

## SAFETY DATA SHEET

### In conformity with Regulation (EC) 1907/2006 annex II

Trade name: SpiroPlus LimeCleaner  
 Revision dated: 11-02-2010

Version: 2

#### 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Product name:	<b>SpiroPlus LimeCleaner</b>
Application:	Agent for removing lime scale from water-carrying systems.
Manufacturer:	Spirotech B.V. - Churchillaan 52 - 5705 BK Helmond, tel. +31 (0)492 - 57 89 89 during office hours 08:00 - 17:00 h
E-mail:	<a href="mailto:w.vandenberg@spirotech.nl">w.vandenberg@spirotech.nl</a>
Telephone number for emergencies	In case of emergencies contact the National Poisons Information Centre, tel. no.: +31 (0)30-2748888 (only to be reached in emergencies for treatment by a physician in case of suspicion of poisoning).

#### 2. IDENTIFICATION OF THE RISKS

Physical and chemical risks	The product is non-flammable. The product is acid and reacts with base.
Health risks	Contact with skin and eyes may cause minor irritation.
Environmental risks	According to the present knowledge about this product, no harmful effects are to be expected.

#### 3. COMPOSITION AND INFORMATION ABOUT THE COMPONENTS

This product is a preparation. Ingredients are citric acid and sulfamic acid.

#### 4. MEASURES FOR FIRST AID

General	Ask for medical advice in all cases of doubt or in case of persistent symptoms. If the victim is unconscious, do not give him something to drink and do not arouse vomiting.
Inhale	Bring into fresh air in a sitting position. Loosen clothing.
Skin contact	Thoroughly rinse with running water.
Contact with the eyes	Rinse the eyes with ample water. Remove contact lenses after having rinsed for some time. Consult a physician in case of persistent irritation.
Swallow	Rinse the mouth with water. Do not arouse vomiting. Consult a physician in case of persistent disorders.

## 5. FIRE-FIGHTING AGENTS

The product is non-flammable.

Fire-extinguishing agents	All common extinguishing agents can be used.
Special measures	Avoid inhaling smoke in case of fire and/or explosion.
Protection for fire fighters	Wear respiratory protection using mobile compressed air (type: overpressure) and protective fireman's clothing, including helmet, boots and gloves.

## 6. MEASURES IN CASE OF ACCIDENTAL RELEASE OF THE SUBSTANCE OR THE PREPARATION

Personal precautions	See section 8 for personal protection.
Environmental precautions	Collect spilled product in a container for removal; also see section 13.
Cleaning methods	Immediately remove spilled product and put in into fluid-tight packaging material. Wash away the residues with ample water.

## 7. HANDLING AND STORAGE

Handling	Observe the normal precautions for handling chemical substances. Avoid contact with skin and eyes. Avoid development of vapours.
Prevention of fire and explosion	No specific recommendations.
Storage requirements	Keep in properly closed plastic packaging in a ventilated room. Keep separated from strong acids and oxidants.

## 8. MEASURES FOR CONTROL OF EXPOSURE/PERSONAL PROTECTION

Technical control measures	Prevent development of vapours.
Respiration	Use respiratory protection equipment (P2SL or P3SL) in situations in which vapour development is unavoidable.
Hand/skin	Wear impenetrable gloves (latex, pvc, nitrile and rubber gloves suffice).
Eyes and face	Wear safety goggles or acid goggles.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Colour	Yellow
Odour	Characteristically acidulous
Boiling point/range	Not determined
Solidification point	< -3°C
Specific density	Not determined
Vapour pressure	Similar to water
pH	About 1.2
Solubility in water	Fully miscible
Flash point	None
Explosion limits	N/A

## 10. STABILITY AND REACTIVITY

Stability	Chemical stability: stable under normal handling and storage conditions.
Material applications	Steel, brass, copper, plastic, hemp, liquid gasket
Substances to be avoided	Strong bases and oxidants.
Hazardous decomposition products	Nitrates and nitrites may develop at high temperatures.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity	Low at single oral dose. No damage expected when incidentally swallowed.
Short-term effects: Skin	May cause minor irritation of the skin.
Short-term effects: Swallow	May cause irritation of mouth/throat and gastrointestinal tract.
Short-term effects: Eyes	May cause irritation of the eyes. Consult a physician in case of persistent disorders.
Long-term effects	No long-term effects are known.

## 12. ECOLOGICAL INFORMATION

Mobility	The product is completely soluble in water.
Composition	No substances harmful to the environment are present.
pH	When pure, the pH of this product is too low for discharge.
WGK	(The Netherlands): 11
Sanitation efforts	(The Netherlands): B

### 13. INSTRUCTIONS FOR DISPOSAL

Product disposal	Destroy the product in accordance with the national and local legal stipulations.
Waste disposal	The producer of the waste must evaluate his process himself and assign the appropriate waste code.

### 14. INFORMATION WITH RESPECT TO TRANSPORT

The product has not been classified for any type of transport.\*

### 15. LEGALLY MANDATORY INFORMATION

This product does not need classification according to the EU criteria ('Dangerous Substances Directive' 67/548 EEC and 'Dangerous Preparation Directive' 1999/45/EC).\*

### 16. OTHER INFORMATION

This version replaces version 1:

\*adjustment to format in conformity with EC 1907/2006.

\*Re-evaluation has led to the conclusion that the product does not need classification.

Therefore the transport classification is cancelled.

Sections 14 and 15 have been adjusted accordingly.

This information is based on the currently available data (manufacturers, chemical safety cards).

The information provided here is to our knowledge correct and complete on the date of issue of this Safety Data Sheet. The information only concerns the product mentioned and does not guarantee the quality and the completeness of the properties of the product nor if the product is used in combination with other products or in any other process. The user remains responsible for ensuring that the information is applicable and complete with respect to the specific use of the product.

**End of document**