gastro-intestinal tract.

Aspiration hazard

No aspiration hazard expected.

Section 12 - Ecological Information

Other None Available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.



Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	Not Regulated	Not Regulated	Not Regulated
Hazard Class:			
UN Number:			

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Section 15 - Regulatory Information

European/International Regulations:

European Labeling in Accordance with EC Directives

Hazard Symbols:

Risk Phrases: R20/21/22

R36/37/38

Safety Phrases: Not Available.

United Kingdom Occupational Exposure Limits: Not Known.

Canada : Product is on the DSL list.

Exposure Limits

US FEDERAL

TSCA : Product is listed on the TSCA list.

Section 16 - Additional Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages. -----

