


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

- **1.1 Product identifier**
- **Trade name:** **ACETALDEHYD**
- **CAS Number:** 75-07-0
- **EC number:** 200-836-8
- **Index number:** 605-003-00-6
- **Registration number:** 01-2119451152-51
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Chemical intermediate
For industrial use
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** PERGAN GmbH
Hilfsstoffe für industrielle Prozesse
Schlavenhorst 71
D-46395 Bocholt
Tel: +49 2871 9902-0
Fax: +49 2871 9902-50
- **Further information obtainable from:** Qualified person: E-mail: msds@pergan.com
- **1.4 Emergency telephone number:** - Tel: +49 2871 9902-0

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
 Flam. Liq. 1 H224 Extremely flammable liquid and vapour.
 Eye Irrit. 2 H319 Causes serious eye irritation.
 Muta. 2 H341 Suspected of causing genetic defects.
 Carc. 1B H350 May cause cancer.
 STOT SE 3 H335 May cause respiratory irritation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07 GHS08
- **Signal word** Danger
- **Hazard-determining components of labelling:** acetaldehyde
- **Hazard statements**
 H224 Extremely flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H341 Suspected of causing genetic defects.
 H350 May cause cancer.
 H335 May cause respiratory irritation.
- **Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P243	Take action to prevent static discharges.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:** Restricted to professional users.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
- **vPvB:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

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· **Determination of endocrine-disrupting properties**

The product does not contain substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients· **3.1 Substances**

· CAS No. Description	75-07-0 acetaldehyde
· Identification number(s)	
· EC number:	200-836-8
· Index number:	605-003-00-6

SECTION 4: First aid measures· **4.1 Description of first aid measures**· **General information:**

Take care of personal protection for the first aider.

· **After inhalation:**

Take affected persons into fresh air and keep quiet.

· **After skin contact:**

Immediately remove contaminated clothing.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

If symptoms persist consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures· **5.1 Extinguishing media**· **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.· **5.2 Special hazards arising from the substance or mixture**

Under certain fire conditions, traces of other toxic gases cannot be excluded.

· **5.3 Advice for firefighters**· **Protective equipment:**

Do not inhale explosion gases or combustion gases.

· **Additional information**Cool endangered receptacles with water spray.
Self-protection first!**SECTION 6: Accidental release measures**· **6.1 Personal precautions, protective equipment and emergency procedures**

Keep away from ignition sources.

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:**

Dilute with plenty of water.



Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Soak up with absorbant material (e. g. Vermiculit) and dispose of in accordance with government regulations.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

In case of large spillage the environmental authority should be informed.

SECTION 7: Handling and storage· **7.1 Precautions for safe handling**

Keep away from heat and direct sunlight.

Open and handle receptacle with care.

Prevent formation of aerosols.

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Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
Before break and at the end of work hands should be thoroughly washed.
While using do not eat, drink or smoke.
Do not generate flames or sparks.
Take precautionary measures against static discharges.
The pressure in sealed containers can increase under the influence of heat.

Information about fire - and explosion protection:

Protect against electrostatic charges.
Use explosion-proof apparatus / fittings and spark-proof tools.
Highly volatile, flammable constituents are released during processing.
Fumes can combine with air to form an explosive mixture.



Wear shoes with conductive soles.

Formation of flammable or explosive gas/air-mixtures is possible.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Pay attention to the special requirements of your local authorities for storing dangerous goods.

Requirements to be met by storerooms and receptacles:

Store in a cool location.
Prevent any seepage into the ground.
Use only receptacles specifically permitted for this substance/product.

Information about storage in one common storage facility:

Store away from foodstuffs, drinks and feeding stuffs.

Further information about storage conditions:

Keep container tightly sealed.
Do not seal receptacle gas tight.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Store receptacle in a well ventilated area.
Protect from contamination.

Recommended storage temperature (To maintain quality):

max.: +20 °C

Storage class:

3

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

75-07-0 acetaldehyde

OEL (Ireland)	Short-term value: 45 mg/m ³ , 25 ppm
WEL (Great Britain)	Short-term value: 92 mg/m ³ , 50 ppm
	Long-term value: 37 mg/m ³ , 20 ppm
	Carc

Additional information:

The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls

No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
Use skin protection cream for skin protection.
Be sure to clean skin thoroughly after work and before breaks.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.



Use suitable respiratory device when it exceed exposure limit and when insufficiently ventilated.

Filter AX

Hand protection

Only use chemical-protective gloves with CE-labelling of category III.

