

# ALDEHYDE C-14 -REACH REGISTERED BATCH NUMBER: 4435113

BEST BEFORE: JUNE 2023

ALD0029 FEMA#: 3091

CAS#: 104-67-6

### PRODUCTIOENTIFICATIO

SHELF LIFE (DAYS)

PRODUCT NAME ALDEHYDE C-14 - REACH REGISTERED

365

MOLECULAR FORM C11H20O2

MOLECULAR WT 184.28

MELTING POINT (C) 10 deg C

BOILING POINT (C) 297 deg C

FLASH POINT (F) 293 deg F

PHYSIGAL SPECIFICATIONS	RANGE	RESULTS	A CONTRACTOR
APPEARANCE	COLORLESS TO PALE YELLOW LIG	QUID CONFORMS	***
ODOR	SWEET, OILY FRUITY, PEACH LIKE	ODOR CONFORMS	
SPECIFIC GRAVITY (25C)	0.9420 to 0.9450	0.9425	
REFRACTIVE INDEX (20C)	1.4480 to 1.4530	1.4504	
SOLUBILITY	SOLUBLE IN ALCOHOL, FIXED OIL	S, PG; PASSES	
	INSOLUBLE IN GLYCERINE, WATE	R	
ANALYTICAL SPECIFICATIONS	RANGE	I P. RESULTS	SAME PARTY
PURITY (BY GC)	98.0% MINIMUM	98.91%	
OTHER SPECIFICATIONS		PESULS:	
SOLUBILITY IN ALCOHOL	1 ML IN 5 ML OF 60% ALCOHOL	PASSES	
STABILITY			A CANADA CONTRACTOR
STABLE UNDER NORMAL CON	IDITIONS		
			The second secon

STORE IN COOL DRY PLACE AWAY FROM HEAT AND SUNLIGHT

**CERTIFICATE OF ANALYSIS** 

Date Revised: 19/03/2018



## **FRAGRANCE ALLERGENS**

# Aldehyde C14

Contains the following fragrance allergens as detailed in the 7th Amendment to the EU Cosmetic Directive 76/768/EEC:

	Allergen	CAS number	Content %
1	Alpha isomethylionone	127-51-5	-
2	Amyl cinnamal	122-40-7	-
3	Amylcinnamyl alcohol	101-85-9	-
4	Anisyl alcohol	105-13-5	-
5	Benzyl alcohol	100-51-6	-
6	Benzyl benzoate	120-51-4	-
7	Benzyl cinnamate	103-41-3	-
8	Benzyl salicylate	118-58-1	-
9	Butylphenyl methylpropional (Lilial)	80-54-6	-
10	Cinnamal	104-55-2	-
11	Cinnamyl alcohol	104-54-1	-
12	Citral	5392-40-5	-
13	Citronellol	106-22-9	-
14	Coumarin	91-64-5	-
15	Eugenol	97-53-0	-
16	Farnesol	4602-84-0	-
17	Geraniol	106-24-1	-
18	Hexyl cinnamal	101-86-0	-
19	Hydroxycitronellal	107-75-5	-
20	Hydroxyisohexyl 3-cyclohexene carboxaldehyde (Lyral)	31906-04-4	-
21	Isoeugenol	97-54-1	-
22	Limonene	5989-27-5	-
23	Linalool	78-70-6	-
24	Methyl 2-octynoate	111-12-6	-
25	Evernia furfuracea (Treemoss) extract	90028-67-4	-
26	Evernia prunastri (Oakmoss) extract	90028-68-55	-

(All absent)



## **PROCESS FLOW CHART**

## **ALDEHYDE C-14**



BiOrigins, 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK Tel: 01425 655555 Email: technical@madarcorporation.co.uk



## **GMO CERTIFICATE**

Madar Corporation Ltd hereby certifies that:

## **ALDEHYDE C-14**

to the best of its knowledge does not derive from a genetically modified source (GMO) nor have

GMO materials been used in its manufacture or as additives.

