

according to Regulation (EC) No 1907/2006

Isoamyl alcohol min. 98% for fat determination according to Gerber colored red

Revision date: 06.03.2025 Product code: 07086 Page 1 of 12

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

1.1. Product identifier

Isoamyl alcohol min. 98% for fat determination according to Gerber colored red

REACH Registration Number: 01-2119493725-26-XXXX

CAS No: 123-51-3 603-006-00-7 Index No: EC No: 204-633-5

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

Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH

ACD

Street: Stempelstraße 6 Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, 1.4. Emergency telephone Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: number:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

Further Information

No data available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Danger

Print date: 07.03.2025



Safety Data Sheet

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Pictograms:







Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 Keep container tightly closed.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: C5H12O Molecular weight: 88.15 g/mol

Relevant ingredients

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (Regulation (EC) No 1272/2008)				
123-51-3	Isoamyl alcohol				
	204-633-5	603-006-00-7	01-2119493725-26-XXXX		
	Flam. Liq. 3, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT SE 3; H226 H332 H315 H318 H335 EUH066				

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. I	imits, M-factors and ATE	
123-51-3	204-633-5	Isoamyl alcohol	100 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = ca. 2860 mg/kg; oral: LD50 = 3438 mg/kg		

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures



according to Regulation (EC) No 1907/2006

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4.1. Description of first aid measures

General information

No data available

After inhalation

Provide fresh air.

If breathing is irregular or stopped, administer artificial respiration.

Call a physician immediately.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs.

Call a physician immediately.

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

Dizziness, Unconsciousness, Gastrointestinal complaints

Vomiting, Headache, Irritant

Cough, Dyspnoea

Repeated exposure may cause skin dryness or cracking.

Dermauus

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

Foam

Carbon dioxide (CO2)

Extinguishing powder

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Carbon dioxide (CO2) Carbon monoxide

In case of warming:

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

In case of fire and/or explosion do not breathe fumes.

Avoid contact with skin, eyes and clothes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.



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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Keep away from sources of ignition - No smoking.

This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).

Take action to prevent static discharges.

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

Danger of explosion

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use personal protection equipment.

Do not breathe gas/fumes/vapour/spray.

Provide adequate ventilation.

Read label before use.

Use extractor hood (laboratory).

Advice on protection against fire and explosion

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharges.



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Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

Further information on handling

Take off immediately all contaminated clothing and wash it before reuse.

Wash hands before breaks and after work.

Draw up and observe skin protection programme.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and dry.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

national regulations

Further information on storage conditions

Store in a well-ventilated place. Keep container tightly closed. storage temperature $+5^{\circ}\text{C}$ - $+30^{\circ}\text{C}$

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
123-51-3	3-Methylbutan-1-ol	5	18		TWA (8 h)	
		10	37		STEL (15 min)	

DNEL/DMEL values

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
123-51-3	123-51-3 Isoamyl alcohol					
Worker DNEL,	long-term	inhalation	local	73,16 mg/m³		
Worker DNEL,	Worker DNEL, acute		local	292 mg/m³		
Consumer DNEL, long-term		inhalation	local	13 mg/m³		
Consumer DNEL, acute		inhalation	local	218 mg/m³		
Consumer DNEL, long-term		oral	systemic	12,5 mg/kg bw/day		



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PNEC values

CAS No	Substance	
Environment	al compartment	Value
123-51-3	Isoamyl alcohol	
Freshwater		0,12 mg/l
Freshwater (intermittent releases)		1,2 mg/l
Marine water		0,012 mg/l
Freshwater sediment		0,496 mg/kg
Marine sediment		0,05 mg/kg
Micro-organisms in sewage treatment plants (STP)		37 mg/l
Soil		1,068 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles

Face protection umbrella

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 730 Camatril® Velours Recommended material: NBR (Nitrile rubber) 0,4 mm Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 720 Camapren®

Recommended material: CR (polychloroprene, chloroprene rubber) 0,65 mm

Wearing time with occasional contact (splashes): > 240 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear anti-static footwear and clothing

Wear fire resistant or flame retardant clothing.

Take off immediately all contaminated clothing and wash it before reuse.

Wash hands and face before breaks and after work and take a shower if necessary.



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Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Filtering device with filter or ventilator filtering device of type: A

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not allow to enter into surface water or drains.

