

BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

1.1	Product identifier	: BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510 Ethyl acetate
	CAS:	141-78-6
	EC:	205-500-4
	Index:	607- 0 22-00-5
	REACH:	01-2119475103-46-XXXX
1.2	Relevant identifie	d uses of the substance or mixture and uses advised against:
	Relevant uses: Lal	poratory. For professional user only.
	Uses advised agai	nst: All uses not specified in this section or in section 7.3
1.3	-	plier of the safety data sheet:
	82 Avenue du 85e	R LÕIRE - FRANCE 2496 pharma.fr
1.4	Emergency telep	none number: ORFILA (INRS) +33.1.45.42.59.59
SEC	TION 2: HAZARI	DS IDENTIFICATION
2.1	Classification of	the substance or mixture:
		EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Eye Irrit. 2: Eye irritation, Category 2, H319 Flam. Liq. 2: Flammable liquids, Category 2, H225 STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:



Hazard statements:

Eye Irrit. 2: H319 - Causes serious eye irritation Flam. Liq. 2: H225 - Highly flammable liquid and vapour STOT SE 3: H336 - May cause drowsiness or dizziness

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P280: Wear protective gloves/protective clothing/eye protection/face protection P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing

P370+P378: In case of fire: Use ABC powder extinguisher to extinguish

P403+P233: Store in a well-ventilated place. Keep container tightly closed

P403+P235: Store in a well-ventilated place. Keep cool

P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Supplementary information:

EUH066: Repeated exposure may cause skin dryness or cracking

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria



BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Chemical description: Chemical substance

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification		Chemical name/Classification		Concentration
CAS: 141-78-6 EC: 205-500-4	Ethyl acetate		ATP CLP00	
EC. 205-500-4 Index: 607-022-00-5 REACH01-2119475103-46- : XXXX	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger		100 %
To obtain more informat	ion on the hazards o	of the substances consult sections 8, 11, 12, 15 and 16		

32 Mixture:

Non-applicable

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

In case of consumption, seek immediate medical assistance showing the SDS for the product.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit...) in accordance with Directive 89/654/EC.

Additional provisions:



BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

SECTION 5: FIREFIGHTING MEASURES (continued)

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 94/9/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.:	5 °C
Maximum Temp.:	30 °C

Maximum time: 6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.



BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

	Identification	Er	vironmental limits	
Ethyl acetate		IOELV (8h)	200 ppm	734 mg/m ³
CAS: 141-78-6		IOELV (STEL)	400 ppm	1468 mg/m ³
EC: 205-500-4		Year	2018	

DNEL (Workers):

			Short e	xposure	Long e	xposure
lde	entification		Systemic	Local	Systemic	Local
Ethyl acetate		Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 141-78-6		Dermal	Non-applicable	Non-applicable	63 mg/kg	Non-applicable
EC: 205-500-4		Inhalation	1468 mg/m ³	1468 mg/m ³	734 mg/m ³	734 mg/m ³

DNEL (General population):

		Short e	xposure	Long e	kposure
Identification		Systemic	Local	Systemic	Local
Ethyl acetate	Oral	Non-applicable	Non-applicable	4,5 mg/kg	Non-applicable
CAS: 141-78-6	Dermal	Non-applicable	Non-applicable	37 mg/kg	Non-applicable
EC: 205-500-4	Inhalation	734 mg/m³	734 mg/m ³	367 mg/m ³	367 mg/m³

PNEC:

Identification				
Ethyl acetate	STP	650 mg/L	Fresh water	0,24 mg/L
CAS: 141-78-6	Soil	0,148 mg/kg	Marine water	0,024 mg/L
EC: 205-500-4	Intermittent	1,65 mg/L	Sediment (Fresh water)	1,15 mg/kg
	Oral	200 g/kg	Sediment (Marine water)	0,115 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

	Pictogram	PPE	Labelling	CEN Standard	Remarks
	Mandatory respiratory tract protection	Filter mask for gases and vapours	CAT III	EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.
C	Specific protection	n for the hands			

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	NON-disposable chemical protective gloves		EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Face mask		EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

