acc. to Regulation (EC) No. 1907/2006 (REACH)

Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: 1A9A Version: 2.0 en Replaces version of: 2020-04-21 Version: (1)

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

Product identifier 1.1

1.2

Identification of the substance	Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis
Article number	1A9A
EC number	203-686-1
CAS number	109-60-4
Alternative name(s)	Propyl acetate
Relevant identified uses of the substance or mi	xture and uses advised against
Relevant identified uses:	Laboratory and analytical use Laboratory chemical

Uses advised against:

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 Telefax: +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment sheet:

e-mail (competent person):

Emergency telephone number 1.4

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture



sicherheit@carlroth.de

date of compilation: 2020-04-21

Revision: 2022-05-19

acc. to Regulation (EC) No. 1907/2006 (REACH)



Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: **1A9A**

Classification acc. to GHS

Section	on Hazard class		Hazard class and category	Hazard statement
2.6	Flammable liquid	2	Flam. Liq. 2	H225
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.8D	Specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336

Supplemental hazard information

Code	Supplemental hazard information
EUH066	repeated exposure may cause skin dryness or cracking

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling

Signal word Danger

Pictograms

GHS02, GHS07



Hazard statements

H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

Precautionary statements

Precautionary statements - prevention

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

Precautionary statements - response

P304+P340IF INHALED: Remove person to fresh air and keep comfortable for breathingP305+P351+P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contactP337+P313If eye irritation persists: Get medical advice/attention

Supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: **1A9A**

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	Acetic acid n-propyl ester
Molecular formula	$C_5H_{10}O_2$
Molar mass	102,1 ^g / _{mol}
CAS No	109-60-4
EC No	203-686-1

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed Irritation, Dizziness, Drowsiness, Narcosis

4.3 Indication of any immediate medical attention and special treatment needed none



acc. to Regulation (EC) No. 1907/2006 (REACH)



Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: **1A9A**

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapourair mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours may form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Danger of explosion.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

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

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

® Roth

article number: **1A9A**

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation.

Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

of vapours into cellars, flues and ditches.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Ground/bond container and receiving equipment.

Ventilation requirements

Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
GB	n-propyl acetate	109-60-4	WEL	200	849	250	1.060				EH40/ 2005

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur



Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: 1A9A

Notation

 STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified)
TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Human health values

Relevant DN	ELs and other t	hreshold levels		
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	420 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
DNEL	840 mg/m ³	human, inhalatory	worker (industry)	acute - local effects

Environmental values

Relevant PNECs and other threshold levels End-Threshold Organism **Environmental com-Exposure time** point level partment PNEC 0,06 ^{mg}/_l aquatic organisms freshwater short-term (single instance) PNEC 0,006 mg/l aquatic organisms marine water short-term (single instance) 1 ^{mg}/ı PNEC sewage treatment plant aquatic organisms short-term (single instance) (STP) 0,16 ^{mg}/_{kg} PNEC freshwater sediment short-term (single instance) aquatic organisms PNEC 0,016 mg/ka aquatic organisms marine sediment short-term (single instance) 0,021 ^{mg}/ka PNEC terrestrial organisms soil short-term (single instance)

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection



hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. 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. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a consider-able reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as

acc. to Regulation (EC) No. 1907/2006 (REACH)



Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: 1A9A

a guide.

• type of material

Butyl caoutchouc (butyl rubber)

material thickness

0,7mm

• breakthrough times of the glove material

>120 minutes (permeation: level 4)

other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 $^{\circ}$ C, colour code: Brown).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	fruity
Melting point/freezing point	-93 °C (ECHA)
Boiling point or initial boiling point and boiling range	101,3 °C at 1.013 hPa (ECHA)
Flammability	flammable liquid in accordance with GHS criteria
Lower and upper explosion limit	1,7 vol% (LEL) - 8 vol% (UEL)
Flash point	11,8 °C at 1.013 hPa (ECHA)
Auto-ignition temperature	380 °C at 1.013 hPa (ECHA)
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	0,6517 ^{mm²} / _s at 20 °C
Dynamic viscosity	0,58 mPa s at 20 °C
Solubility(ies)	
Water solubility	18,9 ^g / _l at 20 °C (ECHA)



Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: 1A9A

Partition coefficient	
Partition coefficient n-octanol/water (log value):	1,4 (pH value: 7, 25 °C) (ECHA)
Vapour pressure	33 hPa at 20 °C
Density and/or relative density	
Density	0,89 ^g / _{cm³} at 20 °C
Relative vapour density	information on this property is not available
Particle characteristics	not relevant (liquid)
Other safety parameters	
Oxidising properties	none
Other information	
Information with regard to physical hazard classes:	There is no additional information.
Other safety characteristics:	
Gas group (explosion group)	IIA Maximum Experimental Safe Gap value; MESG > 0,9 mm
Maximum explosion pressure	8,6 bar

SECTION 10: Stability and reactivity

10.1 Reactivity

9.2

It's a reactive substance. Risk of ignition. Vapours may form explosive mixtures with air.

If heated

Risk of ignition.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser

10.4 Conditions to avoid

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

10.5 Incompatible materials

Rubber articles, different plastics

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis



article number: **1A9A**

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity

Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	8.700 ^{mg} / _{kg}	rat		ECHA
inhalation: vapour	LC50	32 ^{mg} / _l /4h	rat		ECHA
dermal	LD50	>17.800 ^{mg} / _{kg}	rabbit		ECHA

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

Data are not available.

