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

1.1. Product identifier

V2A - Beize

UFI: QAXS-XX27-5D09-2QV3

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

Use of the substance/mixture

Laboratory chemical

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: Schmitz-Metallographie GmbH
Street: Kaiserstraße 100
Place: D-52134 Herzogenrath
Telephone: 02407 / 568296-0 Telefax: 02407 / 568296-9
E-mail: info@schmitz-metallographie.de
Contact person: Herr Füllmann
E-mail: info@schmitz-metallographie.de
Internet: www.schmitz-metallographie.de

1.4. Emergency telephone number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240 (24h)

Further Information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Met. Corr. 1; H290
Skin Corr. 1; H314
Eye Dam. 1; H318
STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

hydrochloric acid
nitric acid

Signal word: Danger

Pictograms:

Hazard statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Precautionary statements

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.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

2.3. Other hazards

The substances in the mixture (> 0.1%) do not meet the PBT/vPvB criteria according to REACH, annex XIII. This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria. This product does not contain a substance (> 0,1 %) that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7647-01-0	hydrochloric acid			15 - < 20 %
	231-595-7	017-002-01-X	01-2119484862-27	
	Met. Corr. 1, Skin Corr. 1A, Eye Dam. 1, STOT SE 3; H290 H314 H318 H335			
7697-37-2	nitric acid			3 - < 5 %
	231-714-2	007-030-00-3	01-2119487297-23	
	Ox. Liq. 3, Met. Corr. 1, Acute Tox. 3, Skin Corr. 1A; H272 H290 H331 H314 EUH071			
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether			0.1 - < 0.2 %
	203-539-1	603-064-00-3		
	Flam. Liq. 3, STOT SE 3; H226 H336			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7647-01-0	231-595-7	hydrochloric acid	15 - < 20 %
	Skin Corr. 1A; H314: >= 25 - 100 Skin Corr. 1B; H314: >= 10 - < 25 Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Dam. 1; H318: >= 1 - 100 Eye Irrit. 2; H319: >= 10 - < 25 STOT SE 3; H335: >= 10 - 100		
7697-37-2	231-714-2	nitric acid	3 - < 5 %
	inhalation: ATE 2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 - 100 Skin Corr. 1B; H314: >= 5 - < 20		
107-98-2	203-539-1	1-methoxy-2-propanol; monopropylene glycol methyl ether	0.1 - < 0.2 %
	dermal: LD50 = 11000 mg/kg; oral: LD50 = > 5000 mg/kg		

Further Information

Product does not contain listed SVHC substances > 0.1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Remove contaminated, saturated clothing immediately.

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical advice immediately.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, seek medical treatment.

After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptoms persist, seek medical advice.

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

acute danger of asphyxia due to spasm or glottis at high doses of nitrous gases by inhalation.

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

acute danger of asphyxia due to spasm or glottis at high doses of nitrous gases by inhalation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Nitrogen oxides (NOx). Chlorine (Cl2). Hydrogen chloride (HCl).

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Wear personal protection equipment. (See section 8.)
Remove persons to safety. Provide adequate ventilation.
Do not breathe gas/fumes/vapour/spray.

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil

barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Unsuitable material for taking up: Flammable materials, eg. As sawdust, paper towels
Treat the recovered material as prescribed in the section on waste disposal.
Clear contaminated areas thoroughly.
Clean contaminated objects and areas thoroughly observing environmental regulations.
Provide adequate ventilation.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid exposure.
Wear suitable protective clothing. (See section 8.)
Use extractor hood (laboratory).

Advice on protection against fire and explosion

Keep/Store away from combustible materials.

Advice on general occupational hygiene

When using do not eat, drink or smoke.

Further information on handling

Always close containers tightly after the removal of product.
Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.
General protection and hygiene measures: refer to section 8

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep locked up. Keep container tightly closed and in a well-ventilated place.
Unsuitable materials for Container:Base metals and alloys

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Radioactive substances. Infectious substances.

Further information on storage conditions

Store small packages in a suitable, robust cabinet.

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
107-98-2	1-Methoxypropan-2-ol	100	375		TWA (8 h)	
		150	568		STEL (15 min)	
7647-01-0	Hydrogen chloride	5	8		TWA (8 h)	
		10	15		STEL (15 min)	
7697-37-2	Nitric acid	1	2.6		STEL (15 min)	

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
7647-01-0	hydrochloric acid		
Worker DNEL, long-term	inhalation	local	15 mg/m³
Worker DNEL, acute	inhalation	local	8 mg/m³
7697-37-2	nitric acid		
Worker DNEL, long-term	inhalation	local	2,6 mg/m³
Consumer DNEL, long-term	inhalation	local	1,3 mg/m³
Consumer DNEL, acute	inhalation	local	1,3 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. EN ISO 16321-1:2022

Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time >= 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time >= 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

