	RIAL SAFETY DATA SHEET (REACH)  dance with Regulation (EC) No. 1907/2006 and Regulation (EU) No. 453/2010  Revision: 16/09/2013 Page 1 / 10
	Lime Remover (Limpiador Antical) Code: 14/070
Version	on: 2 Revision: 16/09/2013 Previous revision: 13/12/2011 Date of printing: 07/04/2014
SECTION	ON 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1	PRODUCT IDENTIFIER: Lime Remover (Limpiador Antical) Code: 14/070
1.2	RELEVANT IDENTIFIED USES AND USES ADVISED AGAINST: Intended uses (main technical functions): Cleaner. Uses advised against: # None. As there is not classified as dangerous, this product can be used in ways other than the identified uses, but all uses have to be consistent with the safety guidelines provided. Restrictions on manufacture, placing on market and use, according to Annex XVII of Regulation (EC) No. 1907/2006:
1.3	Not applicable.  DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET: NAUTIEL SERVICE, S.L. Pg. Joan de Borbó, 92 - 08003 Barcelona Phone: +34 93 2210869 E-mail address of the person responsible for the safety data sheet: nautiel-service@nautiel.com
1.4	EMERGENCY TELEPHONE NUMBER: +34 93 5880846 (9:00-13:00 / 15:00-18:00 h.) (working hours)
SECTION	ON 2 : HAZARDS IDENTIFICATION
2.1	CLASSIFICATION OF THE SUBSTANCE OR MIXTURE: This product is not classified as dangerous. in accordance with Directive 1999/45/EC~2006/8/EC
2.2	LABEL ELEMENTS:
	This product does not require pictograms, in accordance with Directive 67/548/EEC~2009/2/EC and 1999/45/EC~2006/8/EC  R-phrases: None. S-phrases: S2 Keep out of reach of children. S25 Avoid contact with eyes. Supplementary statements: P153 Contains cationic surfactants < 5 %, non-ionic surfactants < 5 %, LIMONENE. Do not swallow. Hazardous ingredients: None.
2.3	DTHER HAZARDS: Hazards which do not result in classification but which may contribute to the overall hazards of the mixture: Other physicochemical hazards: Not applicable. Other adverse human health effects: Prolonged exposure to vapours may produce transient drowsiness. In case of prolonged contact, the skin may become dry. Other negative environmental effects: Not applicable.

Route of exposure	Symptoms and effects, acute and delayed	Description of first-aid measures
Inhalation:	# Normaly does not produce symptoms.	# Should there be any symptoms, transfer the person affected to the open air.
Skin:	# Normaly does not produce symptoms.	# Remove contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and a solution of 5% sodium bicarbonate. Finally, rewash the affected area with soap and water.
Eyes:	# Normaly does not produce symptoms.	# Rinse eyes copiously by irrigation with plenty of clean, fresh water, holding the eyelids apart. Remove contact lenses. Call a physician immediately.
Ingestion:	# If swallowed in high doses, may cause gastrointestinal disturbances.	If swallowed, seek immediate medical attention. Due to its acid condition, the effects can be reduced to a minimum by drinking plenty of water, to which milk of magnesia has been added. Do not induce vomiting, due to the risk of aspiration. Keep the patient at rest.

