

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Date of issue: 02/03/2015 Revision date: 13/01/2023 Supersedes version of: 13/04/2018 Version: 2.3

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

1.1. Product identifier

Product form : Substance

Trade name : UN2031 Nitric acid 65% EPR

 Chemical name
 : nitric acid ... %

 IUPAC name
 : nitric acid

 EC Index-No.
 : 007-004-00-1

 EC-No.
 : 231-714-2

 CAS-No.
 : 7697-37-2

 REACH registration No
 : 01-2119487297-23

 Product code
 : NIAC-50P

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

: HNO3

1.2.1. Relevant identified uses

Main use category : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

labbox labware s.l.

Migjorn, 1

Formula

P.O. Box Barcelona (SPAIN)

08338 Premia de Dalt - SPAIN

ES

T +34 937 07 79 70 - F +34 937 909 532 <u>info@labbox.com</u> - <u>www.labbox.com</u>

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.

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Oxidising Liquids, Category 2 H272
Corrosive to metals, Category 1 H290
Acute toxicity (inhal.), Category 3 H331
Skin corrosion/irritation, Category 1A H314

Full text of H and EUH statements: see section 16

Specific concentration limits:

 (5 \leq C < 20)</td>
 Skin Corr. 1B, H314

 (20 \leq C < 100)</td>
 Skin Corr. 1A, H314

 (65 \leq C < 99)</td>
 Ox. Liq. 3, H272

 (99 \leq C < 100)</td>
 Ox. Liq. 2, H272

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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)



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) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P220 - Keep away from clothing and other combustible materials.

P234 - Keep only in original packaging.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

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

2.3. Other hazards

No additional information available

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.: 007-004-00-1 REACH-no: 01-2119487297- 23	≥ 65

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a physician

immediately.

First-aid measures after skin contact : After contact with skin, wash immmediatly with plenty of propylene glycol 400 (Roticlean).

Take off contaminated clothing. Get medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do.

Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after inhalation : Corrosive to the respiratory tract. Toxic if inhaled.

Symptoms/effects after skin contact : Causes severe burns.
Symptoms/effects after eye contact : Causes serious eye burns.
Symptoms/effects after ingestion : nausea, vomiting.

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

Never give anything by mouth to an unconscious person.

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. In contact with water releases flammable gases.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. 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 Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

smoking. Store in a well-ventilated place. Keep container tightly closed.

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.

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7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

UN2031 Nitric acid 65% EPR (7697-37-2)			
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	Nitric acid		
IOEL STEL	2,6 mg/m³		
IOEL STEL [ppm]	1 ppm		
France - Occupational Exposure Limits			
Local name	Acide nitrique		
VLE (OEL Ceiling/STEL)	2,6 mg/m³		
VLE (OEL Ceiling/STEL) [ppm]	1 ppm		
Remark	Valeurs règlementaires indicatives		
Germany - Occupational Exposure Limits (TRGS 90	<u> </u>		
Local name	Salpetersäure		
AGW (OEL TWA) [1]	2,6 mg/m³		
AGW (OEL TWA) [2]	1 ppm		
Remark	EU,13,16		
Italy - Occupational Exposure Limits			
Local name	Acido nitrico		
OEL STEL	2,6 mg/m³		
OEL STEL [ppm]	1 ppm		
Portugal - Occupational Exposure Limits			
Local name	Ácido nítrico		
OEL TWA [ppm]	2 ppm		
OEL STEL [ppm]	4 ppm		
Spain - Occupational Exposure Limits			
Local name	Ácido nítrico		
VLA-EC (OEL STEL)	2,6 mg/m³		
VLA-EC (OEL STEL) [ppm]	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			

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WEL STEL	2,6 mg/m³
WEL STEL (ppm)	1 ppm

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

UN2031 Nitric acid 65% EPR (7697-37-2)		
DNEL/DMEL (Workers)		
Acute - local effects, inhalation	2,6 mg/m³	
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	

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. EN 374.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves against chemicals (EN 374)

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Respiratory protection			
Device	Filter type	Condition	Standard
	ABEK		

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8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid : Colourless. Colour : 63,01 g/mol Molecular mass : characteristic. Odour Odour threshold : Not available : -41,6 °C Melting point : Not available Freezing point Boiling point : 83 °C Flammability : Not available **Explosive limits** : 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 : < 1

: Not available Viscosity, kinematic : 0,75 mPa·s 20° C Viscosity, dynamic Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available : 6,1 kPa 20° C Vapour pressure Vapour pressure at 50 °C Not available Density : Not available

: 1,5129 Type: 'relative density' Temp.: 20 °C Relative density

Relative vapour density at 20 °C : Not available Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable in use and storage conditions as recommended in item 7. May be corrosive to metals.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Overheating. Avoid ignition sources. Direct sunlight.

