

CERTIFICATE OF ANALYSIS

Batch: 4434008Best ALDEHYDE C10

Before End: May 2023

TEST REQUIREMENT RESULT

Appearance : Colourless to very pale yellow. : Conforms

Odour : Citrus-like, floral. : Conforms

Refractive index : 1.4260 to 1.4300 : 1.4277

@ 20°C

Optical rotation : -1° to $+1^{\circ}$: $+0^{\circ}$

@ 20°C

Specific gravity : 0.8240 to 0.8350 : 0.8269

@ 20°C

Purity : >98% : 99.87%

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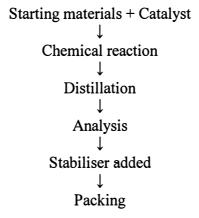


30th January 2019

Please find below a Production flow chart for the following material:-

Product

Aldehyde C10



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MATERIAL SAFETY DATASHEET

ALDEHYDE C10

10/09/2018

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

Product Name : ALDEHYDE C10

Use of substance/mixture:

Company : MADAR Corporation Ltd

19-20 Sandleheath Industrial Estate

Fordingbridge Hampshire SP6 1PA

email address : sales@madarcorporation.co.uk

telephone : +44 1425 655555 emergency telephone : +44 1425 655555

2. Hazard identification

GHS Classification

Skin irritation 2 Aquatic chronic 1

GHS Labelling

Symbol :





Signal word : Warning

hazard statements : H315 Causes skin irritation

H410 Very toxic to aquatic life with long lasting effects

precaution statements : P264 Wash thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P273 Avoid release to the environment

P302+352 IF ON SKIN: Wash with soap and water

P332+313 If skin irritation occurs: Get medical advice/attention P362 Take off contaminated clothing and wash before reuse

P501 Dispose of contents/container in accordance with local regulations

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

Classified as: IRRITANT

Symbol: Xi!

R-phrases:

R38: Irritating to the skin

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrases:

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection

S61: Avoid release to the environment. Refer to special instructions/Safety data sheet

3. Composition/information on ingredients

IUPAC name: Decanal

Characterisation : Acyclic aldehydes

 Molecular formula
 :
 C10 H20 O

 Molecular weight
 :
 156.27

 CAS no
 :
 112-31-2

 EINECS no
 :
 203-957-4

 FEMA
 :
 2362

Substances within the mixture

This product contains: EINECS CAS

> 98% Decanal R 38,50/53: 203-957-4 112-31-2

Ski2,ACh1 H 315,410

For full text of R and H phrases see section 16

4. First aid measures

In case of excessive inhalation remove the person to fresh air and keep at rest in a

comfortable position. Obtain medical advice immediately.

Skin contact : Remove contaminated clothing (N.B. wash before re-use). Wash off skin immediately

with plenty of water, using soap if available . If any sign of tissue damage or persistant

irritation is apparent obtain medical advice immediately

Eye contact : Rinse the eyes immediately with plenty of water for at least ten minutes. If any sign of

tissue damage or persistant irritation is apparent, obtain medical advice immediately.

Ingestion : Rinse mouth with water. Obtain medical advice immediately.

5. Fire-fighting measures

Extinguishing media : Carbon dioxide, foam, dry chemical

Do not use a direct water jet.

Special hazards : CO/CO2, Smoke

Advice for firefighters : Avoid inhalation of smoke and fumes. In case of insufficient ventilation wear suitable

respiratory equipment.

6. Accidental release measures

Personal precautions : Gloves and eye protection should be worn when handling spillages.

Avoid skin/eye contact and inhalation of vapour.

Good personal washing routines should be followed after accidental release. Ensure

adequate ventilation in working areas following accidental release.

Environmental precautions: Do not allow discharge into drains, soil or any aquatic environment.

Methods for cleaning up : Absorb spillages on porous inert material such as earth, sand or vermiculite and dispose

of in accordance with local regulations.

Large spillages should be contained by the use of sand or another inert material,

transferred to a suitable container and recovered or disposed of in accordance with local

regulations.

See also sections 8 and 13

7. Handling and storage

Precautions for safe handling: Handle in accordance with good occupational hygene and safety practices in a well

ventilated area.

Avoid direct contact with skin and eyes. Depending on working conditions, this may include wearing of eye protection and protective clothing such as PVC gloves and suitable

overalls.

Wash hands after use

Remove protective equipment and contaminated clothing before entering eating areas

Avoid breathing vapours especially if the material is hot.

Conditions for safe storage: Store in full, dry, airtight containers away from sources of heat and light. Do not re-use

the empty container.

Uses and applications : Fragrances and flavours

8. Exposure controls/personal protection

Exposure parameters : Occupational exposure limits

Long term exposure 20 ppm 8 hours Short term exposure 20 ppm 15 min

Respiratory Protection : Where ventilation may be inadequate,

wear self-contained breathing apparatus.

Hand protection : Wear impervious gloves.

Skin protection : Wear protective clothing.

