

STARFOUNT SF-5091Z

Version 1.4

Revision Date 05/20/2015

Print Date 06/05/2015

SECTION 1. IDENTIFICATION

Product name : STARFOUNT SF-5091Z
Product Use Description : SHEET FED FOUNTAIN SOLUTION

Manufacturer or supplier's details

Company : ACTEGA Kelstar
1050 Taylors Lane
Cinnaminson, NJ 08077
Telephone : (800) 255-0021
Telefax : (856) 786-2860
Visit our web site : www.actega.com
Emergency telephone number : Chemtrec Phone: 1-800-424-9300 / +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Skin irritation : Category 2
Eye irritation : Category 2A
Respiratory sensitisation : Category 1
Carcinogenicity : Category 1B
Reproductive toxicity : Category 1B
Specific target organ toxicity - repeated exposure : Category 2 (Kidney)

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H350 May cause cancer.
H360 May damage fertility or the unborn child.
H373 May cause damage to organs (Kidney) through prolonged

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or repeated exposure.

Precautionary statements

: **Prevention:**

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P280 Wear eye protection/ face protection.
 P280 Wear protective gloves.
 P281 Use personal protective equipment as required.
 P285 In case of inadequate ventilation wear respiratory protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
 P362 Take off contaminated clothing and wash before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
Hazardous components

Component	CAS-No.	Concentration (%)
2-Butoxyethanol	111-76-2	>= 10 - < 30
Ethylene glycol	107-21-1	>= 1 - < 5
1-octylpyrrolidine-2-one	2687-94-7	>= 1 - < 5
Acetic acid	64-19-7	>= 1 - < 5
Cobalt Nitrate	10141-05-6	>= 0.1 - < 1

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SECTION 4. FIRST AID MEASURES

- General advice : Get medical attention immediately if symptoms occur.
Treat symptomatically.
- If inhaled : If inhaled, remove to fresh air.
If breathing is difficult, give oxygen.
If not breathing, give artificial respiration.
- In case of skin contact : Remove contaminated clothing. Wash thoroughly with soap and
water for at least 20 min. or until material is removed.
Wash contaminated clothing before re-use.
Get medical attention if irritation develops and persists.
- In case of eye contact : If easy to do, remove contact lens, if worn.
Rinse immediately with plenty of water, also under the eyelids,
for at least 15 minutes.
Seek medical advice.
- If swallowed : Do NOT induce vomiting.
Gently wipe or rinse the inside of the mouth with water.
Obtain medical attention.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local
circumstances and the surrounding environment.
- Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread
fire.
- Further information : Use water spray to cool unopened containers.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
Use personal protective equipment.
- Environmental precautions : Prevent spilled material from entering the ground, water
and/or air by using appropriate containment methods.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material.

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SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Use only in accordance with our recommendations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
- Materials to avoid : Keep away from oxidising agents and strongly acid or alkaline materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-Butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	50 ppm 240 mg/m ³	OSHA Z-1
Ethylene glycol	107-21-1	C (Aerosol only)	100 mg/m ³	ACGIH
Acetic acid	64-19-7	TWA	10 ppm	ACGIH
		STEL	15 ppm	ACGIH
		TWA	10 ppm 25 mg/m ³	OSHA Z-1
		TWA	10 ppm 25 mg/m ³	OSHA P0
		TWA	10 ppm 25 mg/m ³	NIOSH REL
		ST	15 ppm 37 mg/m ³	NIOSH REL
Cobalt Nitrate	10141-05-6	TWA	0.02 mg/m ³ (Cobalt)	ACGIH

Engineering measures : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Hand protection

Material : Impervious gloves

Eye protection

: Safety glasses with side-shields
Safety goggles

Skin and body protection

: Long sleeved clothing
Chemical resistant apron

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	Lightweight protective clothing
Protective measures	: Ensure that eye flushing systems and safety showers are located close to the working place.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking, or smoking.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aqueous solution
Colour	: green
Odour	: sweet
Odour Threshold	: No data available
pH	: 4 - 5
	: No data available
Initial boiling point	: > 200.1 °F (> 93.4 °C)
Flash point	: > 200.1 °F (> 93.4 °C)
Evaporation rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative Density/Specific Gravity	: 1.045 (68 °F (20 °C))
Density	: 8.70 lb/gal
Bulk density	: No data available
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available

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Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Thermal decomposition	:	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Nitrogen oxides (NOx)
Viscosity	:	
Viscosity, kinematic	:	< 14 mm ² /s (104 °F (40 °C))

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	:	Acids and bases
Conditions to avoid	:	Keep away from open flames, hot surfaces and sources of ignition.
Hazardous decomposition products	:	Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Eyes
Skin contact
Inhalation