- CONTINUED ON NEXT PAGE -



BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory complete body protection	Disposable clothing for protection against chemica risks, with antistatic and fireproof properties		EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982- 1:2004/A1:2010 EN ISO 6529:2001 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994		professional use only. Clean periodica ording to the manufacturer's instructior
	Mandatory foot protection	Safety footwear for protectio against chemical risk, with antistatic and heat resistar properties		EN 13287:2008 EN ISO 20345:2011 EN 13832-1:2006	Re	place boots at any sign of deterioration
- 7	Additional emerge	ency measures		Ullatit		
	Emergency mea	asure	Standards	Emergency measu	ure	Standards
	Emergency sho	ISC	NSI Z358-1 9 3864-1:2002	Eyewash station	s	DIN 12 899 ISO 3864-1:2002
- nv	vironmental expo		1		-	
n ao pilla	ccordance with th	ne community legislation roduct and its container		on of the environment it is information see subsectior		mended to avoid environmental
Vith	regard to Directi	ive 2010/75/EU, this pro	oduct has the fol	lowing characteristics:		
	.C. (Supply):	100 % weigh	t			
1.0						
	.C. density at 20	°C: 899,26 kg/m³	(899,26 g/L)			
.0	.C. density at 20 ^r rage carbon num	, 3	(899,26 g/L)			

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

I Information on basic physical and chemi	cal properties:
For complete information see the product da	atasheet.
Appearance:	
Physical state at 20 °C:	Liquid
Appearance:	Not available
Colour:	Not available
Odour:	Not available
Odour threshold:	Non-applicable *
Volatility:	
Boiling point at atmospheric pressure:	77 °C
Vapour pressure at 20 ºC:	10016 Pa
Vapour pressure at 50 °C:	38057 Pa (38 kPa)
Evaporation rate at 20 °C:	Non-applicable *
Product description:	
Density at 20 °C:	899 kg/m³
Relative density at 20 °C:	0,899
Dynamic viscosity at 20 °C:	0,44 cP
Kinematic viscosity at 20 °C:	0,49 cSt
Kinematic viscosity at 40 °C:	Non-applicable *
*Not relevant due to the nature of the product, not pro	viding information property of its hazards.