BiOrigins, 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK Tel: 01425 655555 Email: technical@madarcorporation.co.uk

## **IFRA CERTIFICATE**

## **ALDEHYDE C-14**

Madar Corporation limited hereby certifies that the above material complies with the requirements of the INTERNATIONAL FRAGRANCE ASSOCIATION - IFRA-49th Amendment / published January 10th 2020) provided it is used in following application (class) at a maximum concentration level of:

IFRA category	Maximum level of use (%)
Class 1	Not restricted
Class 2	Not restricted
Class 3	Not restricted
Class 4	Not restricted
Class 5A	Not restricted
Class 5B	Not restricted
Class 5C	Not restricted
Class 5D	Not restricted
Class 6	Not restricted
Class 7A	Not restricted
Class 7B	Not restricted
Class 8	Not restricted
Class 9	Not restricted
Class 10A	Not restricted
Class 10B	Not restricted
Class 11A	Not restricted
Class 11B	Not restricted
Class 12	Not restricted

The above values were calculated based on the following IFRA restricted materials: <none contained>

Date of issue: 09/03/2020

The IFRA Standards regarding use restrictions are based on safety assessments by the Panel of Experts of the RESEARCH INSTITUTE FOR FRAGRANCE MATERIALS (RIFM) and are enforced by the IFRA Scientific Committee.

It is the ultimate responsibility of our customer to ensure the safety of the final product by further testing if need be. Evaluation of the Fragrance ingredient was made according to the safety requirements contained in the relevant section of the IFRA Code of Practice.

IFRA category includes	IFRA category
Children's toys, Lip Products of all types (solid and liquid lipsticks, balms, clear or coloured etc) (****)	Class 1
Deodorant and Antiperspirant products of all types (spray, stick, roll-on, under-arm and body etc), Body sprays (including body mist)	Class 2
Eye products of all types (eye shadow, mascara, eyeliner, eye make-up, eye masks, eye pillows, etc.) including eye care and moisturizer; Facial make up and foundation; Make-up remover for face and eyes; Nose pore strips; Wipes or refreshing tissues for face, neck, hands, body; Body and face paint (for children and adults); Facial masks for face and around the eyes	Class 3
Hydroalcoholic and non-hydroalcoholic fine fragrance of all types (Eau de Toilette, Parfum, Cologne, solid perfume, fragrancing cream, aftershaves of all types, etc.); Fragranced bracelets; Ingredients of perfume kits and fragrance mixtures for cosmetic kits; Scent pads, foil packs; Scent strips for hydroalcoholic products	Class 4
Body creams, oils, lotions of all types; Foot care products (creams and powders); Insect repellent (intended to be applied to the skin); All powders and talc (excluding baby powders and talc)	Class 5A
Facial toner; Facial moisturizers and creams	Class 5B
Hand cream; Nail care products including cuticle creams, etc.	Class 5C
Baby cream/lotion, baby oil, baby powders and talc	Class 5D
Mouthwash, including breath sprays; Toothpaste; Toothpowder, strips, mouthwash tablets (****)	Class 6
Hair permanent or other hair chemical treatments (rinse-off) (e.g. relaxers), including rinse-off hair dyes	Class 7A
Hair sprays of all types (pumps, aerosol sprays, etc.); Hair styling aids non sprays (mousse, gels, leave- on conditioners); Hair permanent or other hair chemical treatments (leave-on) (e.g. relaxers), including leave-on hair dyes; Shampoo - Dry (waterless shampoo); Hair deodorizer	Class 7B
Intimate wipes; Tampons; Baby wipes; Toilet paper (wet)	Class 8
Bar Soap; Shampoo off all type; Cleanser for face (rinse off); Conditioner (rinse off); Liquid Soap; Body washes and shower gels of all types; Baby wash, bath, shampoo; Bath gels, foams, mousses, salts, oils and other products added to bathwater; Foot care products (feet are placed in a bath for soaking); Shaving creams of all types (stick, gels, foams, etc.); All depilatories (including facial) and waxes for mechanical hair removal; Shampoos for pets	Class 9
Hand wash laundry detergent (including concentrates); Laundry pre-treatment of all types (e.g. paste, sprays, sticks); Hand dishwashing detergent (including concentrates); Hard surface cleaners of all types (bathroom and kitchen cleansers, furniture polish, etc.); Machine laundry detergents with skin contact (e.g. liquids, powders) including concentrates; Dry cleaning kits; Toilet seat wipes; Fabric softeners of all types including fabric softener sheets; Household cleaning products, other types including fabric cleaners, soft surface cleaners, carpet cleaners, furniture polishes sprays and wipes, leather cleaning wipes, stain removers, fabric enhancing sprays, treatment products for textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or fabrics); Floor wax; Fragranced oil for lamp ring, reed diffusers, pot-pourri, liquid refills for air fresheners (non-cartridge systems), etc; Ironing water (Odorized distilled water)	Class 10A
Animal sprays – sprays applied to animals of all types; Air freshener sprays, manual, including aerosol and pump; Aerosol/spray insecticides	Class 10B
Feminine hygiene conventional pads, liners, interlabial pads; Diapers (baby and adult); Adult incontinence pant, pad; Toilet paper (dry);	Class 11A
Tights with moisturizers; Scented socks, gloves; Facial tissues (dry tissues); Napkins; Paper towels; Wheat bags; Facial masks (paper/protective) e.g. surgical masks not used as medical device; Fertilizers, solid (pellet or powder)	Class 11B
Candles of all types (including encased); Laundry detergents for machine wash with minimal skin contact (e.g. Liquid tabs, pods); Automated air fresheners and fragrancing of all types (concentrated aerosol with metered doses (range 0.05-0.5mL/spray), plug-ins, closed systems, solid substrate, membrane delivery, electrical, powders, fragrancing sachets, incense, liquid refills (cartridge), air freshening crystals); Air delivery systems; Cat Litter; Cell phone cases; Deodorizers/maskers not intended for skin contact (e.g. fabric drying machine deodorizers, carpet powders); Fuels; Insecticides (e.g. mosquito coil, paper, electrical, for clothing) excluding aerosols/sprays; Joss sticks or incense sticks; Dishwash detergent and deodorizers – for machine wash; Olfactive board games; Paints; Plastic articles (excluding toys); Scratch and sniff; Scent pack; Scent delivery system (using dry air technology); Shoe polishes; Rim blocks (Toilet)	Class 12

