

## SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

### Lepro 2

Creation date	04th June 2020	Version	2.0
Revision date	06th October 2022		

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

##### 1.1. Product identifier

Lepro 2

Substance / mixture

mixture

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

###### Mixture's intended use

Chemical production, analytical chemistry, laboratory synthesis, industrial applications. for the treatment of stainless steel surfaces

###### Mixture uses advised against

The product should not be used in ways other than those referred in Section 1.

##### 1.3. Details of the supplier of the safety data sheet

###### Distributor

Name or trade name

Ing. Petr Švec - PENTA s.r.o.

Address

Radiová 1122/1, Praha 10, 102 00

Czech Republic

Identification number (CRN)

02096013

VAT Reg No

CZ02096013

Phone

+420 226 060 681

E-mail

info@pentachemicals.eu

Web address

www.pentachemicals.eu

###### Importer

Name or trade name

Penta s.r.o. - Ing. Doudová Jolana

Address

Píšťovy 825, Chrudim, 537 01

Czech Republic

Phone

469660715

E-mail

doudova@pentachemicals.eu

Web address

www.pentachemicals.eu

###### Competent person responsible for the safety data sheet

Name

Ing. Petr Švec - PENTA s.r.o.

E-mail

info@pentachemicals.eu

##### 1.4. Emergency telephone number

European emergency number: 112

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Flam. Liq. 2, H225

Eye Irrit. 2, H319

Full text of all classifications and hazard statements is given in the section 16.

###### Most serious adverse physico-chemical effects

Highly flammable liquid and vapour.

###### Most serious adverse effects on human health and the environment

Causes serious eye irritation.

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#### 2.2. Label elements

##### Hazard pictogram



##### Signal word

Danger

##### Hazard statements

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.

##### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.  
P233 Keep container tightly closed.

#### 2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

Mixture of substances and additives specified below.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 603-002-00-5 CAS: 64-17-5 EC: 200-578-6 Registration number: 01-2119457-610-43-xxxx	ethanol	<97	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2, H319: C ≥ 50 %	
Index: 007-030-00-3 CAS: 7697-37-2 EC: 231-714-2 Registration number: 01-2119487297-23-0039	nitric acid ...%	2	Ox. Liq. 3, H272 Skin Corr. 1A, H314 Acute Tox. 3, H331 EUH071 Specific concentration limit: Ox. Liq. 3, H272: C ≥ 65 % ATE Inhalation (vapor) = 2,65 mg/l Skin Corr. 1A, H314: C ≥ 20 % Skin Corr. 1B, H314: 5 % ≤ C < 20 %	1, 2

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#### Notes

- Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
- Substance with a Union workplace exposure limit.

Full text of all classifications and hazard statements is given in the section 16.

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

##### If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

##### If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists. Rinse skin with water or shower.

##### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

##### If swallowed

Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.

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

##### If inhaled

Not expected.

##### If on skin

Not expected.

##### If in eyes

Causes serious eye irritation.

##### If swallowed

Irritation, nausea.

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

Symptomatic treatment.

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

##### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

##### Unsuitable extinguishing media

Water - full jet.

##### 5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

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#### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Highly flammable liquid and vapour. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

#### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

#### 6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

#### 6.4. Reference to other sections

See the Section 7, 8 and 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use non-sparking tools. Use of antistatic clothes and footwear is recommended. Prevent contact with skin and eyes. No smoking. Use non-sparking tools. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take action to prevent static discharges.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight. Keep container tightly closed. Keep cool.

Storage temperature

min 0 °C, max 4 °C

#### The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

#### 7.3. Specific end use(s)

not available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

#### European Union

#### Commission Directive 2006/15/EC

Substance name (component)	Type	Value
nitric acid ...% (CAS: 7697-37-2)	OEL 15 minutes	2,6 mg/m <sup>3</sup>
	OEL 15 minutes	1 ppm

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#### 8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

##### Eye/face protection

Protective goggles.

##### Skin protection

Hand protection: Protective gloves resistant to the product. Contaminated skin should be washed thoroughly.

##### Respiratory protection

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

##### Thermal hazard

Not available.

##### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colorless to yellowish
Odour	containing alcohol
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	soluble
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	0,809 g/cm <sup>3</sup> at 20 °C

### 9.2. Other information

not available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

not available

### 10.2. Chemical stability

The product is stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Unknown.