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	Substances taking part in a percentage higher than the exemption limit:
	< 0,015 %
4.3	INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:  Notes to physician: Damage caused by detergents and tensioactives to intestinal mucus is irreversible. Do not induce vomiting. Pump out stomach prior to the addition of dimeticone (antifrothing agent).  Antidotes and contraindications: # Not available.
SECTIO	ON 5 : FIRE-FIGHTING MEASURES
5.1	EXTINGUISHING MEDIA: # Extinguishing powder or CO2. In the case of more important fires, also alcohol resistant foam and water spray/mist.
5.2	SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE: As consequence of combustion or thermal decomposition, hazardous products may be produced: carbon monoxide, carbon dioxide, nitrogen oxides, halogenated compounds, hydrochloric acid. Exposure to combustion or decomposition products may be a hazard to health.
5.3	ADVICE FOR FIREFIGHTERS: Special protective equipment: # Depending on magnitude of fire, heat-proof protective clothing may be required, appropriate independent breathing apparatus, gloves, protective glasses or face masks and boots. If the fire-proof protective equipment is not available or not used, combat fire from a sheltered position or at a safe distance. The standard EN469 provides a basic level of protection for chemical incidents.  Other recommendations: Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Do not allow fire-fighting residue to enter drains, sewers or water courses.
SECTIO	ON 6 : ACCIDENTAL RELEASE MEASURES
6.1	PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: # Avoid direct contact with this product.
6.2	ENVIRONMENTAL PRECAUTIONS: Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sewages, inform the appropriate authorities in accordance with local regulations.
6.3	METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP: Contain and mop up spills with absorbent materials (sawdust, earth, sand, vermiculite, diatomaceous earth, etc). Transfer to a suitable container for recovery or elimination. Neutralize with carbonate or sodium bicarbonate. Keep the remains in a closed container. Finally, clean up the area with plenty of water.
6.4	REFERENCE TO OTHER SECTIONS: For contact information in case of emergency, see section 1. For information on safe handling, see section 7. For exposure controls and personal protection measures, see section 8. For subsequent waste disposal, follow the recommendations in section 13.
SECTIO	DN 7 : HANDLING AND STORAGE
7.1	PRECAUTIONS FOR SAFE HANDLING: Comply with the existing legislation on health and safety at work. General recommendations: Avoid any type of leakage or escape. Keep the container tightly closed. Recommendations for the prevention of fire and explosion risks: Not applicable. Recommendations for the prevention of toxicological risks: Do not eat, drink or smoke while handling. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8. Recommendations for the prevention of environmental contamination: It is not considered a danger to the environment. In the case of accidental spillage, follow the instructions indicated in section 6.
7.2	CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:  Prevent unauthorized access. Keep out of reach of children. Keep away from sources of heat. If possible, avoid direct contact with sunlight. In order to avoid leakages, the containers, after use, should be closed carefully and placed in a vertical position. For more information, see section 10.  Class of store  i # According to current legislation.  Maximum storage period  Temperature interval  Incompatible materials:  Keep away from reducing agents, oxidizing agents, acids, alkalis, metals.  Type of packaging:  According to current legislation.  Limit quantity (Seveso III): Directive 96/82/EC~2003/105/EC:  Not applicable.
7.3	SPECIFIC END USES: For the use of this product do not exist particular recommendations apart from that already indicated.

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#### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1 CONTROL PARAMETERS:

If a product contains ingredients with exposure limits, may be necessary a personnel monitoring, work place or biological, to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to EN689 standard concerning methods for assesing the exposure by inhalation to chemical agents and national guidance documents for methods for the determination of dangerous substances.

## OCCUPATIONAL EXPOSURE LIMIT VALUES (TLV)

AGCIH 2011	<u>Year</u>	TLV-TWA		TLV-STEL		<u>Observations</u>
Alcohol isopropílico (R)-p-menta-1,8-dieno	2003	200. 290.	mg/m3 491.	ppm 400.	mg/m3 982.	A4 Internal value

TLV - Threshold Limit Value, TWA - Time Weighted Average, STEL - Short Term Exposure Limit.

A4 - Non classified as carcinogenic in humans.

# BIOLOGICAL LIMIT VALUES:

Not available

### **DERIVED NO-EFFECT LEVEL (DNEL):**

Derived no-effect level (DNEL) is a level of exposure that is considered safe, derived from toxicity data according to specific guidances included in REACH. DNEL values may differ from a occupational exposure limit (OEL) for the same chemical. OEL values may come recommended by a particular company, a government regulatory agency or an organization of experts. Although considered protective of health, the OEL values are derived by a process different of REACH.

Derived no-effect level, workers: - Systemic effects, acute and chronic: Not available (withoud data of registration REACH).	DNEL Inhalation	DNEL Cutaneous	DNEL Oral
	mg/m3	mg/kg bw/d	mg/kg bw/d
Derived no-effect level, workers: - Local effects, acute and chronic: Not available (withoud data of registration REACH).	DNEL Inhalation	DNEL Cutaneous	DNEL Eyes
	mg/m3	mg/cm2	mg/cm2
Derived no-effect level, general population: - Systemic effects, acute and chronic: Not available (withoud data of registration REACH).	DNEL Inhalation	DNEL Cutaneous	DNEL Oral
	mg/m3	mg/kg bw/d	mg/kg bw/d
Derived no-effect level, general population: - Local effects, acute and chronic: Not available (withoud data of registration REACH).	DNEL Inhalation	DNEL Cutaneous	DNEL Eyes
	mg/m3	mg/cm2	mg/cm2

# PREDICTED NO-EFFECT CONCENTRATION (PNEC):

Predicted no-effect concentration, aquatic organisms: - Fresh water, marine water and intermitent release: Not available (withoud data of registration REACH).	PNEC Fresh water mg/l	PNEC Marine mg/l	PNEC Intermittent mg/I -	
- Wastewater treatment plants (STP) and sediments in fresh- and marine water: Not available (withoud data of registration REACH).	PNEC STP mg/l	PNEC Sediments mg/kg dry weight -	PNEC Sediments mg/kg dry weight	
Predicted no-effect concentration, terrestrial organisms: - Air, soil and effects for predators and humans: Not available (withoud data of registration REACH).	PNEC Air mg/m3	PNEC Soil mg/kg dry weight	PNEC Oral mg/kg bw/d	

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#### 8.2 **EXPOSURE CONTROLS:**

## **ENGINEERING MEASURES:**





# Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.