(\*\*\*\*) Fragrance materials for use in these applications need also FEMA-GRAS conformity.

Date of issue: 09/03/2020

## **Safety Data Sheet**



This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Product code ALD0029Product name ALDEHYDE C-14

Issue date 28-Jan-2015 Revision date 17-Feb-2020 Version 2

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

#### 1.1. Product Identifier

Product code ALD0029

Product name ALDEHYDE C-14

REACH registration number 01-2119959333-34-XXXX

**EC No.** 203-225-4 **CAS No** 104-67-6

Chemical Name 5-Heptyldihydro-2(3H)-furanone

Synonyms gamma-Undecalactone / Undecan-4-olide

Pure substance/mixtureSubstanceFormulaC11H20O2Molecular weight184.28

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Sold to the general public?

Recommended Use Industry Use

### 1.3. Details of the supplier of the safety data sheet

Supplier

Madar Corporation Limited 19 - 20 Sandleheath Industrial Estate Fordingbridge SP6 1PA

Tel: (+44) 1425 655 555

For further information, please contact

Contact Point technical@madarcorporation.com

E-mail address

### 1.4. Emergency telephone number

Emergency telephone CHEMTREC

Emergency telephone - +1-703-741-5970
Europe CCN# 17256

### **SECTION 2: Hazards identification**

ALDEHYDE C-14 Revision date 17-Feb-2020

\_\_\_\_\_\_

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Chronic aquatic toxicity Category 3 - (H412)

#### 2.2. Label Elements

Product identifier Hazard statements

H412 - Harmful to aquatic life with long lasting effects

### **Precautionary Statements**

P273 - Avoid release to the environment

P501 - Dispose of contents/ container to an approved waste disposal plant

### 2.3. Other Hazards

H316 - Causes mild skin irritation H402 - Harmful to aquatic life

### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

#### **Chemical nature**

Lactone.

Chemical Name	EC No.	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
gamma Undecalactone	Present	104-67-6	100	Aquatic Acute 3 (H402) (EFFA) Skin Irrit. 3 (H316) (EFFA) Aquatic Chronic 3 (H412) (EFFA)	No data available

Full text of H- and EUH-phrases: see section 16

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

**Inhalation** Remove to fresh air.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. In the case of skin irritation or allergic reactions see a physician.

