

Safety Data Sheet according to Regulation (EU) 2020/878

Date of issue: 30.07.2021
Revision date: -
Effective from: 30.07.2021
Version: 1

Replaced version: -

Pro-Die Spacer
Pro-Die Hardener
Pro-Seal wax sealing

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

1.1. Product identifier

Substance name/ Trade name: Ethyl acetate / Die Spacers + Die Hardener / Pro-Seal wax sealing
03-2000, 03-2040, 03-2060, 03-2070, 03-2090, 03-2100 //03-2020 /03-1980// 03-2300
EC index no: 607-002-00-5
EC no: 205-500-4
CAS no: 141-78-6
REACH registration no: 01-2119475103-46-xxxx

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

Relevant identified uses:
SU 20 Healthcare. Plaster die seal or wax seal for use in the dental laboratory
Uses advised against:
Do not use outside of the dental laboratory.

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier
al dente Dentalprodukte GmbH

Street / mailbox:
Borsigstr. 1

Country code / postal code / city:
D-38644 Goslar

Contact for technical information
+49 (0) 5321-80031

Phone / Fax / E-mail
+49 (0)5321-80031 / +49 (0)5321-50881 / E-Mail: info@aldente.de

1.4. Emergency telephone number

+49 (0) 171 8637790

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2, H225
Serious eye damage/eye irritation, Category 2, H319
Specific target organ toxicity — Single exposure, Category 3, Narcosis, H336

Full text of H statements: see section 16.

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Danger
Hazard statements (CLP) : H225 - Highly flammable liquid and vapour
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
Precautionary statements (CLP) : P233 - Keep container tightly closed
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P102 - Keep out of reach of children
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
EUH phrases : EUH066 - Repeated exposure may cause skin dryness or cracking

2.3. Other hazards

Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances

Main constituent of the substance:
Name: Ethyl acetate
EC index no: 607-002-00-5
EC no: 205-500-4
CAS no: 141-78-6

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethyl acetate	(CAS no) 141-78-6 (EC no) 205-500-4 (EC index no) 607-022-00-5 (REACH no) 01-2119475103-46-xxxx	≤ 100	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H statements: see section 16.

Impurities, stabilizing additives and individual constituents:
Name: Solution of binders and auxiliary materials, depending on the Die Spacer Type color pigments
EC index no: not applicable
EC no: not applicable
CAS no: not applicable

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

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4.1. Description of first aid measures

General measures: Call a doctor if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.

After inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

After skin contact: Take off contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

After eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion: Rinse mouth. Drink water as a precaution. Do NOT induce vomiting.

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

Symptoms/injuries after inhalation: May cause drowsiness or dizziness.

Symptoms/injuries after eye contact: Causes serious eye irritation.

Other symptoms/injuries: Nausea, vomiting, headache, drooling.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Dry extinguishing powder. Foam. Carbon dioxide.
Unsuitable extinguishing media: Water.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Highly flammable liquid and vapour.
Explosion hazard: May form flammable/explosive vapour-air mixture.
Hazardous decomposition products in case of fire: Toxic fumes may be released. Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Protection during firefighting: Use a self-contained breathing apparatus and also a protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Stop leak if safe to do so. Provide adequate ventilation. Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Avoid contact with skin and eyes. Do not breathe vapour/aerosol.

For non-emergency personnel:

Emergency procedures: Evacuate unnecessary personnel.

For emergency responders:

Protective equipment: Wear personal protective equipment. Use self-contained breathing apparatus.

6.2. Environmental precautions

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Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Dispose of in accordance with relevant local regulations.

6.4. Reference to other sections

Exposure controls and personal protection, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling: Provide good ventilation in process area to prevent formation of vapour. Remove ignition sources. No open flames. No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Wear personal protective clothing. Do not breathe vapour/aerosol. Avoid contact with skin and eyes.

Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment.

