

SECTION 1. PRODUCT IDENTIFICATION			
Product name	:	ULTRASIL 78	
Other means of identification	:	Not applicable	
Recommended use	:	Cleaning product	
Restrictions on use	:	Reserved for industrial and professional use.	
Product dilution information	:	0,5 % - 1,0 %	
Company	:	Manufactured or Distributed in Costa Rica by: ECOLAB Costa Rica SRL, Zona Franca BES, El Coyol 7 Km al Oeste Aeropuerto Juan Santamaría, Alajuela, Costa Rica, Código Postal: Apdo109-4003.	
		Product Distributed in Honduras by: ECOLAB Ofibodega Premier, bodega No.8 en el Boulervar del este a 30 mts de la caseta de peaje, San Pedro Sula, Honduras	
		Product Distributed in Panama by: ECOLAB ALBROOK COMERCIAL PARK, L. D14, CALLE RUBEN DARIO, CURUNDU, PANAMÁ	
		Product Distributed in El Salvador by: ECOLAB, S.A, de C,V. 12 Calle Poniente y 23 Avenida Sur #700 San Salvador, El Salvador Colonia Cucumayan.	
		Product Distributed in Guatemala by: ECOLAB S.A. ECOLAB 42 CALLE 23-00 ZONA 12, BODEGA 8	
		Product Distributed in Nicaragua by: ECOLAB C.C.R.L . ECOLAB KM. 16.7 CARRETERA A TICUANTEPE, 200 MTS A COMUNIDAD SAN PEDRO, TICUANTEPE MANAGUA, NICARAGUA	
Emergency telephone	:	Costa Rica: For medical emergency information, call 911 and (506) 2436-3900 in Costa Rica. National Center of Intoxication in Costa Rica: (506) 2223-1028 El Salvador: National Center of Intoxication in EL SALVADOR TEL. (503) 22319262 Guatemala: TOXICOLOGICAL INFORMATION CENTER OF GUATEMALA CIAT (502) 2230 0807 Nicaragua: National Center of Intoxication in NICARAGUA Nº Tel (505) 2897150 Honduras: HOSPITAL ESCUELA DE TEGUCIGALPA HONDURAS (504) 2232-2322 Panama: SYSTEM OF EMERGENCY MANAGEMENT OF THE REPUBLIC OF PANAMA (SUME) - TEL. 911	
Issuing date	:	02.03.2021	

SECTION 2. HAZARD OR HAZARDS IDENTIFICATION

GHS Classification Product AS SOLD

SAFETY DATA SHEET

ULTRASIL 78		
Skin corrosion/irritation, Sub-o Serious eye damage/eye irrita		H314 H318
Product AT USE DILUTION Skin corrosion/irritation, Categ Serious eye damage/eye irrita		H314 H318
GHS label elements Product AS SOLD Hazard pictograms		
Signal Word	: Danger	
Hazard Statements	: H314	Causes severe skin burns and eye damage.
Precautionary Statements	 Prevention: P264 P280 Response: P301 + P330 + I P303 + P361 + I P304 + P340 + I P305 + P351 + I P363 Storage: P405 Disposal: P501 	induce vomiting. P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
Product AT USE DILUTION Hazard pictograms		
Signal Word	: Danger	
Hazard Statements	: H314	Causes severe skin burns and eye damage.
Precautionary Statements	: Prevention: P264 P280 Response: P301 + P330 + I	Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. P331 IF SWALLOWED: Rinse mouth. Do NOT
	1 001 1 1 000 1 1	induce vomiting.