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10.5. Incompatible materials

Strong reducing agents. May be corrosive to metals. Chlorides. metals.

10.6. Hazardous decomposition products

Nitrogen oxides.

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) : Toxic if inhaled.

UN2031	Nitric	acid	65%	EPR	(7697	-37-2)

LD50 oral rat > 2,65 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

UN2031 Nitric acid 65% EPR (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 : Not classified

(acute)

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

UN2031	Nitric ac	id 65% E	PR (7697	-37-2)

LC50 - Fish [1]	3 – 3,5
NOEC chronic fish	97,8 mg/l Test organisms (species): other:Amphiprion ocellaris (anemone fish) Duration: '3 mo'

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12.2. Persistence and degradability

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Persistence and degradability Not biodegradable.

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

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

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

European List of Waste (LoW) code : 06 01 05* - nitric acid and nitrous acid

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)

Transport document description (IMDG)

Transport document description (IATA)

Transport document description (IATA)

Transport document description (ADN)

Transport document description (RID)

Transport document description (RID)

UN 2031 NITRIC ACID, 8 (5.1), II

UN 2031 NITRIC ACID, 8 (5.1), II

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

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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) : 11 Packing group (IMDG) : 11 Packing group (IATA) Ш Packing group (ADN) : 11 Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : CO1 Limited quantities (ADR) : 11 Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02 Special packing provisions (ADR) : PP81, B15 Mixed packing provisions (ADR) : MP15

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Portable tank and bulk container instructions (ADR) Portable tank and bulk container special provisions

(ADR)

Tank code (ADR) : L4BN Vehicle for tank carriage : AT Transport category (ADR) 2 Hazard identification number (Kemler No.) 85

Orange plates

85 2031

Tunnel restriction code (ADR) : E : 2P EAC code : B APP code

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 : TP2 Tank special provisions (IMDG) : F-A EmS-No. (Fire) : S-Q EmS-No. (Spillage) Stowage category (IMDG) : D

Segregation (IMDG) : SG6, SG16, SG17, SG19

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) : F0 PCA Limited quantities (IATA) : Forbidden : Forbidden PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) : Forbidden PCA max net quantity (IATA) : Forbidden CAO packing instructions (IATA) 855 30L CAO max net quantity (IATA) Special provisions (IATA) Α1 ERG code (IATA) 8L

Inland waterway transport

: CO1 Classification code (ADN) : 1 L Limited quantities (ADN) : E2 Excepted quantities (ADN) Carriage permitted (ADN) : T : PP, EP Equipment required (ADN) 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 : MP15 Mixed packing provisions (RID) Portable tank and bulk container instructions (RID) T8 Portable tank and bulk container special provisions : TP2

(RID)

Tank codes for RID tanks (RID) : L4BN

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Transport category (RID) : 2
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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
3.	UN2031 Nitric acid 65% EPR	
3(b)	UN2031 Nitric acid 65% EPR	

REACH Annex XIV (Authorisation List)

UN2031 Nitric acid 65% EPR is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

UN2031 Nitric acid 65% EPR is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

UN2031 Nitric acid 65% EPR is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

UN2031 Nitric acid 65% EPR is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Nitric acid is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to VwVwS, Annex 1 or 2; 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).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

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

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NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Ontwikkeling

: The substance is not listed

: The substance is not listed

: The substance is not listed

Denmark

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

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:		
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3	
EUH071	Corrosive to the respiratory tract.	
H272	May intensify fire; oxidiser.	
H290	May be corrosive to metals.	
H314	Causes severe skin burns and eye damage.	
H331	Toxic if inhaled.	
Met. Corr. 1	Corrosive to metals, Category 1	
Ox. Liq. 2	Oxidising Liquids, Category 2	
Ox. Liq. 3	Oxidising Liquids, Category 3	
Skin Corr. 1A	Skin corrosion/irritation, Category 1A	
Skin Corr. 1B	Skin corrosion/irritation, Category 1B	

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.