- CONTINUED ON NEXT PAGE -



BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

pH:Non-applicable *Vapour density at 20 °C:Non-applicable *Partition coefficient n-octanol/water 20 °C:Non-applicable *Solubility in water at 20 °C:Non-applicable *Solubility properties:Non-applicable *Decomposition temperature:Non-applicable *Melting point/freezing point:-83 °CExplosive properties:Non-applicable *Oxidising properties:Non-applicable *Oxidising properties:Non-applicable *Flammability:-4 °CFlammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:1,1,4 % VolumeUpper flammability limit:1,4 % VolumeExplosive limit:Non-applicable *Upper explosive limit:Non-applicable *Sufface tension at 20 °C:Non-applicable *Surface tension at 20 °C:Non-applicable *Non-applicable *	Concentration:	Non-applicable *	
Partition coefficient n-octanol/water 20 °C:Non-applicable *Solubility in water at 20 °C:Non-applicable *Solubility properties:Non-applicable *Decomposition temperature:Non-applicable *Melting point/freezing point:-83 °CExplosive properties:Non-applicable *Oxidising properties:Non-applicable *Oxidising properties:Non-applicable *Flammability:-4 °CFlammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	pH:	Non-applicable *	
Solubility in water at 20 °C:Non-applicable *Solubility properties:Non-applicable *Decomposition temperature:Non-applicable *Melting point/freezing point:-83 °CExplosive properties:Non-applicable *Oxidising properties:Non-applicable *Oxidising properties:Non-applicable *Flammability:-4 °CFlammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive limit:Non-applicable *Lower explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Vapour density at 20 °C:	Non-applicable *	
Solubility properties:Non-applicable *Decomposition temperature:Non-applicable *Melting point/freezing point:-83 °CExplosive properties:Non-applicable *Oxidising properties:Non-applicable *Flammability:Non-applicable *Flammability:-4 °CFlammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive limit:Non-applicable *Lower explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Quface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Partition coefficient n-octanol/water 20 °C:	Non-applicable *	
Decomposition temperature:Non-applicable *Melting point/freezing point:-83 °CExplosive properties:Non-applicable *Oxidising properties:Non-applicable *Flammability:-4 °CFlammability (solid, gas):-4 °CFlammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive:Upper explosive limit:Non-applicable *Non-applicable *Quife explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Solubility in water at 20 °C:	Non-applicable *	
Melting point/freezing point:-83 °CExplosive properties:Non-applicable *Oxidising properties:Non-applicable *Flammability:-4 °CFlammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive:Upper explosive limit:Non-applicable *Non-applicable *Quiper explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Solubility properties:	Non-applicable *	
Explosive properties:Non-applicable *Oxidising properties:Non-applicable *Flammability:-4 °CFlammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive:Upper explosive limit:Lower explosive limit:Non-applicable *Upper flammability limit:11,4 % VolumeExplosive:Upper explosive limit:Lower explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Decomposition temperature:	Non-applicable *	
Oxidising properties:Non-applicable *Flammability:-4 °CFlash Point:-4 °CFlammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive:VolumeLower explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Melting point/freezing point:	-83 °C	
Flammability:Flash Point:-4 °CFlash Point:Non-applicable *Flammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive:Upper explosive limit:Lower explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Explosive properties:	Non-applicable *	
Flash Point:-4 °CFlammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive:VolumeLower explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Oxidising properties:	Non-applicable *	
Flammability (solid, gas):Non-applicable *Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive:11,4 % VolumeLower explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Flammability:		
Autoignition temperature:427 °CLower flammability limit:2,2 % VolumeUpper flammability limit:11,4 % VolumeExplosive:11,4 % VolumeLower explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Upper explosive limit:Non-applicable *Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Flash Point:	-4 °C	
Lower flammability limit: 2,2 % Volume Upper flammability limit: 11,4 % Volume Explosive: 11,4 % Volume Lower explosive limit: Non-applicable * Upper explosive limit: Non-applicable * Upper explosive limit: Non-applicable * Surface tension at 20 °C: Non-applicable * Refraction index: Non-applicable *	Flammability (solid, gas):	Non-applicable *	
Upper flammability limit: 11,4 % Volume Explosive: 11,4 % Volume Lower explosive limit: Non-applicable * Upper explosive limit: Non-applicable * Other information: Surface tension at 20 °C: Surface tension index: Non-applicable *	Autoignition temperature:	427 °C	
Explosive: Non-applicable * Lower explosive limit: Non-applicable * Upper explosive limit: Non-applicable * Other information: Surface tension at 20 °C: Surface tension at 20 °C: Non-applicable * Refraction index: Non-applicable *	Lower flammability limit:	2,2 % Volume	
Lower explosive limit: Non-applicable * Upper explosive limit: Non-applicable * Other information: Surface tension at 20 °C: Surface tension at 20 °C: Non-applicable * Refraction index: Non-applicable *	Upper flammability limit:	11,4 % Volume	
Upper explosive limit: Non-applicable * 2 Other information: Surface tension at 20 °C: Non-applicable * Refraction index: Non-applicable *	Explosive:		
2 Other information: Surface tension at 20 °C: Non-applicable * Refraction index: Non-applicable *	Lower explosive limit:	Non-applicable *	
Surface tension at 20 °C:Non-applicable *Refraction index:Non-applicable *	Upper explosive limit:	Non-applicable *	
Refraction index: Non-applicable *	2 Other information:		
	Surface tension at 20 °C:	Non-applicable *	
*Not relevant due to the nature of the product, not providing information property of its bazards	Refraction index:	Non-applicable *	
Not relevant due to the nature of the product, not providing memory of the nazardo.	*Not relevant due to the nature of the product, not providing	information property of its hazards.	
	ECTION 10: STABILITY AND REACTIVITY		

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids Water Combustive materials Combustible materials	S Others
Avoid strong acids Not applicable Avoid direct impact Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:



BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances
 - classified as dangerous for this effect. For more information see section 3.
- B- Inhalation (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for skin contact. For more information see section 3.
 - Contact with the eyes: Produces eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
 - Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- F- Specific target organ toxicity (STOT) single exposure:

Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Skin: Repeated exposure may cause skin dryness or cracking
- H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

	Identification		Acute toxicity		
Ethyl acetate		LD50 oral	4100 mg/kg	Rat	
CAS: 141-78-6		LD50 dermal	20000 mg/kg	Rabbit	
EC: 205-500-4		LC50 inhalation	Non-applicable		

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:



BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

Identification			Acute toxicity		Spe	cies	Genus
Ethyl acetate	L		230 mg/L (96 h)	30 mg/L (96 h)		s promelas	Fish
CAS: 141-78-6			717 mg/L (48 h)		Daphnia	a magna	Crustacean
EC: 205-500-4		EC50 3300 mg/L (48 h)			Scenedesmus	s subspicatus	Algae
Persistence and degradability:							
Identification		De	gradability		Bic	odegradability	
Ethyl acetate	BOD5		1.36 g O2/g	Conc	entration	100 r	ng/L
CAS: 141-78-6	COD		1.69 g O2/g	Perio	d	14 da	ays
EC: 205-500-4	BOD5	/COD	0.81 % Biodegradable		degradable	83 %	
	Identification	-		-	Bioaco	cumulation pote	ntial
Ethyl acetate CAS: 141-78-6	Identification				F w Log	30 0.73	ntial
CAS: 141-78-6 EC: 205-500-4	Identification			Po	F	30	ntial
CAS: 141-78-6 EC: 205-500-4	Identification	Abso	orption/desorption	Po	F w Log	30 0.73	ntial
CAS: 141-78-6 EC: 205-500-4 Mobility in soil:	Identification	Abso	prption/desorption 59	Po	F w Log	30 0.73 Moderate Volatility	ntial 9 Pa∙m³/mol
CAS: 141-78-6 EC: 205-500-4 Mobility in soil: Identification				Po	F w Log tential	30 0.73 Moderate Volatility	
CAS: 141-78-6 EC: 205-500-4 Mobility in soil: Identification Ethyl acetate	Koc Concle		59	Po	F w Log tential Henry	30 0.73 Moderate Volatility 13,58	
CAS: 141-78-6 EC: 205-500-4 Mobility in soil: Identification Ethyl acetate CAS: 141-78-6	Koc Concle Surfac	usion	59 Very High	Po	F w Log tential Henry Dry soil	30 0.73 Moderate Volatility 13,58 Yes	

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP4 Irritant — skin irritation and eye damage, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2017 and RID 2017:



BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

SECTION 14: TRANS	SPOR	INFORMATION (continued)	
	14.1	UN number:	UN1173
	14.2	UN proper shipping name:	ETHYL ACETATE
	14.3	Transport hazard class(es):	3
		Labels:	3
	14.4	Packing group:	
3	14.5	Environmental hazards:	No
•	14.6	Special precautions for user	
		Special regulations:	Non-applicable
		Tunnel restriction code:	D/E
		Physico-Chemical properties:	see section 9
		Limited quantities:	1L
	14.7	Transport in bulk according to	Non-applicable
		Annex II of Marpol and the IBC Code:	JIA IIA V
Transport of da			
Transport of da	-		
With regard to IN	IDG 38-	-16:	
	14.1	UN number:	UN1173
A 1/2		UN proper shipping name:	ETHYL ACETATE
	14.3	Transport hazard class(es):	3
		Labels:	3
	14.4	Packing group:	
		Environmental hazards:	No
3	14.6	Special precautions for user	
		Special regulations:	Non-applicable
		EmS Codes:	F-E, S-D
		Physico-Chemical properties:	see section 9
		Limited quantities:	1L
	14.7	Transport in bulk according to Annex II of Marpol and the IBC	Non-applicable
		Code:	
Transport of da	naerou		
With regard to IA	-		
			1014/20
	14.1		UN1173
		UN proper shipping name:	ETHYL ACETATE
$\langle \simeq \rangle$	14.3	Transport hazard class(es):	3
		Labels:	3
3		Packing group:	
•		Environmental hazards:	No
	14.0	Special precautions for user Physico-Chemical properties:	see section 9
	14.7	Transport in bulk according to	
	14.1	Annex II of Marpol and the IBC	
		Code:	

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable Article 95, REGULATION (EU) No 528/2012: Non-applicable REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc) :

- CONTINUED ON NEXT PAGE -



BIOCHEM - ETHYL ACETATE - ANALYTICAL REAGENT 20510

SECTION 15: REGULATORY INFORMATION (continued)

Shall not be used in:

----ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

-tricks and jokes,

-games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H225: Highly flammable liquid and vapour

H336: May cause drowsiness or dizziness

H319: Causes serious eye irritation

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Eye Irrit. 2: H319 - Causes serious eye irritation Flam. Liq. 2: H225 - Highly flammable liquid and vapour STOT SE 3: H336 - May cause drowsiness or dizziness

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu

http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

- IMDG: International maritime dangerous goods code
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organisation
- COD: Chemical Oxygen Demand
- BOD5: 5-day biochemical oxygen demand
- BCF: Bioconcentration factor
- LD50: Lethal Dose 50
- LC50: Lethal Concentration 50
- EC50: Effective concentration 50
- Log-POW: Octanol-water partition coefficient

Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.