	 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediated clothing. Rinse skin with w P304 + P340 + P310 IF INHALED: Remove person to free keep comfortable for breathing. Immedia POISON CENTER/ doctor. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautious water for several minutes. Remove contaif present and easy to do. Continue rinsin Immediately call a POISON CENTER/ do P363 Wash contaminated clothing before reus Storage: P405 Store locked up. Disposal: P501 Dispose of contents/ container to an approved waster plant. 	ater. sh air and tely call a ly with act lenses, ng. octor. e.
Product AS SOLD Other hazards	Do not mix with bleach or other chlorinated products – will c chlorine gas.	ause
SECTION 3. COMPOSITION	ORMATION OF HAZARDOUS INGREDIENTS	
Product AS SOLD Pure substance/mixture	Mixture	
Chemical name Nitric acid citric acid	CAS-No.Concentratio7697-37-230 - 5077-92-91 - 5	n (%)
Product AT USE DILUTION		
No hazardous ingredients		
SECTION 4. FIRST AID MEA	ES	
Product AS SOLD In case of eye contact	Rinse immediately with plenty of water, also under the eyelic least 15 minutes. Remove contact lenses, if present and eas Continue rinsing. Get medical attention immediately.	
In case of skin contact	Wash off immediately with plenty of water for at least 15 mir a mild soap if available. Wash clothing before reuse. Thorou shoes before reuse. Get medical attention immediately.	
If swallowed	Rinse mouth with water. Do NOT induce vomiting. Never giv anything by mouth to an unconscious person. Get medical a immediately.	
If inhaled	Remove to fresh air. Treat symptomatically. Get medical atte symptoms occur.	ention if
Protection of first-aiders	If potential for exposure exists refer to Section 8 for specific protective equipment.	personal
Notes to physician	Treat symptomatically.	
Most important symptoms and effects, both acute and delayed	See Section 11 for more detailed information on health effect symptoms.	cts and

Product AT USE DILUTION In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
In case of skin contact	: Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
Potential Health Effects	
Product AS SOLD	
Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.
Product AT USE DILUTION	
Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	None known.
Specific hazards during fire fighting	:	Not flammable or combustible.
Hazardous combustion products	:	Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

SAFETY DATA SHEET

ULTRASIL 78

Special protective equipment for fire-fighters	Use personal protective equipment.
Specific extinguishing methods	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. MEASURES TO BE TAKEN IN CASE OF ACCIDENTAL SPILLAGE

Product AS SOLD Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed.
Environmental precautions	:	Do not allow contact with soil, surface or ground water.
Methods and materials for containment and cleaning up	:	Stop leak if safe to do so. Contain spillage, and then collect with non- combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.
Product AT USE DILUTION Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed.
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SECTION 7. HANDLING AND STORAGE

Product AS SOLD Advice on safe handling	:	Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
Conditions for safe storage	:	Keep away from strong bases. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
Storage temperature	:	0 °C to 50 °C

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Product AT USE DILUTION Advice on safe handling	: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
Conditions for safe storage	: Keep away from strong bases. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Product AS SOLD Ingredients with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Nitric acid	7697-37-2	TWA	2 ppm	CR OEL
		STEL	4 ppm	CR OEL
Nitric acid	7697-37-2	TLV-TWA	2 ppm	DO OEL
Nitric acid	7697-37-2	ССТ	4 ppm 10 mg/m3	PA OEL
		CPT	2 ppm 5 mg/m3	PA OEL
Nitric acid	7697-37-2	TWA	2 ppm	ACGIH
		STEL	4 ppm	ACGIH
		STEL	4 ppm 10 mg/m3	NIOSH REL
		TWA	2 ppm 5 mg/m3	NIOSH REL
		TWA	2 ppm 5 mg/m3	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection	:	Safety goggles Face-shield
Hand protection	:	Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	:	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Respiratory protection	:	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Product AT USE DILUTION Engineering measures	:	Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.
Personal protective equipme	ent	
Eye protection	:	Safety goggles Face-shield
Hand protection	:	Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	:	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Respiratory protection	:	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Physical State	: liquid	liquid
Color	: clear, colorless	colorless
Odor	: odorless	odorless
рН	: 0,5 - 1,0, (100 %)	1,0 - 2,0
Flash point	: Not applicable	
Odor Threshold	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: 100 °C	
Evaporation rate	: No data available	
Flammability (solid, gas)	: Not applicable	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapor pressure	: No data available	
Relative vapor density	: No data available	
Relative density	: 1,203 - 1,213	
Water solubility	: soluble	
Solubility in other solvents	: No data available	
Partition coefficient: n- octanol/water	: No data available	
Autoignition temperature	: No data available	
Thermal decomposition	: No data available	
Viscosity, kinematic	: No data available	
Explosive properties	: No data available	