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 selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
-Exceeding exposure limit values
-Insufficient ventilation and aerosol or mist formation
Suitable respiratory protective equipment: Combination filtering device (EN 14387) type EB - P3
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

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:	colourless	
Odour:	stinging	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		~100 °C
Flammability:		not determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		>100 °C
Auto-ignition temperature:		Non-flammable.
Decomposition temperature:		not relevant
pH-Value (at 20 °C):		0
Viscosity / kinematic:		not determined
Water solubility:		completely miscible
Solubility in other solvents		
not determined		
Dissolution rate:		not relevant
Partition coefficient n-octanol/water:		not relevant
Dispersion stability:		not relevant
Vapour pressure:		not determined
Density (at 20 °C):		1,109 g/cm³
Bulk density:		not relevant
Relative vapour density:		not determined
Particle characteristics:		not relevant

9.2. Other information

Information with regard to physical hazard classes

Explosive properties	
not explosive.	
Sustained combustibility:	No data available
Self-ignition temperature	
Solid:	not relevant
Gas:	not relevant
Oxidizing properties	
not determined	

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	No information available.
Solid content:	not determined
Sublimation point:	not relevant
Softening point:	not relevant
Pour point:	not relevant
Viscosity / dynamic:	not determined
Flow time:	not determined

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.
Refer to section 10.5.

10.4. Conditions to avoid

Keep away from heat.
Thermal decomposition can lead to the escape of irritating gases and vapours.

10.5. Incompatible materials

Reacts with: Substances that form flammable gases in contact with water. Organic peroxides. Oxidizing substances. Alkali metals. Oxidizing agents. Acrylonitrile. Antimony. Arsenic. Bor. Bromine pentafluoride. Germanium. Copper (I) nitride. concentrated alkalis. reducing agents. Sulfur halides. Iron (II) oxide (powder). Amines. Ammonia. combustibles. Hydrogen iodide. Sodium. Sodium hydride. Phosphonium. Pyridine. Hydrogen sulfide. Hydrogen selenide. Turpentine (catalyst). Toluidine. concentrated sulfuric acid. Chlorine trifluoride. Sodium hypochlorite. Sawdust. Polypropylene. Hydrofluoric acid. Formic acid. Acetonitrile. Benzene. Cyclohexylamine. 1,2-dichloroethane. Diethyl ether (anhydrous). Dichloromethane. Dimethylhydrazine. Calcium phosphide. Acetic acid / acetone. Acetic anhydride. Fluorine. Potassium chlorate. Nitrobenzene / sulfuric acid. Nitrotoluene. Nitro chloroaniline. Phosphorus trichloride. Phosphine. Phthalic anhydride / sulfuric acid. Catechol. Tetraborane. Titan. Hydrogen peroxide / mercury. Dimethyl sulfide. Dinitrobenzene. Dimethyl ether. Hydrazine. Metal powders. Formaldehyde. Thiocyanates cellulosic products. Trifluoroacetic. Sulfuric acid. Aluminium. Alkali hydroxide. Ammonia. Fluorine. Metal carbides. Calcium. Formaldehyde. Copper sulfide. Lithium silicide. Sodium hydride. Sodium hypochlorite and its solutions. Silanes. Silica. Vinyl methyl ether. Zinc.

10.6. Hazardous decomposition products

Can be released in case of fire: Nitrogen oxides (NOx). Chlorine (Cl2). Hydrogen chloride (HCl).

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

No information available.

Acute toxicity

Based on available data, the classification criteria are not met.
Hydrogen chloride (HCl).
Acute toxicity, inhalant Rat. LC 50 : 3124 ppm/1h

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 50 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7697-37-2	nitric acid				
	inhalation vapour	ATE 2,65 mg/l			
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether				
	oral	LD50 > 5000 mg/kg	Rat	IUCLID	
	dermal	LD50 11000 mg/kg	Rabbit		

Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage. (On basis of test data)
Serious eye damage/eye irritation: Causes serious eye damage. (On basis of test data)

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
Hydrogen chloride (HCl).
In-vitro mutagenicity (hamster.) positive. Literature information: ECHA Dossier.

1-methoxy-2-propanol; monopropylene glycol methyl ether:
In-vitro mutagenicity: Method: OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test); Result: negative. Literature information: ECHA Dossier; Carcinogenicity: Method: [inhalative, OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)]; Species: Mouse.; Exposure duration: 2 years; Result: NOAEL = 1000 ppm; Literature information: ECHA Dossier; Reproductive toxicity: Method: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study) ;Species: Rat; Result: NOAEL = 300 mg/kg; Literature information: ECHA Dossier; Developmental toxicity/teratogenicity: Method: [inhalative, OECD Guideline 414 (Prenatal Developmental Toxicity Study)]; Species: Rabbit; Exposure duration: 29 d. Result: NOAEL = 1500 mg/m3; Literature information: ECHA Dossier

STOT-single exposure

May cause respiratory irritation. (hydrochloric acid)

