Nitric acid 70% AGR, ACS, Ph Eur.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 06/09/2013 Revision date: 20/03/2026 Supersedes version of: 15/09/2022 Version: 2.4

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	Nitric acid 70% AGR, ACS, Ph Eur.
Chemical name	:	nitric acid …% [C ≤ 70 %]
IUPAC name	:	nitric acid
EC Index-No.	:	007-030-00-3
EC-No.	:	231-714-2
CAS-No.	:	7697-37-2
REACH registration No.	:	01-2119487297-23
Product code	:	NIAC-00A
Formula	:	HNO3

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

Relevant identified uses

Main use category	:	Laboratory use

1.3. Details of the supplier of the safety data sheet

Labbox Labware S.L.
Migjorn, 1
08338 Premia de Dalt, Barcelona
España
T +34 937 07 79 70, F +34 937 909 532
info@labbox.com, www.labbox.com

1.4. Emergency telephone number

Emergency number	:	+34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number. 24 hours a day, 7 days a week

Country/Area	Organisation	Emergency number
United Kingdom	National Poisons Information Service (Belfast Centre). Royal Victoria Hospital. Grosvenor Road BT12 6BA Belfast.	0344 892 0111 Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Liquids, Category 3	H272
Corrosive to metals, Category 1	H290
Acute toxicity (inhalation:vapour) Category 3	H331
Skin corrosion/irritation, Category 1, Sub-Category 1A	H314

Full text of H- and EUH-statements: see section 16
Specific concentration limits (%):

(5 ≤ C < 20)	Skin Corr. 1B; H314
(20 ≤ C ≤ 100)	Skin Corr. 1A; H314
(65 ≤ C ≤ 100)	Ox. Liq. 3; H272

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS03 GHS05 GHS06

Signal word (CLP) : Danger

Hazard statements (CLP) : H272 - May intensify fire; oxidiser.
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H331 - Toxic if inhaled.

Precautionary statements (CLP) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P309+P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

EUH-statements : EUH071 - Corrosive to the respiratory tract.

2.3. Other hazards

Other hazards which do not result in classification : Does not contain PBT and/or vPvB substances ≥ 0.1% evaluated according to Annex XIII of REACH.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%
Nitric acid	CAS-No.: 7697-37-2 EC-No.: 231-714-2 EC Index-No.: 007-030-00-3 REACH-no: 01-2119487297-23	≥ 69

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get immediate medical advice/attention.

First-aid measures after skin contact : After contact with skin, wash immmediatly with plenty of propylene glycol 400 (Roticlean). Take off contaminated clothing. Call a physician immediately.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Consult an eye specialist.

First-aid measures after ingestion : If the person is fully conscious, make him/her drink warm water (1/2 litre). Never give an unconscious person anything to drink. Call a physician immediately.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Making extinguishing agents environment-friendly.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not inhale vapour. Avoid contact with skin and eyes.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

Emergency procedures : Ventilate area. Stop release.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

See Section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use personal protective equipment as required.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in a well-ventilated place. Keep cool.

Storage area : Store in a well-ventilated place. Store away from heat.

Special rules on packaging : Store in a closed container. Keep only in original container.

7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Nitric acid 70% AGR, ACS, Ph Eur. (7697-37-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Nitric acid
IOEL STEL	2,6 mg/m³
	1 ppm
France - Occupational Exposure Limits	
Local name	Acide nitrique
VLEP CT (OEL STEL)	2,6 mg/m³
	1 ppm
Remark	Valeurs règlementaires indicatives
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Salpetersäure
AGW (OEL TWA)	2,6 mg/m³
	1 ppm
Remark	EU,13,16
Italy - Occupational Exposure Limits	
Local name	Acido nitrico
OEL STEL	2,6 mg/m³
	1 ppm
Portugal - Occupational Exposure Limits	
Local name	Ácido nítrico
OEL TWA	2 ppm
OEL STEL	4 ppm
Spain - Occupational Exposure Limits	
Local name	Ácido nítrico
VLA-EC (OEL STEL)	2,6 mg/m³
	1 ppm
Remark	VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país).
United Kingdom - Occupational Exposure Limits	
Local name	Nitric acid
WEL STEL (OEL STEL)	2,6 mg/m³
	1 ppm