Oxidizing properties	:	No data available
Molecular weight	:	No data available
VOC	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid	: None known.
Incompatible materials	: Bases Metals
Hazardous decomposition products	 In case of fire hazardous decomposition products may be produced such as: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation, Eye contact, Skin contact exposure

Experience with human exposure

Product AS SOLD Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough
Product AT USE DILUTION Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough
Toxicity	
Product AS SOLD Product	
Acute oral toxicity	: No data available

Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	No data available
Skin corrosion/irritation	:	No data available
Serious eye damage/eye irritation	:	No data available
Respiratory or skin sensitization	:	No data available
Carcinogenicity	:	No data available
Reproductive effects	:	No data available
Germ cell mutagenicity	:	No data available
Teratogenicity	:	No data available
STOT-single exposure	:	No data available
STOT-repeated exposure	:	No data available
Aspiration toxicity	:	No data available
Components		
Acute oral toxicity	:	citric acid LD50 Rat: 11.700 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD Ecotoxicity	
Environmental Effects	: This product has no known ecotoxicological effects.
Product	
Toxicity to fish	: 96 h LC50: > 120 mg/l
Toxicity to daphnia and other aquatic invertebrates	: 48 h EC50: > 120 mg/l
Toxicity to algae	: No data available
Persistence and degradabilit	/
Product AS SOLD Readily biodegradable.	
Product AT USE DILUTION Readily biodegradable.	
Bioaccumulative potential	
No data available	
Mobility in soil	
No data available	
Other adverse effects	
No data available	
SECTION 13. INFORMATION	REGARDING THE DISPOSAL OF PRODUCTS

Product AS SOLD

Disposal methods :	: Avoid that the product entering in the body of water, drains, pipes, or the earth (grounds). Where possible, recycling is preferable to disposal or incineration in accordance with local legislation. If you can't recycle, dispose according to local regulations. Elimination of waste in approved waste disposal plants.
Disposal considerations :	: Dispose of in accordance with local, state, and federal regulations. Remove as unused products. Empty containers should be brought to local recycling or waste disposal according to local legislation. Do not reuse empty containers.
Product AT USE DILUTION Disposal methods :	: Avoid that the product entering in the body of water, drains, pipes, or the earth (grounds). Where possible, recycling is preferable to disposal or incineration in accordance with local legislation. If you can't recycle, dispose according to local regulations. Elimination of waste in approved waste disposal plants.
Disposal considerations :	: Dispose of in accordance with local, state, and federal regulations. Remove as unused products. Empty containers should be brought to local recycling or waste disposal according to local legislation. Do not reuse empty containers.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport

UN number	:	2031
Description of the goods	:	NITRIC ACID
Class	:	8
Packing group	:	П
Environmentally hazardous	:	no

Air transport (IATA)

Contact Regulatory for air freight eligibility

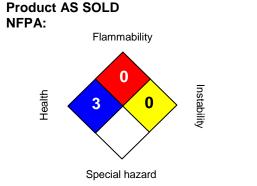
Sea transport (IMDG/IMO)

UN number	:	2031
Description of the goods	:	NITRIC ACID
Class	:	8
Packing group	:	II
Transport in bulk according	:	Not applicable
to Annex II of MARPOL		
73/78 and the IBC Code		
Marine pollutant	:	no

SECTION 15. REGULATORY INFORMATION

Our Safety Data Sheet (SDS) complies with Decree n ° 40705-S

SECTION 16. OTHER INFORMATION

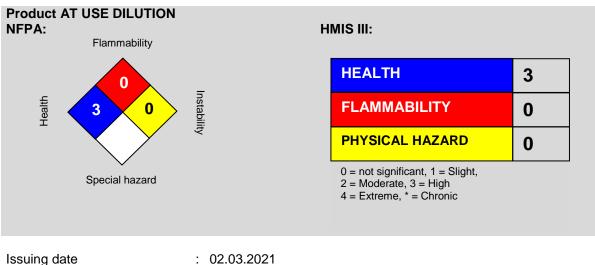


HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic



: 1.0 Version Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.