

Trade name: Floralife® Hydraflor 200 clear / Floralife® Hydraflor 300 clear

Product no.: 10.003

Version: 1.1.0 / GB

Status: 24.01.2003

1.) Identification of the substance/preparation and company

Product details

Trade name

Floralife® Hydraflor 200 clear / Floralife® Hydraflor 300 clear

Use

Cut Flower Food

Identification of the manufacturer / supplier

Address

Floralife Europe GmbH
Corneliusplatz 2
D-47918 Tönisvorst

Telephone no. +49 (0)2151 934040

Fax no. +49 (0)2151 9340410

Emergency telephone number

0049-(0)6131-19240

2.) Composition / information on ingredients

Hazardous ingredients

CITRIC ACID

EC no.	201-069-1	Index no.	-	CAS no.	77-92-9
Concentration	> 2	<	20	%-b.w.	
Classification	Xi; R36				
Hazard symbols	Xi	R phrases	36		

3.) Hazards identification

Classification

C; R34 Causes burns.

Hazard symbols

C Corrosive

R phrases

34 Causes burns.

4.) First aid measures

General information

Never give anything by mouth to an unconscious person. Remove soiled or soaked clothing immediately. Seek medical advice immediately.

After inhalation

Remove to fresh air, keep patient warm and at rest. Irregular breathing/no breathing: artificial respiration. If unconscious place in recovery position and seek medical advice.

After skin contact

In case of contact with skin wash off immediately with plenty of water. Do NOT use solvents or thinners !; Consult a doctor if skin irritation persists.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.

After ingestion

Do not induce vomiting. Summon a doctor immediately. Never give anything by mouth to an unconscious person. Keep at rest.

Trade name: Floralife® Hydraflor 200 clear / Floralife® Hydraflor 300 clear

Product no.: 10.003

Version: 1.1.0 / GB

Status: 24.01.2003

5.) Fire-fighting measures**Suitable extinguishing media**

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases

In the event of fire, the following can be released:

Chlorine compounds

Special protective equipment for firefighting

When extinguishing fires, use breathing apparatus with an independent source of air.

Other information (chapter 5.)

Cool endangered containers with water in case of fire. DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS OR WATER COURSES

6.) Accidental release measures**Personal precautions**

Refer to protective measures listed in sections 7 and 8. Do not inhale vapours.

Environmental precautions

Do not allow to enter drains or watercourses.. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

Methods for cleaning up/taking up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see chapter 13). Neutralize with soda or Natriumbicarbonat.

7.) Handling and storage**Handling****Advice on safe handling**

Avoid contact with skin and eyes. Provide good ventilation of working area (local exhaust ventilation if necessary). Comply with the health and safety at work laws.

Advice on protection against fire and explosion

Containers in danger should be cooled with water.

Storage**Requirements for storage rooms and vessels**

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on storage assembly

None known

Further information on storage conditions

Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep container dry in a cool, well-ventilated place.

8.) Exposure controls / personal protection**Additional hints on technical system design.**

Provide adequate ventilation. This should be achieved by the use of local exhaust ventilation and good general extraction.

Exposure limit values

N O N E

Trade name: Floralife® Hydraflor 200 clear / Floralife® Hydraflor 300 clear

Product no.: 10.003

Version: 1.1.0 / GB

Status: 24.01.2003

Personal protective equipment

Respiratory protection

If ventilation insufficient, use a respiratory protection apparatus.

Hand protection

For prolonged or repeated handling, use glove types like nitrile, neoprene or polyvinyl alcohol. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Eye protection

Safety glasses/face shield

Skin protection

Clothing as usual in the chemical industry.

General protective and hygiene measures

Do not eat or drink during work - no smoking. Avoid contact with eyes and skin. Do not inhale vapours. Wash hands before breaks and after work.

9.) Physical and chemical properties

General information

Form liquid, clear

Important health, safety and environmental information

Changes in physical state

Type	Boiling point		
Value		104	°C
Type	Freezing point		
Value	<	0	°C

Flash point

Remarks not applicable

Vapour pressure

Value	18	mm Hg
Reference temperature	20	°C

Density

Value	1,24	g/ml
Reference temperature	20	°C

Solubility in water

Remarks Completely miscible

pH value

Value	0,8
Reference temperature	25 °C

Octanol/water partition coefficient (log Pow)

Remarks not determined

10.) Stability and reactivity

Conditions to avoid

Stable under recommended storage and handling conditions(See section 7).

Materials to avoid

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Trade name: Floralife® Hydraflor 200 clear / Floralife® Hydraflor 300 clear

Product no.: 10.003

Version: 1.1.0 / GB

Status: 24.01.2003

11.) Toxicological information

Experience in practice

Corrosive effect of product in contact with skin, eyes and mucous membranes.
Danger of acute eye damage.

Other information (chapter 11.)

There are no data available on the preparation itself.

12.) Ecological information

General information / ecology

There are no data available on the preparation itself. For componets which are dangerous for the environment see section 2.

The product should not be allowed to enter drains or water courses.

13.) Disposal considerations

Product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Uncleaned packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of in agreement with the regional waste disposal company.

14.) Transport information

Land transport ADR/RID

Class	8	Classification code	C9
Packaging group	II		
Hazard id. no.	80		
Label	8		
UN number	1760		
Technical name	Corrosive liquid, n.o.s.		
Danger releasing substance	CITRIC ACID		

Marine transport IMDG/GGVSee

Class	8
Packaging group	II
UN number	1760
Proper shipping name	Corrosive liquid, n.o.s.
Danger releasing substance	CITRIC ACID
EmS	8-15
MARPOL	-
Label	8

Air transport ICAO/IATA

Class	8
Packaging group	II
UN number	1760
Proper shipping name	Corrosive liquid, n.o.s.
Danger releasing substance	CITRIC ACID
Label	8

15.) Regulatory information

Labelling in accordance with EC directives

Product is labelled "Caustic" owing to its pH-value.

Trade name: Floralife® Hydraflor 200 clear / Floralife® Hydraflor 300 clear

Product no.: 10.003

Version: 1.1.0 / GB

Status: 24.01.2003

Hazard symbols

C Corrosive

R phrases

34 Causes burns.

S phrases

2 Keep out of the reach of children.

13 Keep away from food, drink and animal feedingstuffs.

20 When using do not eat or drink.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16.) Other information**Relevant R-phrases (chapter 2):**

36 Irritating to eyes.

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.