

Certificate issued on: 12/02/2019 Specification Issue 3 dated: 16/12/2013

CERTIFICATE OF ANALYSIS

Batch: 4365604 Best Before End: Ju	ALDEHYDE C10	0
TEST	REQUIREMENT	RESULT
Appearance	: Colourless to very pale yellow.	: Conforms
Odour	: Citrus-like, floral.	: Conforms
Refractive index @ 20°C	: 1.4260 to 1.4300	: 1.4274
Optical rotation @ 20°C	: -1° to +1°	: +0°
Specific gravity @ 20°C	: 0.8240 to 0.8350	: 0.8281
Purity	: >98%	: Conforms

The information in this Certificate of Analysis is, to the best of our knowledge, information and belief, correct and consistent with the state of technical information available at the date of issue. MADAR Corporation Ltd. cannot however accept liability for any loss, injury and/or damage that results from use or misuse of the information herein. This document remains the property of MADAR Corporation Ltd and should not be copied or distributed without written authority.



30th January 2019

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

Product Aldehyde C10

Starting materials + Catalyst 1 Chemical reaction Ţ Distillation Ţ Analysis Ţ Stabiliser added Ţ Packing

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MATERIAL SAFETY DATASHEET

ALDEHYDE C10

10/09/2018

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

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 toEU 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 pro	oduct contains:		EINECS	CAS
> 98%	Decanal Ski2,ACh1	R 38,50/53: H 315,410	203-957-4	112-31-2

For full text of R and H phrases see section 16

4. First aid measures

Inhalation	:	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 exposure20 ppm 8 hoursShort term exposure20 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 Odour Odour threshold pH Melting point Initial boiling point Boiling Range Flash point Evaporation rate Flammability Upper flammable limit Lower flammable limit Upper explosive limit Lower explosive limit Lower explosive limit Vapour pressure Vapour Density Relative Density Solubility Partition coefficient n-octanol/water Autoignition temperature Decomposition temperature Viscosity Explosive properties Oxidising properties	Colorless to pale yellow liquid Strong, fatty High Data not available 207øC @ 760mm/Hg 207 to 209øC @ 760mm/hg 86 øC Data not available Data not available 5.4% (calc.) 0.8% (calc.) Data not available Data not available 0.103 mm/Hg @ 25øC Data not available 0.830 @ 20øC Data not available 4.09 Date not available 1.7 mPas @ 20øC Data not available 1.7 mPas @ 20øC
Oxidising properties	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
Respiratory or skin sensitization	Data not available
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	Data not available
Persistence and degradability data	Data not available
Bioaccumulative potential	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: 3082Shipping Name: Environmentally hazardous substance, liquid, n.o.s.Class: 9Packing 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

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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 48^{th} 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 ALDEHYDE C10

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:

87°C Flash point: 17 to 18 °C @ 760 mm/Hg 207 to 209 °C @ 760 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. This material is suitable for Halal use but not certified as such. Halal status: This material is food grade according with Article 14 of EU Directive 178/2002 Food grade status: Contains no modified material according to 1829/2003/EC and 1830/2003/EC 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

This material contain 0.1% tocopherol

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Issue: 4

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01-2119967771-26-xxxx Decanal

Melting point: Boiling point:

INCI name:

300818

IUPAC name: Decanal

GMO status: Storage:

Additives:

ALDEHYDE C10

Fragrance sensitisers (typical values):

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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.

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