

# SAFETY DATA SHEET

## CITRUS MIX

This safety data sheet complies with the requirements of:  
Regulation (EC) No. 453/2010 and Regulation (EC) No. 1272/2008



SDS # : NP-0088-A  
Revision date: 2018-07-19  
Format: EU  
Version 1.02

### Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Code(s) NP-0088-A  
Product Name CITRUS MIX

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

Recommended Use: A micronutrient suspension concentrate for use in agriculture  
Restrictions on use Use as recommended by the label.

#### 1.3. Details of the supplier of the safety data sheet

Manufacturer FMC Agro Limited  
Rectors Lane  
Pentre  
Flintshire  
CH5 2DH  
United Kingdom  
Tel: + 44 (0) 1244 537370  
E-mail: fmc.agro.uk@fmc.com

For further information, please contact:

Contact point Tel: +44(0)1244 537370  
Email: fmc.agro.uk@fmc.com

#### 1.4. Emergency telephone number

Emergency telephone Tel: +44(0)1244 537370 (Office hours only)

### Section 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture *Regulation (EC) No 1272/2008*

Chronic aquatic toxicity	Category 2 (H411)
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#### 2.2. Label elements

Hazard pictograms



Signal Word

None

### Hazard Statements

H411 - Toxic to aquatic life with long lasting effects

### Precautionary Statements

P273 - Avoid release to the environment

P391 - Collect spillage

P501: Dispose of contents/container as hazardous waste.

### 2.3. Other hazards

This product is not identified as a PBT/vPvB substance.

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

The product is a mixture, not a substance.

### 3.2 Mixture containing the following hazardous ingredients:

Chemical name	EC-No	CAS-No	Weight percent	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
ethane-1,2-diol	203-473-3	107-21-1	1-10	Acute Tox. 4 (H302) STOT RE 2: (H373)	01-2119456816-28-XXXX
Zinc oxide	215-222-5	1314-13-2	1-10	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119463881-32-XXXX

### Additional Information

For the full text of the H-, R- and EUH- phrases mentioned in this Section, see Section 16.

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>Eye Contact</b>	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Call a doctor if irritation persists.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water. If symptoms persist, call a doctor.
<b>Inhalation</b>	Remove person from exposure ensuring one's own safety while doing so. Consult a doctor if necessary.
<b>Ingestion</b>	Get medical attention if symptoms occur. Rinse mouth with water and afterwards drink plenty of water or milk. Do NOT induce vomiting. If vomiting does occur, rinse mouth and drink fluids again. If symptoms persist, call a doctor.

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

<b>Most important symptoms and effects, both acute and delayed</b>	Skin contact: May see mild irritation at the site of contact.
	Eye contact: Possible irritation and redness.
	Ingestion: Possible irritation of the throat.
	Inhalation: May experience irritation of the throat with a feeling of tightness in the chest.
	Delayed/Immediate effects: Immediate effects can be expected after short-term exposure.

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

<b>Indication of immediate medical</b>	Treat symptomatically.
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attention and special treatment  
needed, if necessary

## Section 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool containers / tanks with water spray.

#### Unsuitable extinguishing media

No information available

### 5.2. Special hazards arising from the substance or mixture

Toxic fumes may be released in fire situations.

#### Hazardous Combustion Products

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>).

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear. Wear protective clothing to prevent contact with skin and eyes. Contaminated fire extinguishing water should not be discharged into drains, if preventable. If there is accidental release into water courses, drains, soil or vegetation, immediately contact the relevant authorities.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### Personal Precautions

For personal protection see section 8. Stop leak if you can do it without risk. In case of spill, avoid contact. Isolate area and keep out animals and unprotected persons.

For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

#### For emergency responders

Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

Do not discharge into drains or rivers. Contain the spillage using bunding. Accidental release into water courses must be alerted to the appropriate regulatory body.

### 6.3. Methods and material for containment and cleaning up

#### Methods for Containment

Surface drains within close vicinity of the spill should be covered. Dike to confine spill and absorb with non-combustible absorbent such as clay, sand or soil.

#### Methods for cleaning up

Contain and collect spillage 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).

### 6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

#### Handling

Use only in area provided with appropriate exhaust ventilation.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

## 7.2. Conditions for safe storage, including any incompatibilities

### Storage

Protect from freezing. Store above 5°C. Keep in a dry, cool and well-ventilated place. Keep away from direct sunlight. Keep away from heat. Keep out of reach of children and animals. Keep away from food, drink and animal feedingstuffs.