Storage temperature: < 30 °C

Storage conditions: Store in original container. Keep container tightly closed. Store in a cool, well-ventilated place. Protect from sunlight. Keep in fireproof place. Store locked up. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Prohibitions on mixed storage: Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethyl acetate (141-78-6)		
EU	Local name	Ethyl acetate
EU	IOELV TWA (mg/m ³)	734 mg/m ³
EU	IOELV TWA (ppm)	200 ppm
EU	IOELV STEL (mg/m ³)	1468 mg/m ³
EU	IOELV STEL (ppm)	400 ppm
Ireland	Local name	Ethyl acetate
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	OEL (8 hours ref) (mg/m ³)	734 mg/m ³
Ireland	OEL (15 min ref) (ppm)	400 ppm
Ireland	OEL (15 min ref) (mg/m ³)	1468 mg/m ³
Ireland	Notes	IOELV

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Ethyl acetate (141-78-6)		
Malta	Local name	Ethyl acetate
Malta	OEL 8 hours (mg/m ³)	734 mg/m ³
Malta	OEL 8 hours (ppm)	200 ppm
Malta	OEL STEL (mg/m ³)	1468 mg/m ³
Malta	OEL STEL (ppm)	400 ppm
United Kingdom	Local name	Ethyl acetate
United Kingdom	WEL TWA (ppm)	200 ppm
United Kingdom	WEL TWA (mg/m ³)	734 mg/m ³
United Kingdom	WEL STEL (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m ³)	1468 mg/m ³
Ethyl acetate (141-78-6)		
DNEL/DMEL (Workers)		
Acute - systemic effects, inhalation		1468 mg/m ³
Acute - local effects, inhalation		1468 mg/m ³
Long-term - systemic effects, inhalation		734 mg/m ³
Long-term - local effects, inhalation		734 mg/m ³
Long-term - systemic effects, dermal		63 mg/kg bodyweight/day
DNEL/DMEL (General population)		
Acute - systemic effects, inhalation		734 mg/m ³
Acute - local effects, inhalation		734 mg/m ³
Long-term - systemic effects, oral		4.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation		367 mg/m ³
Long-term - systemic effects, dermal		37 mg/kg bodyweight/day
Long-term - local effects, inhalation		367 mg/m ³
PNEC (Water)		
PNEC aqua (freshwater)		0.24 mg/l
PNEC aqua (marine water)		0.024 mg/l
PNEC aqua (intermittent, freshwater)		1.65 mg/l
PNEC (Sediment)		
PNEC sediment (freshwater)		1.15 mg/kg dwt
PNEC sediment (marine water)		0.115 mg/kg dwt
PNEC (Soil)		
PNEC soil		0.148 mg/kg dwt
PNEC (Oral)		
PNEC oral (secondary poisoning)		200 mg/kg food
PNEC (STP)		
PNEC sewage treatment plant		650 mg/l

8.2. Exposure controls

Appropriate engineering controls: Provide local exhaust or general room ventilation to minimize vapour concentrations.

Hand protection: Wear suitable gloves (EN 374). Butyl rubber, ≥ 0.7 mm. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Penetration time (min.): ≥ 60 min

Eye protection: Wear safety glasses (EN 166).

Skin and body protection: Wear suitable protective clothing. Flame retardant antistatic protective clothing.

Respiratory protection: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Breathing apparatus with filter type A.

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Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Transparent or colored according to the Die Spacer Type
Odour : Characteristic; Odour threshold: 0.1 - 181.5 ppm
Melting point/freezing point : -83 °C
Boiling point or initial boiling point and boiling range : 75-77 °C
Flammability : Highly flammable liquid and vapour.
Lower and upper explosion limit : 2.1 – 11.5 vol.-%
Flash point : -4 °C
Auto-ignition temperature : 460 °C
Decomposition temperature : No data available
pH : No data available
Kinematic viscosity : No data available
Solubility : Water: 79 g/l
Partition coefficient n-octanol/water (log value) : 0.68 (25 °C)
Vapour pressure : No data available
Density and/or relative density : No data available
Relative vapour density : No data available
Particle characteristics : Not applicable

9.2. Other information

Explosive properties : May form flammable/explosive vapour-air mixture.

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3. Possibility of hazardous reactions

The substance can react with strong oxidizing agents.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Prolonged storage above 45 °C.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

No hazardous decomposition products known. In case of fire: Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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Acute toxicity : Not classified
Based on available data, the classification criteria are not met

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LD50 oral rabbit	4934 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (Vapours)	> 22.5 mg/l/6 h

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Causes serious eye irritation

Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

11.2. Information on other hazards

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified
Chronic aquatic toxicity : Not classified

Ethyl acetate (141-78-6)	
LC50 fish	230 mg/l 96 h, Pimephales promelas
EC50 Daphnia	165 mg/l Daphnia Cucullata
EC50 microorganisms	5870 mg/l 15 min, Photobacterium phosphoreum
NOEC algae	> 100 mg/l 72 h, Desmodesmus subspicatus

12.2. Persistence and degradability

Ethyl acetate (141-78-6)	
Persistence and degradability	Readily biodegradable.
Biodegradation	69 %, 15 d

12.3. Bioaccumulative potential

Ethyl acetate (141-78-6)	
Partition coefficient n-octanol/water (Log Pow)	0.68 (25 °C)
Bioaccumulative potential	Bioaccumulation unlikely.