DNEL and PNEC

Nitric acid 70% AGR, ACS, Ph Eur. (7697-37-2)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	2,6 mg/m³

Nitric acid 70% AGR, ACS, Ph Eur. (7697-37-2)	
Long-term - local effects, inhalation	1,3 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	1,3 mg/m³
Long-term - local effects, inhalation	0,65 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:
ISO 374-1.
Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Safety glasses

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Nitrile rubber (NBR) /

Respiratory protection

Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Not available
Molecular mass	:	63,01 g/mol
Odour	:	Not available
Odour threshold	:	Not available
Melting point	:	-41 °C
Freezing point	:	Not available
Boiling point	:	122 °C
Flammability	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	< 1

Viscosity, kinematic	:	Not available
Solubility	:	Soluble.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	1,5129 Type: 'relative density' Temp.: 20 °C
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Acids. Metals. Combustible materials. Direct sunlight.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

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

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Inhalation:vapour: Toxic if inhaled.

Nitric acid 70% AGR, ACS, Ph Eur. (7697-37-2)	
LD50 oral rat	430 mg/kg

Skin corrosion/irritation	:	Causes severe skin burns. pH: < 1
Serious eye damage/irritation	:	Assumed to cause serious eye damage pH: < 1
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified

Nitric acid 70% AGR, ACS, Ph Eur. (7697-37-2)	
NOAEL (oral, rat, 90 days)	1500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation, rat, gas, 90 days)	2,15 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Nitric acid 70% AGR, ACS, Ph Eur. (7697-37-2)	
NOEC chronic fish	97,8 mg/l Test organisms (species): other:Amphiprion ocellaris (anemone fish) Duration: '3 mo'

12.2. Persistence and degradability

Nitric acid 70% AGR, ACS, Ph Eur. (7697-37-2)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Must follow special treatment according to local regulation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	:	UN 2031
UN-No. (IMDG)	:	UN 2031
UN-No. (IATA)	:	UN 2031
UN-No. (ADN)	:	UN 2031
UN-No. (RID)	:	UN 2031

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	NITRIC ACID
Proper Shipping Name (IMDG)	:	NITRIC ACID
Proper Shipping Name (IATA)	:	Nitric acid
Proper Shipping Name (ADN)	:	NITRIC ACID
Proper Shipping Name (RID)	:	NITRIC ACID
Transport document description (ADR) (ADR)	:	UN 2031 NITRIC ACID, 8 (5.1), II, (E)
Transport document description (IMDG)	:	UN 2031 NITRIC ACID, 8 (5.1), II
Transport document description (IATA)	:	UN 2031 Nitric acid, 8 (5.1), II
Transport document description (ADN)	:	UN 2031 NITRIC ACID, 8 (5.1), II
Transport document description (RID)	:	UN 2031 NITRIC ACID, 8 (5.1), II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8 (5.1)

Danger labels (ADR) : 8, 5.1

:

IMDG

Transport hazard class(es) (IMDG) : 8 (5.1)

Danger labels (IMDG) : 8, 5.1

:

IATA

Transport hazard class(es) (IATA) : 8 (5.1)

Danger labels (IATA) : 8, 5.1

:

ADN

Transport hazard class(es) (ADN) : 8 (5.1)

Danger labels (ADN) : 8, 5.1

:

RID

Transport hazard class(es) (RID) : 8 (5.1)

Danger labels (RID) : 8, 5.1

:

14.4. Packing group

Packing group (ADR)	:	II
Packing group (IMDG)	:	II
Packing group (IATA)	:	II
Packing group (ADN)	:	II
Packing group (RID)	:	II