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while

rinsing. Do not rub affected area. If eye irritation persists: Get medical advice/attention.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms None known.

4.3. Indication of any immediate medical attention and special treatment needed

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

### **Suitable Extinguishing Media**

Dry chemical, CO2, water spray or alcohol-resistant foam

#### Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire

#### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors

Hazardous combustion products Irritating or toxic substances may be emitted upon burning, combustion, or decomposition.

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

#### Personal precautions

Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. Stop leak if you can do it without risk.

#### For emergency responders

Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

Collect spillage.

### 6.3. Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so. Cover with DRY earth, DRY sand or

other non-combustible material followed with plastic sheet to minimize spreading or contact

with rain.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Sweep up and shovel into suitable containers for disposal.

#### 6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

### Advice on safe handling

Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

Protect from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

#### 7.3. Specific end use(s)

### **Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

Derived No Effect Level (DNEL) Workers

dermal 5.38 mg/kg bw/day

Inhalation 19 mg/m<sup>3</sup>

Derived No Effect Level (DNEL) General Population

oral 2.7 mg/kg bw/day

dermal 2.7 mg/kg bw/day

Inhalation 4.68 mg/m<sup>3</sup>

**Predicted No Effect Concentration** 

(PNEC)

Fresh Water 5.85 µg/L

Sea Water 0.585 μg/L

Sea sediment 0.063 mg/kg sediment dw

Soil 0.122 mg/kg soil dw

Impact on Sewage Treatment 80 mg/L

8.2. Exposure controls

Engineering controls Showers

Eyewash stations Ventilation systems

Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment** 

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear protective gloves.

**Skin and Body Protection** Wear suitable protective clothing.

**Respiratory protection**No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls** Prevent product from entering drains.

### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state Liquid

(25°C)

(25°C)

AppearanceClearOdorCharacteristic odorColorColorless to Pale YellowOdor thresholdNot applicable

Property Values Remarks • Method

pH

Melting point / freezing point

-9.5 °C / 14.9 °F (101.3kPa)

Boiling point / boiling range

297 °C / 567 °F (101.3kPa)

Flash Point

145 °C / > 212 °F CC (closed cup)

Evaporation Rate

Flammability (solid, gas)
Flammability Limit in Air
Upper flammability limit:
Lower flammability limit:

Vapor pressure 0.00027kPa (25°C) Vapor Density

Specific gravity

Water solubility

0.942 - 0.945

Insoluble

solubility insoluble

Partition coefficient 3.6 Log Kow Autoignition Temperature >256 °C / >493 °F

Autoignition Temperature >256 °C / >493 °F

Decomposition temperature

Kinematic viscosity <10mPa.s (20°C)

Dynamic viscosity

Explosive properties

Oxidizing properties

Not an explosive
Not oxidising

9.2. Other information

Molecular weight
VOC content (%)
Density
Bulk Density

184.28
Not applicable
Not applicable
Not applicable

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

### 10.2. Chemical stability

Stable under recommended storage conditions.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

### 10.3. Possibility of hazardous reactions

#### **Possibility of Hazardous Reactions**

None under normal processing.

#### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

None under normal use conditions.

### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

#### **Acute toxicity**

### **Product Information**

Harmful if inhaled.

**Inhalation** Avoid breathing vapors or mists.

**Eye Contact** Avoid contact with eyes.

**Skin contact** Avoid contact with skin. Causes mild skin irritation.

**Ingestion** No known hazard by swallowing.

100 % of the mixture consists of ingredient(s) of unknown toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
gamma Undecalactone	>2,000 mg/kg (Rat)	>2,000 mg/kg (Rat)	

**Skin corrosion/irritation**Causes mild skin irritation.

Serious eye damage/eye irritation Not classified.

**Sensitization** Not expected to cause skin sensitization.

Germ cell mutagenicity Not classified.

Carcinogenicity None known.

Reproductive toxicity

This product does not contain any known or suspected reproductive hazards above the

threshold value.

STOT - single exposure Not classified.

STOT - repeated exposure Not classified.