Acute toxicity**Product:**

Acute oral toxicity	:	Acute toxicity estimate : 2,425 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate : 26499 ppm Exposure time: 4 h Test atmosphere: gas Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method

Components:

111-76-2 2-Butoxyethanol:	:	
Acute oral toxicity	:	LD50 (Rat): 530 mg/kg

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LD50 (Rabbit): 520 mg/kg
Acute inhalation toxicity : LC50 (Rat): 468 ppm
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): 220 mg/kg
LD50 (Rabbit): 100 mg/kg

107-21-1 Ethylene glycol:

Acute oral toxicity : 1,650 mg/kg
Acute inhalation toxicity : LC50 (Mouse): > 200 mg/l
Exposure time: 2.00 h

Acute dermal toxicity : LD50 (Rabbit): 9.53 mg/kg

64-19-7 Acetic acid:

Acute oral toxicity : LD50 (Rat): 3,530 mg/kg

Skin corrosion/irritation**Product:**

Remarks: No data available

Components:**111-76-2 2-Butoxyethanol:**

Species: Rabbit
Result: Moderate skin irritation

107-21-1 Ethylene glycol:

Species: Rabbit
Exposure time: 1.00 h
Result: Mild skin irritation

64-19-7 Acetic acid:

Species: Rabbit
Result: Moderate skin irritation

Serious eye damage/eye irritation**Product:**

Remarks: No data available

Components:**111-76-2 2-Butoxyethanol:**

Species: Rabbit
Result: Eye irritation

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Method: OECD Test Guideline 405
 GLP: yes

107-21-1 Ethylene glycol:

Species: Rabbit
 Result: Moderate eye irritation
 Method: Draize Test

Respiratory or skin sensitisation
Product:

Remarks: No data available

Components:
111-76-2 2-Butoxyethanol:

Test Type: Maximisation Test (GPMT)
 Exposure routes: Dermal
 Species: Guinea pig
 Method: OECD Test Guideline 406
 Result: Does not cause skin sensitisation.
 GLP: yes

Carcinogenicity

IARC	Group 2A: Probably carcinogenic to humans	
	Cobalt Nitrate	10141-05-6
	Group 2B: Possibly carcinogenic to humans	
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.	
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	

Repeated dose toxicity
Product:

Remarks: No data available

Further information
Product:

Remarks: No data available

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SECTION 12. ECOLOGICAL INFORMATION
Ecotoxicity
Product:

Toxicity to fish :
 Remarks: No data available

Toxicity to daphnia and other :
 aquatic invertebrates Remarks: No data available

Persistence and degradability
Product:

Biodegradability : Remarks: No data available

Bioaccumulative potential
Product:

Bioaccumulation : Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS
Disposal methods

Waste from residues : Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations. The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

Contaminated packaging : Do not re-use empty containers.

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SECTION 14. TRANSPORT INFORMATION
International Regulation
IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations
49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION
WHMIS Classification : D2B: Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity

Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a SARA 302 RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

2-Butoxyethanol	111-76-2	16.9 %
Ethylene glycol	107-21-1	4.4 %

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Cobalt Nitrate	10141-05-6	.2 %
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Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Ethylene glycol	107-21-1	4.4 %
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This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMII Intermediate or Final VOC's (40 CFR 60.489):

2-Butoxyethanol	111-76-2	16.9 %
1,2-Propanediol	57-55-6	12.9 %
Ethylene glycol	107-21-1	4.4 %
Acetic acid	64-19-7	1.0 %

VOC : 3.09 lb/gal
35.46 %

Non-volatile information is not a specification.

Massachusetts Right To Know

2-Butoxyethanol	111-76-2
Ethylene glycol	107-21-1
Acetic acid	64-19-7

Pennsylvania Right To Know

Water	7732-18-5
2-Butoxyethanol	111-76-2
1,2-Propanediol	57-55-6
Ethylene glycol	107-21-1
Inextricably Bound Solid	Not Assigned
Acetic acid	64-19-7
sodium sulphate	7757-82-6

New Jersey Right To Know

Water	7732-18-5
2-Butoxyethanol	111-76-2
1,2-Propanediol	57-55-6
Ethylene glycol	107-21-1
Inextricably Bound Solid	Not Assigned
Acetic acid	64-19-7
Cobalt Nitrate	10141-05-6

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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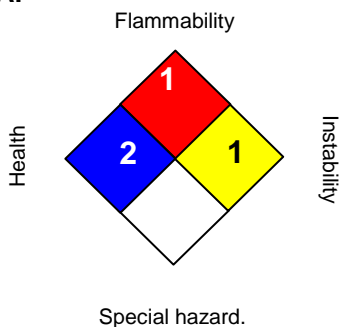
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The components of this product are reported in the following inventories:

LISTED : Listed

SECTION 16. OTHER INFORMATION
Further information
NFPA:

HMIS III:

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	1

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

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