## 7.3. Specific end use(s)

### Specific Use(s)

No data available.

### Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Chemical name	European Union	The United Kingdom	France	Spain	Germany
ethane-1,2-diol 107-21-1	TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> S*	STEL 40 ppm STEL 104 mg/m <sup>3</sup> STEL 30 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> TWA 20 ppm TWA 52 mg/m <sup>3</sup> Skin	TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> P*	TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> S*	-
Zinc oxide 1314-13-2	-	TWA 52 mg/m <sup>3</sup> (vapour) STEL 104 mg/m <sup>3</sup> (vapour)	TWA 5 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup>	TWA 2 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>	-
Chemical name	Italy	Portugal	The Netherlands	Finland	Denmark
ethane-1,2-diol 107-21-1	TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> Pelle*	TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> Ceiling 100 mg/m <sup>3</sup> C(A4) P*	Huid* STEL 104 mg/m <sup>3</sup> TWA 52 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup>	TWA 20 ppm TWA 50 mg/m <sup>3</sup> STEL 40 ppm STEL 100 mg/m <sup>3</sup> iho*	TWA 10 ppm TWA 26 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> H*
Zinc oxide 1314-13-2	-	TWA 2 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>	-	TWA 2 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>	TWA 4 mg/m <sup>3</sup>
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
ethane-1,2-diol 107-21-1	H* STEL 20 ppm STEL 52 mg/m <sup>3</sup> TWA 10 ppm TWA 26 mg/m <sup>3</sup>	SS-C** H* TWA 10 ppm TWA 26 mg/m <sup>3</sup> STEL 20 ppm STEL 52 mg/m <sup>3</sup>	TWA 15 mg/m <sup>3</sup> STEL 50 mg/m <sup>3</sup>	TWA 20 mg/m <sup>3</sup> TWA 52 ppm TWA 52 mg/m <sup>3</sup> S* STEL 104 mg/m <sup>3</sup> STEL 40 ppm	TWA 10 mg/m <sup>3</sup> TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> Skin
Zinc oxide 1314-13-2	TWA 5 mg/m <sup>3</sup>	TWA 3 mg/m <sup>3</sup> STEL 3 mg/m <sup>3</sup>	TWA 5 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>	TWA 5 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>	TWA 2 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

### 8.2. Exposure controls

#### Engineering measures

Ensure adequate ventilation, especially in confined areas. The floor of the storage room must be impermeable to prevent the escape of liquids.

#### Personal protective equipment

##### Eye/Face Protection

Safety glasses with side-shields. Provide emergency on-site eyewash.

<b>Hand Protection</b>	Protective gloves. Impervious butyl rubber gloves. Wear chemical protective gloves made of materials such as nitrile or neoprene.
<b>Skin and Body Protection</b>	Wear protective gloves/clothing.
<b>Respiratory Protection</b>	Not required under normal use.
<b>Environmental exposure controls</b>	Refer to specific Member State legislation for requirements under Community environmental legislation.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<b>Physical State</b>	Liquid
<b>Appearance</b>	No information available
<b>Odour</b>	Barely perceptible
<b>Colour</b>	Creamy white
<b>Odour threshold</b>	No information available
<b>pH</b>	7.5 - 8.5
<b>Melting point/freezing point</b>	No information available
<b>Boiling point/boiling range</b>	No information available
<b>Flash point</b>	No information available
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
Upper flammability limit:	No information available
Lower flammability limit	No information available
<b>Vapour pressure</b>	No information available
<b>Vapour density</b>	No information available
<b>Specific gravity</b>	~1.30
<b>Water solubility</b>	Emulsifies
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidising properties</b>	Non-oxidizing (by EC criteria)

### 9.2. Other information

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available
<b>K<sub>st</sub></b>	No information available

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None under normal use conditions

### 10.2. Chemical stability

Stable under recommended storage conditions.

#### Explosion data

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

### 10.3. Possibility of hazardous reactions

**Hazardous polymerisation**

Hazardous polymerization does not occur.

**Hazardous reactions**

None under normal processing. Decomposition may occur on exposure to conditions or materials listed below.

**10.4. Conditions to avoid**

Heat.

**10.5. Incompatible materials**

Strong oxidising agents, Strong acids.

**10.6. Hazardous decomposition products**

May emit toxic fumes under fire conditions. See Section 5.2 for more information.

**Section 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****Acute toxicity****Product Information**

**LD50 Oral** > 5000 mg/kg (rat) (Calculated Estimated Acute Toxicity - EAT)

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Sensitisation</b>	No information available.
<b>Mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.