Aspiration hazard Not classified.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Harmful to aquatic life with long lasting effects

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

### 12.2. Persistence and degradability

Readily biodegradable.

### 12.3. Bioaccumulative potential

Low potential for bioaccumulation.

Bioconcentration factor (BCF) 421 L/Kg

### 12.4. Mobility in soil

### Mobility in soil

709.2 Koc (Kow method)

### 12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

### 12.6. Other adverse effects

No information available

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from Residues/Unused

**Products** 

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container. Improper disposal or reuse of this container may be dangerous and

### **SECTION 14: Transport information**

#### **IMDG**

14.1 UN/ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Marine pollutant	Not applicable

14.6 Special Provisions

14.7 Transport in bulk according to No information available

Annex II of MARPOL 73/78 and the

**IBC Code** 

RID	
14.1 UN/ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable

14.6 Special Provisions None

ADR	
14.1 UN/ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14 6 Special Provincions	None

14.6 Special Provisions

### ICAO (air)

10710 (011)	
14.1 UN/ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable

14.6 Special Provisions None

IATA

14.1 UN/ID noNot regulated14.2 Proper Shipping NameNot regulated14.3 Hazard ClassNot regulated14.4 Packing groupNot regulated14.5 Environmental hazardNot applicable

14.6 Special Provisions None

### **SECTION 15: Regulatory information**

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

Water hazard class (WGK) Slightly hazardous to water (WGK 1)

#### **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

#### Authorization and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

### **Persistent Organic Pollutants**

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

#### 15.2. Chemical safety assessment

No information available

### **SECTION 16: Other information**

#### Full text of H-Statements referred to under section 3

H402 - Harmful to aquatic life

H316 - Causes mild skin irritation

H412 - Harmful to aquatic life with long lasting effects

#### Key literature references and sources for data

Key Source: European Chemicals Agency, http://echa.europa.eu

Issue date 28-Jan-2015

Revision date 17-Feb-2020

Revision note Not applicable.

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

#### **Disclaimer**

This material has not been tested or proven safe for inhalation. With this document, Phoenix LLC only attests to the safety of the product when used in the appropriate and suitable fragrance/flavor industry application.

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage,

relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Classification and labeling according to the IFRA/IOFI Labeling Manual 2019.

**End of Safety Data Sheet** 



### **ALDEHYDE C-14 - REACH REGISTERED**

ALD0029

CAS#: 104-67-6 FEMA#: 3091

		TEICATION	
PRUDU	CIIDENI	TFICATION	

PRODUCT NAME ALDEHYDE C-14 - REACH REGISTERED

MOLECULAR FORM C11H20O2

MOLECULAR WT 184.28

MELTING POINT (C) 10 deg C

BOILING POINT (C) 297 deg C

FLASH POINT (F) 293 deg F

SHELF LIFE (DAYS) 730

PHYSICAL SPECIFICATIONS	RANGE	METHOD

APPEARANCE COLORLESS TO PALE YELLOW LIQUID VISUAL

ODOR SWEET, OILY FRUITY, PEACH LIKE ODOR ORGANOLEPTIC
SPECIFIC GRAVITY (25C) 0.9410 to 0.9450 FCC METHOD
REFRACTIVE INDEX (20C) 1.4480 to 1.4530 FCC METHOD

SOLUBILITY SOLUBLE IN ALCOHOL, FIXED OILS, PG; FCC METHOD

INSOLUBLE IN GLYCERINE, WATER

### ANALYTICAL SPECIFICATIONS RANGE METHOD

PURITY (BY GC) 98.0% MINIMUM CHEM\_25.M

OTHER SPECIFICATIONS RANGE METHOD

SOLUBILITY IN ALCOHOL 1 ML IN 5 ML OF 60% ALCOHOL FCC METHOD

### STABILITY

STABLE UNDER NORMAL CONDITIONS

### STORAGE

STORE IN COOL DRY PLACE AWAY FROM HEAT AND SUNLIGHT



## **VEGAN / VEGETARIAN DECLARATION**

Madar Corporation Ltd. hereby certifies that:

## **ALDEHYDE C-14**

to the best of its knowledge is suitable for both vegan and vegetarian diets.

BiOrigins, 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK Tel: 01425 655555 Email: technical@madarcorporation.co.uk