

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## 656021 ALDEHYDE C12 MNA

Version 18

Revision Date 02.05.2016

Print Date 22.09.2016

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Commercial Product Name : ALDEHYDE C12 MNA  
Material number : 656021  
Substance name : 2-Methylundecanal  
CAS-No. : 110-41-8  
EC-No. : 203-765-0

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

Use of the Substance/Mixture : Aroma chemical

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

Company : Holzminden  
Muehlenfeldstrasse 1  
D-37603 Holzminden  
Telephone : +495531900  
Telefax : +495531901649  
E-mail address : sds@symrise.com

For further information, please contact:  
Symrise AG - Tel.: +49 / (0)5531 / 90-0

#### 1.4 Emergency telephone number

Emergency CONTACT (24-Hour-Number)  
GBK/Infotrac ID 101844: +49(6132)9829021

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

|                                      |      |
|--------------------------------------|------|
| Skin sensitisation, Category 1       | H317 |
| Skin irritation, Category 2          | H315 |
| Acute aquatic toxicity, Category 1   | H400 |
| Chronic aquatic toxicity, Category 1 | H410 |

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms

:



Signal word

: Warning

Hazard statements

: H315  
H317  
H410

Causes skin irritation.  
May cause an allergic skin reaction.  
Very toxic to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**

P261

Avoid breathing dust/ fume/ gas/ mist/  
vapours/ spray.

P264

Wash skin thoroughly after handling.

P273

Avoid release to the environment.

P280

Wear protective gloves.

**Response:**

P302 + P352

IF ON SKIN: Wash with plenty of soap and  
water.

P333 + P313

If skin irritation or rash occurs: Get medical  
advice/ attention.

Contains

: 2-METHYLUNDECANAL. May produce an allergic reaction.

**2.3 Other hazards**

No data available

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Chemical characterization : 2-Methylundecanal

Molecular weight : 184,36 g/mol

Total formula : C12-H24-O

CAS-No. : 110-41-8

EINECS-No. / ELINCS No. : 203-765-0

**3.2 Mixtures**

**Hazardous components**

Not applicable

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures**

General advice : Move out of dangerous area.  
Never give anything by mouth to an unconscious person.

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- Inhalation : Move to fresh air.
- Skin contact : Take off all contaminated clothing immediately.  
If skin irritation persists, call a physician.  
Wash off immediately with plenty of water for at least 15 minutes.
- Eye contact : Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.  
Remove contact lenses.
- Ingestion : Clean mouth with water and drink afterwards plenty of water.  
Prevent vomiting if possible.  
If a person vomits when lying on his back, place him in the recovery position.  
Never give anything by mouth to an unconscious person.

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

No data available

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

No data available

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Extinguishing media which shall not be used for safety reasons : High volume water jet

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

- Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire.  
Do not allow run-off from fire fighting to enter drains or water courses.

### 5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : In the event of fire and/or explosion do not breathe fumes.  
Use water spray to cool unopened containers.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

- Personal precautions : Ensure adequate ventilation.  
Use personal protective equipment.

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### 6.2 Environmental precautions

Environmental precautions : Should not be released into the environment.  
Avoid subsoil penetration.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Dam up.  
Wipe up with absorbent material (e.g. cloth, fleece).

Additional advice : Local authorities should be advised if significant spillages cannot be contained.  
Suppress (knock down) gases/vapours/mists with a water spray jet.

### 6.4 Reference to other sections

For personal protection see section 8.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Advice on safe handling : Dispose of rinse water in accordance with local and national regulations.  
For personal protection see section 8.

Advice on protection against fire and explosion : When using do not smoke.

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

Requirements for storage areas and containers : Store in original container.  
Keep container tightly closed in a dry and well-ventilated place.  
To maintain product quality, do not store in heat or direct sunlight.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage : No special restrictions on storage with other products.

Other data : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Aroma chemical

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

none

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### 8.2 Exposure controls

#### Engineering measures

none

#### Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection : Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.  
Wear chemicals-resistant gloves, e.g. safety gloves of chloroprene Level 2 or of butyl rubber Level 6.
- Eye protection : Safety glasses
- Skin and body protection : Lightweight protective clothing  
Remove and wash contaminated clothing before re-use.
- Hygiene measures : Wash hands before breaks and immediately after handling the product.
- Protective measures : Avoid contact with skin.  
When using do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Form : clear liquid
- Colour : colorless
- Odour : characteristic
- Odour Threshold : No data available

#### Safety data

- Flash point : 104 °C
- Water solubility : immiscible
- Relative density : 0,8260 - 0,8290 at  
20 °C relation to density of water at 4°C
- Bulk density : Not applicable
- Relative vapour density : not determined
- Vapour pressure : < 1 kPa at 50 °C  
calculated
- Melting point/freezing point : Setting point  
< -20 °C
- Boiling point : 224 °C Method: OECD Test Guideline 103  
GLP: no