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-Q
Other information	:	No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	CO1
Limited quantities (ADR)	:	1l
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02
Special packing provisions (ADR)	:	PP81, B15
Mixed packing provisions (ADR)	:	MP15
Portable tank and bulk container instructions (ADR)	:	T8
Portable tank and bulk container special provisions (ADR)	:	TP2
Tank code (ADR)	:	L4BN
Tank special provisions (ADR)	:	TU42
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Special provisions for carriage - Loading, unloading and handling (ADR)	:	CV24
Hazard identification number (Kemler No.)	:	85
Orange plates	:	85 2031
Tunnel restriction code (ADR)	:	E
EAC code	:	2R

Transport by sea

Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
Special packing provisions (IMDG)	:	PP81
IBC packing instructions (IMDG)	:	IBC02
IBC special provisions (IMDG)	:	B15, B20
Tank instructions (IMDG)	:	T8
Tank special provisions (IMDG)	:	TP2
Stowage category (IMDG)	:	D
Segregation (IMDG)	:	SGG1, SG6, SG16, SG17, SG19, SG36, SG49
Properties and observations (IMDG)	:	Colourless liquid. Oxidant; may cause fire in contact with organic materials such as wood, cotton or straw, evolving highly toxic gases (brown fumes). Highly corrosive to most metals. Causes severe burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA)	:	E0
PCA Limited quantities (IATA)	:	Forbidden
PCA limited quantity max net quantity (IATA)	:	Forbidden
PCA packing instructions (IATA)	:	Forbidden
PCA max net quantity (IATA)	:	Forbidden
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L
Special provisions (IATA)	:	A1
ERG code (IATA)	:	8L

Inland waterway transport

Classification code (ADN)	:	CO1
Limited quantities (ADN)	:	1 L
Excepted quantities (ADN)	:	E2
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0

Rail transport

Classification code (RID)	:	CO1
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02
Special packing provisions (RID)	:	PP81, B15
Mixed packing provisions (RID)	:	MP15
Portable tank and bulk container instructions (RID)	:	T8
Portable tank and bulk container special provisions (RID)	:	TP2
Tank codes for RID tanks (RID)	:	L4BN
Special provisions for RID tanks (RID)	:	TU42
Transport category (RID)	:	2
Special provisions for carriage - Loading, unloading and handling (RID)	:	CW24
Colis express (express parcels) (RID)	:	CE6
Hazard identification number (RID)	:	85

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
3.	Nitric acid 70% AGR, ACS, Ph Eur.
3(b)	Nitric acid 70% AGR, ACS, Ph Eur.

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

Explosives Precursors Regulation (EU 2019/1148)

Listed on the Explosives Precursors list (EU)

ANNEX I RESTRICTED EXPLOSIVES PRECURSORS

List of substances which are not to be made available to, or introduced, possessed or used by, members of the general public, whether on their own or in mixtures or substances that include those substances, unless the concentration is equal to or lower than the limit values set out in column 2, and for which suspicious transactions and significant disappearances and thefts are to be reported within 24 hours.

Name	CAS-No.	Limit value	Upper limit value for licensing under Article 5(3)	Combined Nomenclature (CN) code for a separate chemically defined compound meeting the requirements of Note 1 to Chapter 28 or 29 of the CN, respectively	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Nitric acid	7697-37-2	3	10% w/w	ex 2808 00 00	ex 3824 99 96

Drug Precursors Regulation (EC 273/2004)

Not listed on the Drug Precursors list (EU)

National regulations

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 414).

Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Poland

Polish National Regulations : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)
Regulation of the Minister of Health of 25 August 2015 on the method of marking places, pipelines, and containers and tanks used for storing or containing hazardous substances or hazardous mixtures (J.o.L. 2015, item 1368 as amended)

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Met. Corr. 1	Corrosive to metals, Category 1
Ox. Liq. 3	Oxidising Liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
EUH071	Corrosive to the respiratory tract.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.