<b>Symptoms</b>	Skin contact: May see mild irritation at the site of contact. Eye contact: Possible irritation and redness. Ingestion: Possible irritation of the throat. Inhalation: May experience irritation of the throat with a feeling of tightness in the chest. Delayed/Immediate effects: Immediate effects can be expected after short-term exposure.
<b>Aspiration hazard</b>	No information available.

**Section 12: ECOLOGICAL INFORMATION****12.1. Toxicity**

**Ecotoxicity**

ZEBRAFISH (Danio rerio): 96H LC50 = 26.8 mg/L (calculated)

ALGAE (Pseudokirchneriella subcapitata): 72H IC50 = 2.52 mg/L (calculated)

DAPHNIDS (Daphnia magna): 48H EC50 = 56.1 mg/L (calculated)

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

No information available.

**12.4. Mobility in soil****Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

This product is not identified as a PBT/vPvB substance.

**12.6. Other adverse effects**

Toxic to aquatic organisms.

## Section 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods****Waste from residues / unused products**

Transfer to a suitable container and arrange for collection by specialised disposal company. Do not contaminate ponds, waterways or ditches with chemical or used containers. Do not discharge to sewer systems.

**Contaminated Packaging**

Clean container with water. Dispose of rinse water in accordance with local and national guidelines. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**EWC Waste Disposal No**

02 01 08

**OTHER INFORMATION**

NOTE : The user's attention is drawn to the possible existence of specific European, national or local regulations regarding disposal.

## Section 14: TRANSPORT INFORMATION

**IMDG/IMO****14.1 UN/ID no**

UN3082

**14.2 Proper Shipping Name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE)

**14.3 Hazard class**

9

**14.4 Packing Group**

III

**14.5 Marine Pollutant**

Yes

**Environmental Hazard**

Yes

**14.6 Special Provisions**

No special precautions.

Tunnel code: E

Transport category: 3

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code** The product is not transported in bulk tankers.

**RID**

14.1 UN/ID no UN3082  
14.2 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE)  
14.3 Hazard class 9  
14.4 Packing Group III  
14.5 Environmental Hazard Yes  
14.6 Special Provisions No special precautions.  
Tunnel code: E  
Transport category: 3

**ADR/RID**

14.1 UN/ID no UN3082  
14.2 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE)  
14.3 Hazard class 9  
14.4 Packing Group III  
14.5 Environmental Hazard Yes  
14.6 Special Provisions No special precautions.  
Tunnel code: E  
Transport category: 3

**ICAO/IATA**

14.1 UN/ID no UN3082  
14.2 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE)  
14.3 Hazard class 9  
14.4 Packing Group III  
14.5 Environmental Hazard Yes  
14.6 Special Provisions No special precautions.  
Tunnel code: E  
Transport category: 3

## Section 15: REGULATORY INFORMATION

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

**National regulations** Seveso category in Annex I to Dir. 2012/18/EU: dangerous for the environment.

The substance is covered by EU chemical legislation.

**European Union****Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)  
This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not Applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not Applicable

**International Inventories**



Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
ethane-1,2-diol 107-21-1	X	X	X	X	X	X	X	X
Zinc oxide 1314-13-2	X	X	X	X	X	X	X	X

## 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: OTHER INFORMATION

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of R-phrases referred to under sections 2 and 3

Not applicable

#### Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure

H410 - Very toxic to aquatic life with long lasting effects

H411 - Toxic to aquatic life with long lasting effects

#### Legend

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	CAS (Chemical Abstracts Service)
Ceiling:	Maximum limit value:
DNEL:	Derived No Effect Level (DNEL)
EINECS:	EINECS (European Inventory of Existing Chemical Substances)
GHS:	Globally Harmonised System (GHS)
IATA:	International Air Transport Association (IATA)
ICAO:	International Civil Aviation Organization
IMDG:	International Maritime Dangerous Goods (IMDG)
LC50:	LC50 (lethal concentration)
LD50:	LD50 (lethal dose)
PBT:	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
RID:	Regulations Concerning the International Transport of Dangerous Goods by Rail
STEL:	Short term exposure limit
SVHC:	SVHC: Substances of Very High Concern for Authorisation:
TWA:	time weighted average
vPvB:	very Persistent and very Bioaccumulative

Revision date: 2018-07-19

Reason for revision: Format Change.

#### Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

#### Prepared By

FMC Corporation

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End of Safety Data Sheet