Eye protection : Wear eye protection e.g. Safety glasses/goggles

Engineering measures : None found

9. Physical and chemical properties

Appearance Colorless to pale yellow liquid

Odour Strong, fatty
Odour threshold High

pH Data not available
Melting point Data not available
Initial boiling point 207øC @ 760mm/Hg
Boiling Range 207 to 209øC @760mm/hg

Flash point 86 øC

Evaporation rate Data not available Flammability Data not available Upper flammable limit 5.4% (calc.) Lower flammable limit 0.8% (calc.) Upper explosive limit Data not available Lower explosive limit Data not available 0.103 mm/Hg @ 25øC Vapour pressure Vapour Density Data not available Relative Density 0.830 @ 20øC Solubility Data not available

Partition coefficient n-octanol/water 4.09

Autoignition temperature
Decomposition temperature
Viscosity
Explosive properties
Date not available
Data not available
1.7 mPas @ 20øC
Data not available
Data not available
Data not available

10. Stability and reactivity

Stability: Stable at ambient temperatures

Incompatible Materials: Avoid oxidising agents

Conditions to avoid: None known

Hazardous Decomposion Products: No data available

11. Toxocological information

Acute toxicity LD50 Oral Ratÿ3730 ul/kg

LD50 Dermal Rabbitÿÿ5040ÿul/kg

Skin corrosion/irritation Data not available Data not available Respiratory or skin sensitization Serious eye damage/irritation Data not available Germ cell mutagenicity Data not available Carcinogencity Data not available Reproductive toxicity Data not available STOT single exposure Data not available STOT repeat exposure Data not available Aspiration hazard Data not available

12. Ecological information

Toxicity data

Persistence and degradability data

Bioaccumulative potential

Data not available
Data not available
Data not available

13. Disposal considerations

Dispose in accordance with local regulations. Avoid release into drainage systems and into the environment.

14. Transport information

UN No : 3082

Shipping Name : Environmentally hazardous substance, liquid, n.o.s.

Class : 9 Packing Group : III

15. Regulatory information

This datasheet has been compiled in accordance with 'COMMISSION REGULATION (EU) No 453/2010, Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)'

16. Other information

Changes since the last update

Section 9 Revised physical/chemical properties

Section 11 Revised toxicological data

Section 3 R and H phrases in full

R 38 Irritating to the skin

R 50/53 Very toxic to aquatic organisms; may cause long term adverse effects

in the aquatic environment

H 315 Causes skin irritation

H 410 Very toxic to aquatic life with long lasting effects

Ski2 Skin irritation 2 ACh1 Aquatic chronic 1

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Issue: 6 Date of issue: 12/09/2013



SPECIFICATION

ALDEHYDE C10

Iss date: 16/12/2013

Issue : 3

Appearance : Colourless to very pale yellow.

Odour : Citrus-like, floral.

Refractive Index @ 20 ℃ : 1.4260 to 1.4300

Optical Rotation @ 20 ℃ -1° to +1°

Specific Gravity @ 20 ℃ : 0.8240 to 0.8350

Purity : >98%

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Product Statement

30th January 2019

Aldehyde C10

We hereby confirm that the above material is suitable for vegetarian and vegan use.

We hereby confirm that the above material's country of origin is the UK.

We hereby confirm that the above material does not have any specific restrictions according to the 48th amendment to the IFRA code of practice.

This information is correct to the best of our knowledge and belief. It is for the customer to decide if the material is suitable for their intended use, MADAR Corporation Ltd cannot accept liability for loss, injury or damage which may result from the use of this material or the information above.



Technical Data Sheet

300818 ALDEHYDE C10 Issue: 4

IUPAC name: Decanal

CAS number: 112-31-2
EU number: 203-957-4
FEMA number: 2362
Molecular formula: C10 H20 O
Molecular mass: 156.27

Annex VI ref:

Reach registration: 01-2119967771-26-xxxx

INCI name: Decanal

Flash point: 87℃

Melting point: 17 to $18 \,^{\circ}\text{C} \oplus 760 \,\text{mm/Hg}$ Boiling point: 207 to 209 $\,^{\circ}\text{C} \oplus 760 \,\text{mm/Hg}$

Heavy metals: Material tested for heavy metals according to Quality Schedule. Not all batches

tested. Quality schedule selects a representative number of batches for testing.

Pesticides: Not tested

Natural status: This material is not natural according to EU Directive 1334/2008

Kosher status: Kosher batches of this material are available.

Halal status: This material is suitable for Halal use but not certified as such.

Food grade status: This material is food grade according with Article 14 of EU Directive 178/2002

GMO status: Contains no modified material according to 1829/2003/EC and 1830/2003/EC

Storage: Store in full, dry, airtight containers below -20 °C, away from sources of heat and

light

Food allergens: This material is free from recognised food allergens as defined by EU regulation

1169/2011

TSE statement: This material is of entirely synthetic origin and therefore does not contain any animal

derived material, neither has it been in contact with any animal derived material

Additives: This material contain 0.1% tocopherol

Technical Data Sheet

ALDEHYDE C10 Issue:4

Fragrance sensitisers (typical values):

None found:	X
Amyl cinnamal:	
Benzyl alcohol:	
Cinnamyl alcohol:	
Citral:	
Eugenol:	
Hydroxycitronellal:	
Isoeugenol:	
Amylcinnamyl alcohol:	
Benzyl salicylate:	
Cinnamal:	
Coumarin:	
Geraniol:	
Anise alcohol:	
Benzyl cinnamate:	
Lyral:	
Farnesol:	
Lilial:	
Linalool:	
Benzyl benzoate:	
Hexyl cinnamal:	
Citronellol:	
Limonene:	
Methyl 2-octynoate:	
Alpha-isomethyl ionone:	
Oakmoss extract:	
Treemoss extract:	

With reference to point 4 of Article 14 EU 178/2002, this material should not be consumed independently, only as part of a larger flavouring compound. It is for the user to decide the suitability and concentration of this material appropriate for its specific use.

With reference to point 5 of Article 14 EU 178/2002, this material has been sieved to <1.5 mm to eliminate extraneous matter, and will not putrefy, deteriorate or decay to an unsafe level during the entirety of its shelf life.

Iss: 4 Printed: 10 Sep 2018