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Protective gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Butyl rubber, BR
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
Neoprene

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**



Tightly sealed goggles

· **Body protection:**



Protective work clothing

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

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Fluid

· **Colour:**

Colourless

· **Odour:**

Pungent

· **Melting point/freezing point:**

-123 °C

· **Boiling point or initial boiling point and boiling range**

20,4 °C

· **Flammability**

Not applicable.

· **Lower and upper explosion limit**

· **Lower:**

4 Vol %

· **Upper:**

60 Vol %

· **Flash point:**

-39 °C

· **Auto-ignition temperature:**

155 °C

· **Decomposition temperature:**

420 °C

· **pH**

Not determined.

· **Viscosity:**

· **Kinematic viscosity**

Not determined.

· **Dynamic at 15 °C:**

0,25 mPas

· **Solubility**

· **water:**

Undetermined.

· **Partition coefficient n-octanol/water (log value)**

0,45 log POW

· **Vapour pressure at 20 °C:**

1.006 hPa

· **Density and/or relative density**

· **Density at 20 °C:**

0,784 g/cm³

· **Relative density**

Not determined.

· **Vapour density**

Not determined.

· **9.2 Other information**

· **Appearance:**

· **Form:**

Liquid

· **Important information on protection of health and environment, and on safety.**

· **Ignition temperature:**

Not determined.

· **Explosive properties:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Change in condition**

· **Evaporation rate**

Not determined.

· **Information with regard to physical hazard classes**

· **Explosives**

Void

· **Flammable gases**

Void

· **Aerosols**

Void

· **Oxidising gases**

Void

· **Gases under pressure**

Void

· **Flammable liquids**

Extremely flammable liquid and vapour.

· **Flammable solids**

Void

· **Self-reactive substances and mixtures**

Void

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· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No hazardous decomposition products if used and stored according to specifications.
- **Additional information:** Emergency procedures will vary depending on conditions. The customer should have an emergency response plane in place.

*** SECTION 11: Toxicological information**

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:****75-07-0 acetaldehyde**

Inhalative LC50 / 4h 24,04 mg/l (rattus)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Suspected of causing genetic defects.
- **Carcinogenicity** May cause cancer.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** May cause respiratory irritation.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

· **11.2 Information on other hazards**· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information· **12.1 Toxicity**· **Aquatic toxicity:****75-07-0 acetaldehyde**

LC50 / 96h 30,8 mg/l (fish)

EC50 / 48h 48,3 mg/l (daphnia)

· **12.2 Persistence and degradability**· **Degree of elimination:**· **Classification:****75-07-0 acetaldehyde**

Degradation (Readily biodegradable) (OECD 301 C)

· **12.3 Bioaccumulative potential**· **Partition coefficient: nOctanol/water: [Log Kow]**

0,45 (25°C)

- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

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- **vPvB:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Waste disposal key:** Please contact your hazardous waste disposers to assign the right EWC-(European waste catalog)-number.
- **Uncleaned packaging:**
- **Recommendation:** This material and its container must be disposed of as hazardous waste.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN number or ID number	UN1089
· ADR, IMDG, IATA	
· 14.2 UN proper shipping name	UN1089 ACETALDEHYDE
· ADR	ACETALDEHYDE
· IMDG, IATA	
· 14.3 Transport hazard class(es)	
· ADR	
	
· Class	3 (F1) Flammable liquids.
· Label	3
· IMDG, IATA	
	
· Class	3 Flammable liquids.
· Label	3
· 14.4 Packing group	
· ADR, IMDG, IATA	I
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Warning: Flammable liquids.
· Hazard identification number (Kemler code):	33
· Stowage Category	E
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	0
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	1
· Tunnel restriction code	D/E
· RID / GGVSEB:	like ADR

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Safety data sheet
 according to Regulation (EC) No 1907/2006, Article 31

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Revision: 02.04.2024

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· IMDG	
· Limited quantities (LQ)	0
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity

SECTION 15: Regulatory information· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **Directive 2012/18/EU**
- **Named dangerous substances**
 - **ANNEX I** Substance is not listed.
- **Seveso category** P5a FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 10 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 28, 40, 75

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Contact:** Tel: +49 2871 9902-0
E-mail: mail@pergan.com
- **Version number of previous version:** 8
- **Abbreviations and acronyms:**
 - ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Flam. Liq. 1: Flammable liquids – Category 1
 - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 - Muta. 2: Germ cell mutagenicity – Category 2
 - Carc. 1B: Carcinogenicity – Category 1B
 - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- *** Data compared to the previous version altered.**