STOT-repeated exposure

Based on available data, the classification criteria are not met.
Hydrogen chloride (HCl).
Subchronic inhalative toxicity: [Rat., OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)]
NOAEL = 20 ppm. Literature information: ECHA Dossier.
Nitric acid.:
Subchronic inhalative toxicity NOAEC = 2,15 ppm (Rat) Literature information: ECHA Dossier

1-methoxy-2-propanol; monopropylene glycol methyl ether:
Subchronic inhalation toxicity: Method OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day); Species: Rabbit ; Exposure duration: 90 d; Result: NOAEL = 100 ppm. Literature information: ECHA Dossier; Subacute dermal toxicity: Method: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study); Species: Rabbit. ; Exposure duration: 14 d; Result: NOAEL = 1000 mg/kg; Literature information: ECHA Dossier

Aspiration hazard

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

Additional information on tests

By swallowing danger of perforation of the esophagus and the stomach exists (strong corrosive effects).

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No data available.

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
7647-01-0	hydrochloric acid						
	Acute fish toxicity	LC50	3,25 mg/l	96 h	Lepomis macrochirus	ECHA Dossier	
	Acute algae toxicity	ErC50	4,7 mg/l	72 h	Chlorella vulgaris	ECHA Dossier	
	Acute crustacea toxicity	EC50	4,92 mg/l	48 h	Daphnia magna	ECHA Dossier	
	Acute bacteria toxicity	EC50	>=5 mg/l ( )	3 h	activated sludge	ECHA Dossier	
7697-37-2	nitric acid						
	Acute crustacea toxicity	EC50	2.5 mg/l	48 h	Ceriodaphnia spec	ECHA Dossier	
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether						
	Acute fish toxicity	LC50	18800-23000 mg/l	96 h	Pimephales promelas	ECHA Dossier	
	Acute algae toxicity	ErC50	> 1000 mg/l	96 h	Pseudokirchnerella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EC50	23300 mg/l	48 h	Daphnia magna	ECHA Dossier	
	Acute bacteria toxicity	EC50	>1000 mg/l ( )	3 h	activated sludge	ECHA Dossier	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether			
	OECD 301A / ISO 7827 / EEC 92/69 annex V, C.4-A	96%	28	ECHA Dossier
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7697-37-2	nitric acid	-0,21
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	-0,437

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.
The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

110105 WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY; wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising); pickling acids; hazardous waste

List of Wastes Code - used product

110105 WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY; wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising); pickling acids; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, Hydrochloric acid.)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8

Classification code:	C1
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, Hydrochloric acid.)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8

Classification code:	C1
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid., Hydrochloric acid.)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8

Marine pollutant:	NO
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-A, S-B
Segregation group:	1 - acids

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid., Hydrochloric acid.)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8

Special Provisions:	A3 A803

Limited quantity Passenger:	0.5 L	
Passenger LQ:	Y840	
Excepted quantity:	E2	
IATA-packing instructions - Passenger:		851
IATA-max. quantity - Passenger:		1 L
IATA-packing instructions - Cargo:		855
IATA-max. quantity - Cargo:		30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Safe handling: see section 7

Personal protection equipment: see section 8

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Directive 2010/75/EU on industrial emissions:	not determined
Directive 2004/42/EC on VOC in paints and varnishes:	not determined
Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

Marketing and use of explosives precursors (Regulation (EU) 2019/ 1148):

Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	1 - slightly hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
hydrochloric acid
nitric acid

SECTION 16: Other information

Changes

Rev. 1,0; Initial release 28.03.2022
Rev. 2,0; 14.06.2023, Changes in section: 1 - 16.
Rev. 3,0; 27.01.2026, Changes in section: 2,3,16.

Abbreviations and acronyms

Ox. Liq. 3: Oxidising liquids, hazard category 3

Met. Corr. 1: Corrosive to metals, hazard category 1
Flam. Liq. 3: Flammable liquids, hazard category 3
Acute Tox. 3: Acute toxicity, hazard category 3
Skin Corr. 1A: Skin corrosion, sub-category 1A
Skin Corr. 1: Skin corrosion, hazard category 1
Eye Dam. 1: Serious eye damage, hazard category 1
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service
CLP: Classification, Labelling and Packaging of substances and mixtures
DNEL: Derived No Effect Level
d: day(s)
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European LIst of Notified Chemical Substances
ECHA: European Chemicals Agency
EWC: European Waste Catalogue
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
h: hour
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect concentration
NLP: No-Longer Polymers
N/A: not applicable
OECD: Organisation for Economic Co-operation and Development
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
REACH: Registration, Evaluation, Authorisation of Chemicals
SVHC: substance of very high concern
TRGS: Technische Regeln für Gefahrstoffe
UN: United Nations
VOC: Volatile Organic Compounds
WGK: Water Hazard Class (Germany)

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.
H272 May intensify fire; oxidiser.

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
EUH071	Corrosive to the respiratory tract.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)