



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Product name ANSULEX LPH R-102 LIQUID AGENT

Revision date 07-Mar-2024

Revision Number 8

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

1.1. Product identifier

Product code 079372
Product name ANSULEX LPH R-102 LIQUID AGENT
Pure substance/mixture Mixture
Unique Formula Identifier (UFI) V0NH-F0PF-100E-7KMV

Other means of identification

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

Recommended use Fire extinguishing agent

Uses advised against Consumer use

1.3. Details of the supplier of the safety data sheet

Company Name

Tyco Fire Suppression & Building Products
1 Kopersteden
TJ Enschede, Netherlands.
Post Code: 7547
Telephone: +31 53-428-4444

For further information, please contact

E-mail address psra@jci.com

1.4. Emergency telephone number

Emergency telephone - CHEMTREC 001-800-424-9300 or 001-703-527-3887	
Austria	
Belgium	Poison Information Centre +32 (0)70 245 245
Bulgaria	
Croatia	
Greece	
Czech Republic	
Denmark	
Finland	
France	
Germany	BERLIN Poison Control Center of the Charité - Berlin University of Medicine CBF, House VIII (Economy Building), UG Hindenburgdamm 30 12203 Berlin Tel.: 030/19240 (emergency call), Fax: 030/4505 69 901 mail@giftnotruf.de



	poisonnotruf.charite.de
Hungary	
Lithuania	
Italy	
Netherlands	NVIC+31 (0)30 274 8888
Norway	Norwegian Poison Information Centre+47 22 59 13 00
Portugal	
slovakia	
China	
Spain	
Sweden	
Luxembourg	+32-70 245 2458002 5500, of the Grand Duchy of Luxembourg

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

The product contains no substances which at their given concentration, are considered to be hazardous to health

Chemical name	EC No (EU Index No)	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008	REACH registration number	M-Factor	M-Factor (long-term)	Specific concentration limit (SCL)



				[CLP]				
Potassium Acetate 127-08-2	204-822-2	127-08-2	20 - 40	No data available	No data available	-	-	
Potassium citrate 866-84-2	212-755-5	866-84-2	10 - 20	No data available	No data available	-	-	

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate
No information available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Potassium Acetate 127-08-2	3250	20000	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Rinse mouth Do not induce vomiting without medical advice If swallowed, call a poison control centre or physician immediately

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

Symptoms	Prolonged skin contact may defat the skin and produce dermatitis
Effects of Exposure	No information available.

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

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the
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surrounding environment.

Large Fire

CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media

Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

No information available.

Hazardous combustion products

Carbon oxides. Nitrogen oxides (NOx).

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Ensure adequate ventilation.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions

See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections

See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place

Storage class (TRGS 510) LGK 10.

7.3. Specific end use(s)

Specific use(s)
Fire extinguishing agent.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Potassium Acetate 127-08-2	-	14.36 mg/kg bw/day [4] [6] 86.14 mg/kg bw/day [4] [7]	1265.65 mg/m ³ [4] [6] 1265.65 mg/m ³ [4] [7]

Notes

- [4] Systemic health effects.
- [6] Long term.
- [7] Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Potassium Acetate 127-08-2	6 mg/kg bw/day [4] [6] 43.07 mg/kg bw/day [4] [7]	43.07 mg/kg bw/day [4] [6] 43.07 mg/kg bw/day [4] [7]	624.2 mg/m ³ [4] [6] 624.2 mg/m ³ [4] [7]

Notes

- [4] Systemic health effects.
- [6] Long term.
- [7] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Potassium Acetate 127-08-2	0.46 mg/L	-	0.046 mg/L	-	-



Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Potassium Acetate 127-08-2	0.00185 mg/kg sediment dw	0.000185 mg/kg sediment dw	0.862 g/L	0.00185 mg/kg soil dw	-

8.2. Exposure controls

Personal protective equipment

Eye/face protection	No special protective equipment required.
Hand protection	Wear suitable gloves.
Skin and Body Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact
Respiratory Protection	In case of insufficient ventilation, wear suitable respiratory equipment Wear a respirator conforming to EN 140 with Type A filter or better
Ventilation	Use local exhaust or general dilution ventilation to control exposure within applicable limits.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	light green
Odour	Vinegar.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	< - 60 °C	None known
Initial boiling point and boiling range	100 °C	
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	> 100 °C	
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	7.7 - 8.7 - 8.7	None known
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available Soluble in water	None known



Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	None known
Relative density	1.33	None known
Bulk density	No data available	
Liquid Density	1.32 g/cm3	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.
Remarks No data available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerisation Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Conditions to avoid Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Incompatible materials Strong oxidising agents, strong acids, and strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides (NOx).

SECTION 11: Toxicological information



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

Information on likely routes of exposure

Product Information

- Inhalation** Specific test data for the substance or mixture is not available.
- Eye contact** Specific test data for the substance or mixture is not available.
- Skin contact** Specific test data for the substance or mixture is not available.
- Ingestion** Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

- ATEmix (oral)** 10,740.30 mg/kg
- ATEmix (dermal)** 52,881.70 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium Acetate	= 3250 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

- Skin corrosion/irritation** No information available.
- Respiratory or skin sensitisation** No information available.
- Germ cell mutagenicity** No information available.
- Carcinogenicity** No information available.
- Reproductive toxicity** No information available.



STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Potassium Acetate	-	LC50: =6800mg/L (96h, Oncorhynchus mykiss)	-	-

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

12.4. Mobility in soil

Mobility in soil No information available.

Mobility No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB above the threshold of declaration.

Chemical name	PBT and vPvB assessment
Potassium Acetate	The substance is not PBT / vPvB
Potassium citrate	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties



Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated Packaging Do not re-use container

SECTION 14: Transport information

IATA

- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazards Not applicable
- 14.6 Special precautions for user
Special Provisions None

IMDG

- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazards Not applicable
- 14.6 Special precautions for user
Special Provisions None
- 14.7 Maritime transport in bulk according to IMO instruments No information available

RID

- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazards Not applicable
- 14.6 Special precautions for user
Special Provisions None

ADR

- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazards Not applicable
- 14.6 Special precautions for user



Special Provisions None

SECTION 15: Regulatory information

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

National regulations

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Does not comply
AIIC	Complies
NZIoC	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances



AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorisation:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value * Skin designation
+ Sensitisers

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	On basis of test data
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 and Annex VIII Regulation (EC) No. 1272/2008

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))



U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 07-Mar-2024

Disclaimer

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End of Safety Data Sheet