#### Protection of respiratory system:

Protection of eyes and face: # It is recommended to dispose of water taps or sources with clean water close to the working area.

Protection of hands and skin: # It is recommended to dispose of water taps or sources with clean water close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred.

#### OCUPATIONAL EXPOSURE CONTROLS: Directive 89/686/EEC~96/58/EC:

As a general measure on prevention and safety in the work place, we recommend the use of a basic personal protection equipment (PPE), with the corresponding EC marking. For more information on personal protective equipment (storage, use, cleaning, maintenance, type and characteristics of the

PPE, protection class, m	larking, category, CEN norm, etc), you should consult the informative brochures provided by the manufacturers of PPE.
Mask:	No, unless ventilation is insufficient.
Goggles:	# Safety goggles with suitable lateral protection (EN166).
Face shield:	No.
Gloves:	# Gloves resistant against chemicals (EN374). The breakthrough time of the selected glove material should be in accordance with the pretended period of use. There are several factors (for example, temperature), they do in practice the period of use of a protective gloves resistant against chemicals is clearly lower than the established standard EN374. Due to the wide variety of circumstances and possibilities, we must have in mind the manual of instructions from manufacturers of gloves. The gloves should be immediately replaced when any sign of degradation is noted.
Boots:	No.
Apron:	No.
Clothing:	No.
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# Thermal hazards:

# Not applicable.

# **ENVIRONMENTAL EXPOSURE CONTROLS:**

# Avoid any spillage in the environment.

Spills on the soil: Prevent contamination of soil.

Spills in water: # Do not allow to escape into drains, sewers or water courses.

Emissions to the atmosphere: # Not applicable.

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SECTIO	ON 10 : STABILITY AND REACTIVITY
10.1	REACTIVITY: Not available.  Corrosivity to metals: Not available  Pyrophorical properties: # It is not pyrophoric.
10.2	CHEMICAL STABILITY: Stable under recommended storage and handling conditions.
10.3	POSSIBILITY OF HAZARDOUS REACTIONS: Possible dangerous reaction with reducing agents, oxidizing agents, acids, alkalis, metals.
10.4	CONDITIONS TO AVOID: Heat: Keep away from sources of heat. Light: If possible, avoid direct contact with sunlight. Air: Not applicable. Pressure: Not applicable. Shock: Not applicable.
10.5	INCOMPATIBLE MATERIALS: Keep away from reducing agents, oxidizing agents, acids, alkalis, metals.
10.6	HAZARDOUS DECOMPOSITION PRODUCTS: As consequence of thermal decomposition, hazardous products may be produced: nitrogen oxides, hydrochloric acid, halogenated compounds.

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#### **SECTION 11: TOXICOLOGICAL INFORMATION**

No experimental toxicological data on the preparation is available. The toxicological classification for these preparation has been carried out by using the conventional calculation method of the Directive 1999/45/EC~2006/8/EC.

# 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

#### **ACUTE TOXICITY:**

Dose and lethal concentrations for individual ingredients :	DL50 (OECD 401) mg/kg oral	DL50 (OECD 402) mg/kg cutaneous	CL50 (OECD 403) mg/m3.4h inhalation
Acido cítrico	3000. Rat	5500. Rat	
Cloruro de C8-C18-alquilbencildimetilamonio	240. Rat	1560. Rat	
Alcohol isopropílico	5045. Rat	12800. Rabbit	> 72600. Rat
(R)-p-menta-1,8-dieno	5600. Rat	> 2000. Rabbit	

#### No observed adverse effect level

Not available

Lowest observed adverse effect level

Not available

### **CMR EFFECTS:**

Carcinogenic effects: # Is not considered as a carcinogenic product.

Genotoxicity: # Is not considered as a mutagenic product.

Toxicity for reproduction: # Do not harm fertility. Do not harm the fetus developping.

Effects via lactation: # Not classified as a hazardous product for children breast-fed.

# DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:

Routes of exposure:

Short-term exposure: May irritate the eyes and skin.

Long-term or repeated exposure:

#### ADDITIONAL INFORMATION:

Not available.

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# **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13 1 WASTE TREATMENT METHODS: Directive 2008/98/EC:

Ozone depletion potential: # Not available.

Endocrine disrupting potential: Not available.

Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose of at an authorised waste collection point. Waste should be handled and disposed of in accordance with current local and national regulations. For exposure controls and personal protection measures, see section 8.

# Disposal of empty containers: Directive 94/62/EC~2005/20/EC, Decision 2000/532/EC:

Photochemical ozone creation potential: # Not available.
Earth global warming potential: # In case of fire or incineration liberates CO2.

# Emptied containers and packaging should be disposed of in accordance with currently local and national regulations. The classification of packaging as hazardous waste will depend on the degree of empting of the same, being the holder of the residue responsible for their classification, )in accordance with Chapter 15 01 of Decision 2000/532/EC, and forwarding to the appropriate final destination. With contaminated containers and packaging, adopt the same measures as for the product in itself.

# Procedures for neutralising or destroying the product:

Controlled incineration in special facilities for chemical waste, but in accordance with local regulations. Contains halogenated compounds: In the case of incineration, take all necessary measures in order to avoid production and emission of furanes and dioxines into the atmosphere above the legal limits allowed.

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SECTI	ON 14 : TRANSPORT INFORMATION					
14.1	UN NUMBER: Not applicable					
14.2	UN PROPER SHIPPING NAME: Free					
14.3	TRANSPORT HAZARD CLASS(ES) AND PACKING GROUP:					
14.4	Transport by road (ADR 2013): Transport by rail (RID 2013): Not reglamented					
	Transport by sea (IMDG 35-10): Not reglamented					
	Transport by air (ICAO/IATA 2012): Not reglamented					
	Transport by inland waterways (ADN): Free.					
14.5	ENVIRONMENTAL HAZARDS: Not applicable.					
14.6	SPECIAL PRECAUTIONS FOR USER: Not applicable.					
14.7	TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE: Not applicable.					
SECTI	ON 15 : REGULATORY INFORMATION					
15.1	EU SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC: The regulations applicable to this product generally are listed throughout this material safety data sheet.					
	Restrictions on manufacture, placing on market and use: See section 1.2					
	Control of the risks inherent in major accidents (Seveso III): See section 7.2					
	OTHER REGULATIONS: Not available					
15.2	CHEMICAL SAFETY ASSESSMENT: # Not applicable (mixture).					

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#### **SECTION 16: OTHER INFORMATION**

# 16.1 <u>TEXT OF THE PHRASES AND NOTES REFERENCED IN SECTIONS 2 AND/OR 3:</u>

R-phrases according the Directive 67/548/EEC~2001/59/EC (DSD), Annex III:

R10 Flammable. R11 Highly flammable. R34 Causes burns. R36 Irritating to eyes. R38 Irritating to skin. R43 May cause sensitization by skin contact. R50 Very toxic to aquatic organisms. R67 Vapours may cause drowsiness and dizziness. R21/22 Harmful in contact with skin and if swallowed. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Hazard statements according the Regulation (EC) No. 1272/2008~790/2009 (CLP), Annex III:

H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

#### MAIN LITERATURE REFERENCES AND SOURCES FOR DATA:

- · European Chemicals Agency: ECHA, http://echa.europa.eu/
- · Access to European Union Law, http://eur-lex.europa.eu/
- · European Chemicals Bureau: Existing Chemicals, http://esis.jrc.ec.europa.eu/
- Industrial Solvents Handbook, Ibert Mellan (Noyes Data Co., 1970).
- · Threshold Limit Values, (AGCIH, 2011).
- · European agreement on the international carriage of dangerous goods by road, (ADR 2013).
- International Maritime Dangerous Goods Code IMDG including Amendment 35-10 (IMO, 2010).

#### MATERIAL SAFETY DATA SHEET REGULATIONS:

Material Safety Data Sheet in accordance with Article 31 of Regulation (EC) No. 1907/2006 (REACH) and Annex I of Regulation (EU) No. 453/2010.

 HISTORY:
 Revision:

 Version:
 1
 13/12/2011

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 2
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The information of this Material Safety Data Sheet, is based on the present state of knowledge and on current UE and national laws, as the users' working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified, without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this Material Safety Data Sheet is meant as a description of the safety requirements of the product and it is not to be considered as a guarantee of the product's properties.

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