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#### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

#### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

#### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

### SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

##### Acute toxicity

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

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD50	13300 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD50	> 15800 mg/kg		Rabbit	
Inhalation (vapor)	LC50	124.7 mg/l	4 hour	Rat (Rattus norvegicus)	

nitric acid ...%

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Inhalation (vapor)	ATE	2,65 mg/l			

##### Corrosivity

ethanol

Route of exposure	Result	Exposure time	Species
	No effect		Rabbit

##### Skin corrosion/irritation

Based on available data the classification criteria are not met.

##### Serious eye damage/irritation

Causes serious eye irritation.  
ethanol

Route of exposure	Result	Exposure time	Species
	Irritating		Rabbit

##### Respiratory or skin sensitisation

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

Route of exposure	Result	Exposure time	Species	Sex
	Indeterminate		Human	

##### Mutagenicity

ethanol

Result	Exposure time	Specific target organ	Species	Sex
Indeterminate				

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#### Germ cell mutagenicity

Based on available data the classification criteria are not met.

#### Carcinogenicity

Based on available data the classification criteria are not met.

ethanol

Route of exposure	Parameter	Value	Result	Species	Sex
Oral			Indeterminate	Rat (Rattus norvegicus)	

#### Reproductive toxicity

Based on available data the classification criteria are not met.

ethanol

Effect	Parameter	Value	Exposure time	Result	Species	Sex
Developmental toxicity	NOAEL	38 mg/l		Negative	Rat (Rattus norvegicus)	
	NOAEL	5200 mg/kg	24 hour	Indeterminate	Rat (Rattus norvegicus)	

#### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

ethanol

Route of exposure	Parameter	Value	Exposure time	Specific target organ	Result	Species	Sex
Inhalation	LOAEL	2.6 mg/l	30 min	Nervous system	Drowsiness, Dizziness	Human	
Inhalation	LOAEL	9.4 mg/l		Lungs	Indeterminate	Human	

#### Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

#### Aspiration hazard

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. Based on available data the classification criteria are not met.

#### 11.2. Information on other hazards

not available

### SECTION 12: Ecological information

#### 12.1. Toxicity

##### Acute toxicity

ethanol

Parameter	Value	Exposure time	Species	Environment	Value determination
EC50	42 mg/l	96 hour	Fishes		Experimentally
EC50	5012 mg/l	48 hour	Daphnia		Experimentally
NOEC	<500 mg/l	96 hour	Algae		Experimentally

#### 12.2. Persistence and degradability

Data not available.

#### 12.3. Bioaccumulative potential

Not available.

#### 12.4. Mobility in soil

Not available.

#### 12.5. Results of PBT and vPvB assessment

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Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

#### 12.6. Endocrine disrupting properties

not available

#### 12.7. Other adverse effects

Not available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

#### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

### SECTION 14: Transport information

#### 14.1. UN number or ID number

UN 1993

#### 14.2. UN proper shipping name

FLAMMABLE LIQUID, N.O.S. (LEPRO 2 ( contains ETHANOL, NITRIC ACID))

#### 14.3. Transport hazard class(es)

3 Flammable liquids

#### 14.4. Packing group

II - substances presenting medium danger

#### 14.5. Environmental hazards

not relevant

#### 14.6. Special precautions for user

not available

#### 14.7. Maritime transport in bulk according to IMO instruments

not relevant

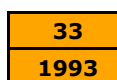
#### Additional information

Hazard identification No.

UN number

Classification code

Safety signs



F1

3





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#### Air transport - ICAO/IATA

Packaging instructions passenger	353
Cargo packaging instructions	364

#### Marine transport - IMDG

EmS (emergency plan)	F-E, S-E
MFAG	310

### SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. Product contains regulated explosives precursor: Making available, introduction, possession and use of those precursors by member of the general public according to Regulation (EU) 2019/1148, Article 5 to 9.

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out (mixture).

### SECTION 16: Other information

#### A list of standard risk phrases used in the safety data sheet

H225	Highly flammable liquid and vapour.
H272	May intensify fire; oxidiser.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.

#### Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.

#### A list of additional standard phrases used in the safety data sheet

EUH071	Corrosive to the respiratory tract.
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#### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

#### Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC50	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
ES	Identification code for each substance listed in EINECS
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association

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IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC50	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD50	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Ox. Liq.	Oxidising liquid
Skin Corr.	Skin corrosion

#### Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

#### Recommended restrictions of use

not available

#### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.  
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

#### The changes (which information has been added, deleted or modified)

The version 2.0 replaces the SDS version from 04 June 2020. Changes were made in sections 1,2,4,5,6,13, 15 and 16.

#### More information

Classification procedure - calculation method.

#### Statement

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The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.