• If in eyes

Causes serious eye irritation

• If inhaled

dizziness, fatigue, narcosis

If on skin

has degreasing effect on the skin, repeated exposure may cause skin dryness or cracking

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: 1A9A

• Other information

none

- **11.2 Endocrine disrupting properties** Not listed.
- 11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)				
Endpoint	Value	Species	Source	Exposure time
LC50	60 ^{mg} / _l	fish	ECHA	96 h
EC50	91,5 ^{mg} / _l	aquatic invertebrates	ECHA	48 h
ErC50	672 ^{mg} / _l	algae	ECHA	72 h

Biodegradation

The substance is readily biodegradable.

12.2 Process of degradability

Theoretical Oxygen Demand: 2,036 ^{mg}/_{mg} Theoretical Carbon Dioxide: 2,154 ^{mg}/_{mg}

Process of degradability		
Process	Degradation rate	Time
oxygen depletion	62 %	5 d

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	1,4 (pH value: 7, 25 °C) (ECHA)
---------------------------	---------------------------------

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment Data are not available.

12.6 Endocrine disrupting properties Not listed.

12.7 Other adverse effects

Data are not available.



acc. to Regulation (EC) No. 1907/2006 (REACH)

® §ROTH

Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: **1A9A**

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1	UN number or ID number	
	ADRRID	UN 1276
	IMDG-Code	UN 1276
	ICAO-TI	UN 1276
14.2	UN proper shipping name	
	ADRRID	n-PROPYL ACETATE
	IMDG-Code	n-PROPYL ACETATE
	ICAO-TI	n-Propyl acetate
14.3	Transport hazard class(es)	
	ADRRID	3
	IMDG-Code	3
	ICAO-TI	3
14.4	Packing group	
	ADRRID	II
	IMDG-Code	II
	ICAO-TI	II
14.5	Environmental hazards	non-environmentally hazardous acc. to the dan- gerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

acc. to Regulation (EC) No. 1907/2006 (REACH)



Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: 1A9A

14.7 Maritime transport in bulk according to IMO instruments The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information		
Proper shipping name	n-PROPYL ACETATE	
Particulars in the transport document	UN1276, n-PROPYL ACETATE, 3, II, (D/E)	
Classification code	F1	
Danger label(s)	3	
Excepted quantities (EQ)	E2	
Limited quantities (LQ)	1 L	
Transport category (TC)	2	
Tunnel restriction code (TRC)	D/E	
Hazard identification No	33	
Emergency Action Code	2YE	
Regulations concerning the International Carri	iage of Dangerous Goods by Rail (RID)Additional	

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information

Classification code	F1
Danger label(s)	3
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Hazard identification No	33
International Maritime Dangerous Goods Code	(IMDG) - Additional information
Proper shipping name	n-PROPYL ACETATE
Particulars in the shipper's declaration	UN1276, n-PROPYL ACETATE, 3, II, 11,8°C c.c.
Marine pollutant	-
Danger label(s)	3
Special provisions (SP)	-
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L

acc. to Regulation (EC) No. 1907/2006 (REACH)



Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: **1A9A**

EmS	F-E, S-D
Stowage category	В
International Civil Aviation Organization (ICAO-	IATA/DGR) - Additional information
Proper shipping name	n-Propyl acetate
Particulars in the shipper's declaration	UN1276, n-Propyl acetate, 3, II
Danger label(s)	3
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

Seveso Directive

2012/18/EU (Seveso III)				
Νο	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements		Notes
P5c	flammable liquids (cat. 2, 3)	5.000	50.000	51)

Notation

51) Flammable liquids, categories 2 or 3 not covered by P5a and P5b

Deco-Paint Directive

VOC content 100 % 890 g/1	
-------------------------------------	--

Industrial Emissions Directive (IED)

VOC content	100 %
VOC content	890 ^g /l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Water Framework Directive (WFD)

not listed

Regulation on the marketing and use of explosives precursors

not listed

Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: 1A9A

Regulation on drug precursors

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

Regulation on persistent organic pollutants (POP)

not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list not listed

Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
Acetic acid n-propyl ester	this product meets the criteria for classi- fication in accordance with Regulation No 1272/2008/EC		3
Acetic acid n-propyl ester	flammable / pyrophoric		40

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
РН	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed

Legend

AIIC Australian Inventory of Industrial Chemicals CICR Chemical Inventory and Control Regulation CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)





article number: 1A9A

Legend	
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Alignment to regulation: Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.1		Supplemental hazard information: change in the listing (table)	yes
2.1	The most important adverse physicochemical, human health and environmental effects: Narcotic effects.	The most important adverse physicochemical, human health and environmental effects: The product is combustible and can be ignited by potential ignition sources.	yes
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.	yes

Abbreviations and acronyms

acc. to Regulation (EC) No. 1907/2006 (REACH)



Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis

article number: 1A9A

Abbr.	Descriptions of used abbreviations	
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de naviga- tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In- land Waterways)	
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)	
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)	
Ceiling-C	Ceiling value	
DGR	Dangerous Goods Regulations (see IATA/DGR)	
DNEL	Derived No-Effect Level	
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval	
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)	
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)	
EINECS	European Inventory of Existing Commercial Chemical Substances	
ELINCS	European List of Notified Chemical Substances	
EmS	Emergency Schedule	
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control	
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions	
ΙΑΤΑ	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
ICAO	International Civil Aviation Organization	
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air	
IMDG	International Maritime Dangerous Goods Code	
IMDG-Code	International Maritime Dangerous Goods Code	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval	
LEL	Lower explosion limit (LEL)	
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
ppm	Parts per million	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)	

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acetic acid n-propyl ester SOLVAGREEN® ≥99,5 %, for synthesis



article number: **1A9A**

Abbr.	Descriptions of used abbreviations
STEL	Short-term exposure limit
TWA	Time-weighted average
UEL	Upper explosion limit (UEL)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.