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|  |   |  |
|--|---|--|
| Partition coefficient: n-octanol/water | : | log Pow: 4,7<br>calculated   |
| pH                                     | : | Not applicable   |
| Evaporation rate                       | : | Lower than the evaporation rate of butyl acetate = 1                         |
| Flammability (solid, gas)              | : | Not applicable   |
| Auto-ignition temperature              | : | The substance or mixture is not classified as self heating.                  |
| Decomposition temperature              | : | No data available  |
| Oxidizing properties                   | : | The substance or mixture is not classified as oxidizing.                     |
| Explosive properties                   | : | Due to its structural properties, the product is not classified as explosive |
| Lower explosion limit                  | : | Vapours may form explosive mixtures with air.                                |
| Upper explosion limit                  | : | Vapours may form explosive mixtures with air.                                |

A final assessment of potential explosion hazards can only be made on a case-by-case basis when precise information is available on product handling, production setup and the circumstances surrounding the use of the product.

### 9.2 Other data

None.

## SECTION 10: STABILITY AND REACTIVITY

|  |   |   |
|--|---|---|
| <b>10.1 Reactivity</b>                         | : | No data available   |
| <b>10.2 Chemical stability</b>                 | : | No data available   |
| <b>10.3 Possibility of hazardous reactions</b> | : | No dangerous reaction known under conditions of normal use. |
| <b>10.4 Conditions to avoid</b>                | : | No data available   |
| <b>10.5 Incompatible materials to avoid</b>    | : | No data available   |
| <b>10.6 Hazardous decomposition products</b>   | : | No data available   |

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

|   |   |                                    |
|---|---|------------------------------------|
| Acute oral toxicity                             | : | LD50 Oral Rat: > 5.000 mg/kg       |
| Acute inhalation toxicity                       | : | No data available                  |
| Acute dermal toxicity                           | : | LD50 Dermal Rabbit: > 10.000 mg/kg |
| Repeated dose toxicity                          | : | No data available                  |
| Acute toxicity (other routes of administration) | : | No data available                  |

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|   |   |   |
|---|---|---|
| Skin irritation                                       | : | Rabbit: Moderate irritation of skin @ 100 % |
| Eye irritation  | : | Rabbit: No eye irritation @ 100 %           |
| Sensitisation   | : | Mouse: Sensitizing effect. @ 10 %           |
| Mutagenicity  | : | Not mutagenic in Ames Test                  |
| Carcinogenicity                                       | : | No data available                           |
| Reproductive toxicity                                 | : | No data available                           |
| Teratogenicity  | : | No data available                           |
| Specific target organ toxicity<br>- single exposure   | : | No data available                           |
| Specific target organ toxicity<br>- repeated exposure | : | No data available                           |
| Aspiration toxicity                                   | : | No data available                           |

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Toxicity

No data available

#### 12.2 Persistence and degradability

Readily biodegradable  
68 %/22 d, OECD 301F

#### 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

No data available

#### 12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

|                        |   |  |
|------------------------|---|--|
| Product                | : | Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. |
| Contaminated packaging | : | Empty remaining contents. Dispose of as unused product.  |

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### SECTION 14: TRANSPORT INFORMATION

#### 14.1 UN number

ADR : 3082  
RID : 3082  
IMDG : 3082  
IATA-DGR : 3082

#### 14.2 Proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-Methylundecanal)  
RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-Methylundecanal)  
IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-Methylundecanal) MP  
IATA-DGR : Environmentally hazardous substance, liquid, n.o.s. (2-Methylundecanal)

#### 14.3 Transport hazard class

ADR : 9  
RID : 9  
IMDG : 9  
IATA-DGR : 9

#### 14.4 Packing group

ADR:  
Packaging group : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9  
Tunnel restriction code : (E)

RID:  
Packaging group : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9

IMDG:  
Packaging group : III  
Labels : 9  
EmS - EmS : F-A , S-F

IATA-DGR:  
Packing instruction (cargo aircraft) : 964  
Qty/Pkg (Cargo) : 450,00 L  
Packing instruction (passenger aircraft) : 964  
Qty/Pkg (Passenger) : 450,00 L  
Packaging group : III  
Labels : 9MI

#### 14.5 Environmental hazards

ADR:  
Environmentally hazardous : yes

RID:  
Environmentally hazardous : yes



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### IMDG:

Marine pollutant : yes

### IATA-DGR:

Environmentally hazardous : yes

### 14.6 Special precautions for user

No data available

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: REGULATORY INFORMATION

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

#### National legislation

Risk classification according to BetrSichV (Germany) : Exempt

Water contaminating class (Germany) : WGK 1 (slightly water endangering)  
3316 VwVwS Annex 3

### 15.2 Chemical Safety Assessment

No data available

## SECTION 16: OTHER INFORMATION

### Further information

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, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

Any data changes with reference to previous versions are marked by a vertical line in front of the concerned paragraph.