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12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT- or vPvB criteria of REACH regulation, annex XIII.

12.6. Endocrine disrupting properties

No additional information available.

12.7. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)

Dispose in a safe manner in accordance with local/national regulations. The product is to be classified as hazardous waste (waste paints).

Waste treatment methods

This material and its container must be disposed of in a safe way.

Waste disposal recommendations

Treat contaminated packaging like the product itself.

Waste code

The waste code number according to the Ordinance on the European Waste Catalogue (AVV) depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer.

Additional information

Handle empty containers with care because residual vapours are flammable. Depending on the use. Do not perforate, cut or weld uncleaned containers.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

14.1. UN number or ID number

UN-No. (ADR)	: UN 1173
UN-No. (IMDG)	: UN 1173
UN-No. (IATA)	: UN 1173

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ETHYL ACETATE
Proper Shipping Name (IMDG)	: ETHYL ACETATE
Proper Shipping Name (IATA)	: Ethyl acetate
Transport document description (ADR)	: UN 1173 ETHYL ACETATE, 3, II, (D/E)
Transport document description (IMDG)	: UN 1173 ETHYL ACETATE, 3, II

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Transport document description (IATA) : UN 1173 Ethyl acetate, 3, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1
Limited quantities (ADR) : 1L
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4

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Portable tank and bulk container special provisions (ADR) : TP1
Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 33
Orange plates :



Tunnel restriction code (ADR) : D/E
- Transport by sea
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Stowage category (IMDG) : B
Flash point (IMDG) : -4°C c.c.

- Air transport
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
ERG code (IATA) : 3L

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations:
Ethyl acetate is not on the REACH Annex XIV List
Ethyl acetate is not on the REACH Candidate List

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Ethyl acetate is not subject to Regulation (EU) No. 649/2012 of the European Parliament and of the Council of July 4, 2012 concerning the export and import of hazardous chemicals
Ethyl acetate is not subject to Regulation (EU) No. 2019/1021 of the European Parliament and of the Council of June 20, 2019 on persistent organic pollutants
Does not contain any substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of June 20, 2019 on the marketing and use of explosives precursors
Ethyl acetate is not subject to Regulation (EC) No. 1005/2009 of the European Parliament and of the Council of September 16, 2009 on substances that deplete the ozone layer
Ethyl acetate is not subject to Regulation (EC) No. 648/2004 of the European Parliament and of the Council of March 31, 2004 on detergents

National regulations:
No additional information available

15.2. Chemical safety assessment

For this substance, a chemical safety assessment was not carried out.

SECTION 16: Other information

Changes compared to earlier versions

-

Data source

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Abbreviations and acronyms:

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DMEL : Derived Minimal Effect Level
DNEL : Derived No-Effect Level
EC50 : The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration)
IATA : International Air Transport Association
IMDG : "International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea
LC50 : Lethal Concentration to 50 % of a test population (Median Lethal Concentration)
LD50 : Lethal Dose to 50% of a test population (Median Lethal Dose)
LOAEL : No Observed Effect Concentration/Level
NOAEC/L : Organisation for Economic Cooperation and Development
NOEC/L : Persistent, Bioaccumulative and Toxic substance
OECD : Predicted No-Effect Concentration
PBT : Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
PNEC : Safety Data Sheet
REACH : Sewage Treatment Plant
SDB (SDS) : Unique Formula Identifier
STP : Very Persistent and Very Bioaccumulative
UFI : European Agreement concerning the International Carriage of Dangerous Goods by Road
vPvB : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Full text of H- and EUH-statements:

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Eye Irrit. 2 : Serious eye damage/eye irritation, Category 2
Flam. Liq. 2 : Flammable liquids, Category 2
STOT SE 3 : Specific target organ toxicity - Single exposure, Category 3, Narcosis
H225 : Highly flammable liquid and vapour
H319 : Causes serious eye irritation
H336 : May cause drowsiness or dizziness
EUH066 : Repeated exposure may cause skin dryness or cracking

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.