Danger of explosion

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid Colour: red

Odour: characteristic
Odour threshold: No data available

Melting point/freezing point:

-147 °C

Boiling point or initial boiling point and

130,7 °C

boiling range:

Flammability: No data available Lower explosion limits: 1.2 vol. % Upper explosion limits: 8 vol. % Flash point: 43,5 °C 335 °C Auto-ignition temperature: Decomposition temperature: No data available pH-Value (at 20 °C): 7 (25 q/l) Viscosity / kinematic: 5,32 mm²/s

(at 20 °C)

Water solubility: 25 g/l

(at 20 °C)

Solubility in other solvents

No data available

Dissolution rate:

Partition coefficient n-octanol/water:

Dispersion stability:

Vapour pressure:

No data available
No data available
No data available

(at 20 °C)

Vapour pressure:No data availableDensity:0,81 g/cm³Relative density:No data availableBulk density:No data availableRelative vapour density:No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

In case of warming:

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Sustaining combustion: Sustaining combustion

Self-ignition temperature

Solid: No data available Gas: No data available

Oxidizing properties

No data available



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Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available
Solvent content:

No data available
Solid content:

No data available
Sublimation point:

No data available
Softening point:

No data available
Pour point:

No data available
No data available
No data available

Viscosity / dynamic: 4,3 mPa·s

(at 20 °C)

Flow time: No data available

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

In case of warming:

Vapours may form explosive mixtures with air.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Alkali metals, Alkaline earth metal, Aluminium Fluorine, Oxygen, Acid, Isocyanates Aluminium, Oxidising agent, strong,

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Rubber articles

10.6. Hazardous decomposition products

SECTION 5: Firefighting measures

Further information

No data available

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

No data available

Acute toxicity

Harmful if inhaled.

Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.



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CAS No	Chemical name								
	Exposure route	Dose		Species	Source	Method			
123-51-3	123-51-3 Isoamyl alcohol								
	oral	LD50 mg/kg	3438	Rabbit	J. Lab. Clin. Med., 10:985 (1925)	acute oral toxicity study			
	dermal	LD50 mg/kg	ca. 2860	Rabbit	Am. Ind. Hyg. Ass. J., 23, 95-107 (1962)	modified acc. to Draize, J.H. et al., J.			
	inhalation vapour	ATE	11 mg/l						
	inhalation dust/mist	ATE	1,5 mg/l						

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye damage.

Repeated exposure may cause skin dryness or cracking.

Repeated exposure may cause skin dryness or cracking.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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

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

STOT-single exposure

May cause respiratory irritation. (Isoamyl alcohol)

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.

Observe risk of aspiration if vomiting occurs.

Specific effects in experiment on an animal

No data available

Additional information on tests

No data available

Practical experience

No data available

11.2. Information on other hazards

Endocrine disrupting properties

No data available

Other information

Liver and kidney damage

Further information

Dizziness, Unconsciousness, Gastrointestinal complaints

Vomiting, Headache, Irritant

Cough, Dyspnoea

Repeated exposure may cause skin dryness or cracking.

Dermatitis

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.



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CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
123-51-3	Isoamyl alcohol						
	Acute fish toxicity	LC50	530 mg/l	96 h	Danio rerio	Z Wasser Abwasser Forsch 15 (2), 49-52 (other: OECD Draft 1980 and ISO TC 147/SC
	Acute algae toxicity	ErC50 mg/l	> 320	l	Pseudokirchneriella subcapitata	Study report (2011)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	341,21	48 h	Daphnia magna	Study report (1990)	EU Method C.2

12.2. Persistence and degradability

84 %; 27 d OECD-301C

Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
123-51-3	Isoamyl alcohol	1,35

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

Do not allow to enter into surface water or drains.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not empty into drains.

Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 1105 **14.2. UN proper shipping name:** PENTANOLS

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



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Classification code: F1
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:UN 110514.2. UN proper shipping name:PENTANOLS

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3Classification code:F1Limited quantity:5 LExcepted quantity:E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1105
14.2. UN proper shipping name: PENTANOLS

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3Special Provisions:223Limited quantity:5 LExcepted quantity:E1EmS:F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1105
14.2. UN proper shipping name: PENTANOLS

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3Special Provisions:A3Limited quantity Passenger:10 LPassenger LQ:Y344Excepted quantity:E1

IATA-packing instructions - Passenger:355IATA-max. quantity - Passenger:60 LIATA-packing instructions - Cargo:366IATA-max. quantity - Cargo:220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No.

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40



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Information according to Directive

P5c FLAMMABLE LIQUIDS

2012/18/EU (SEVESO III):

Additional information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 1 - slightly hazardous to water

SECTION 16: Other information

Abbreviations and acronyms

Flam. Liq: Flammable liquid Acute Tox: Acute toxicity Skin Irrit: Skin irritation Eye Dam: Eye damage

STOT SE: Specific target organ toxicity - single exposure

Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information

Provide appropriate information, instructions and training to users

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.