

## SAFETY DATA SHEET

Creation Date 30-Dec-2014

Revision Date 24-Dec-2021

Revision Number 5

### 1. Identification

**Product Name** FL-70 Detergent, Biodegradable

**Cat No. :** SF105-1; SF105-4

**Synonyms** Concentrated cleaning compound

**Recommended Use** Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

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

##### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

**Emergency Telephone Number** CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation

Category 2

#### Label Elements

##### **Signal Word**

Warning

##### **Hazard Statements**

Causes serious eye irritation

**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Wear eye/face protection

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

**Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition/Information on Ingredients

Component	CAS No	Weight %
Water	7732-18-5	88.8
9-Octadecenoic acid (Z)-, compound with 2,2',2''-nitrilotris[ethanol](1:1)	2717-15-9	3.8
Sodium carbonate	497-19-8	2.7
Alcohols, C12-14-secondary, ethoxylated	84133-50-6	1.8
Tetrasodium EDTA	64-02-8	1.4
Polyethylene glycol	25322-68-3	0.9
Sodium oleate	143-19-1	0.5
Sodium bicarbonate	144-55-8	0.1

### 4. First-aid measures

<b>General Advice</b>	If symptoms persist, call a physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.
<b>Most important symptoms and effects</b>	None reasonably foreseeable.
<b>Notes to Physician</b>	Treat symptomatically

### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.
<b>Unsuitable Extinguishing Media</b>	No information available

<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Non-combustible. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**

Thermal decomposition can lead to release of irritating gases and vapors.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

**Health**  
2

**Flammability**  
0

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

<b>Personal Precautions</b>	Use personal protective equipment as required. Ensure adequate ventilation.
<b>Environmental Precautions</b>	Should not be released into the environment. See Section 12 for additional Ecological Information.

**Methods for Containment and Clean Up** Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

<b>Handling</b>	Ensure adequate ventilation. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.
<b>Storage.</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. No information available.

## 8. Exposure controls / personal protection

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Personal Protective Equipment</b>	
<b>Eye/face Protection</b>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.
<b>Respiratory Protection</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Physical State</b>	Liquid
<b>Appearance</b>	Yellow
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH</b>	12.0 Alkaline
<b>Melting Point/Range</b>	0 °C / 32 °F
<b>Boiling Point/Range</b>	> 100 °C / 212 °F
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	> 1 (Ether = 1.0)
<b>Flammability (solid,gas)</b>	Not applicable
<b>Flammability or explosive limits</b>	
Upper	No data available
Lower	No data available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	> 1.0
<b>Specific Gravity</b>	1.04
<b>Solubility</b>	Soluble in water
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No information available
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	No information available

## 10. Stability and reactivity

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Excess heat.
<b>Incompatible Materials</b>	No information available
<b>Hazardous Decomposition Products</b>	Thermal decomposition can lead to release of irritating gases and vapors
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

**Acute Toxicity****Product Information****Oral LD50**

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

**Dermal LD50**

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

**Vapor LC50**

Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

**Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Sodium carbonate	2800 mg/kg ( Rat )	> 2000 mg/kg (rabbit)	2.3 mg/l 2h (Rat)
Alcohols, C12-14-secondary, ethoxylated	LD50 = 2100 mg/kg ( Rat )	Not listed	Not listed
Tetrasodium EDTA	LD50 = 1780 - 2000 mg/kg ( Rat )	Not listed	Not listed

Polyethylene glycol	LD50 = 22 g/kg ( Rat )	LD50 > 20 g/kg ( Rabbit )	Not listed
Sodium bicarbonate	LD50 = 4220 mg/kg ( Rat )	Not listed	Not listed

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** Irritating to eyes

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
9-Octadecenoic acid (Z)-, compound with 2,2',2''-nitrilotris[ethanol](1:1)	2717-15-9	Not listed	Not listed	Not listed	Not listed	Not listed
Sodium carbonate	497-19-8	Not listed	Not listed	Not listed	Not listed	Not listed
Alcohols, C12-14-secondary, ethoxylated	84133-50-6	Not listed	Not listed	Not listed	Not listed	Not listed
Tetrasodium EDTA	64-02-8	Not listed	Not listed	Not listed	Not listed	Not listed
Polyethylene glycol	25322-68-3	Not listed	Not listed	Not listed	Not listed	Not listed
Sodium oleate	143-19-1	Not listed	Not listed	Not listed	Not listed	Not listed
Sodium bicarbonate	144-55-8	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

This product contains the following substance(s) which are hazardous for the environment. .

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium carbonate	Not listed	Lepomis macrochirus: LC50: 300 mg/L/96h Gambusia affinis: LC50: 740 mg/L/96h	-	EC50: = 265 mg/L, 48h (Daphnia magna)
Alcohols, C12-14-secondary, ethoxylated	Not listed	LC50: = 3.2 mg/L, 96h (Pimephales promelas)	Not listed	EC50: = 3.2 mg/L, 48h (water flea)
Tetrasodium EDTA	EC50: = 1.01 mg/L, 72h (Desmodesmus)	LC50: = 121 - 1592 mg/L, 96h static (Lepomis)	Not listed	EC50: = 140mg/l, 48h (Daphnia magna)

	subspicatus)	macrochirus)		
Polyethylene glycol	EC50 > 100 mg/L 96h, (Scenedesmus subspicatus) OECD Guideline 201	LC50 > 100 mg/L 96h, (Poecilia reticulata) OECD Guideline 203	Not listed	EC50 > 100 mg/L 48h, (Daphnia magna) OECD Guideline 202
Sodium bicarbonate	EC50: 650 mg/L/120h	LC50: 8250 - 9000 mg/L, 96h static (Lepomis macrochirus)	-	EC50: 2350 mg/L/48h

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

### 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

**DOT** Not regulated  
**TDG** Not regulated  
**IATA** Not regulated  
**IMDG/IMO** Not regulated

### 15. Regulatory information

#### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Water	7732-18-5	X	ACTIVE	-
9-Octadecenoic acid (Z)-, compound with 2,2',2''-nitrilotris[ethanol](1:1)	2717-15-9	X	ACTIVE	-
Sodium carbonate	497-19-8	X	ACTIVE	-
Alcohols, C12-14-secondary, ethoxylated	84133-50-6	X	ACTIVE	XU
Tetrasodium EDTA	64-02-8	X	ACTIVE	-
Polyethylene glycol	25322-68-3	X	ACTIVE	XU
Sodium oleate	143-19-1	X	ACTIVE	-
Sodium bicarbonate	144-55-8	X	ACTIVE	-

#### Legend:

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base  
 Production and Site Reports (40 CFR 710(B))

**TSCA 12(b)** - Notices of Export Not applicable

#### International Inventories

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Water	7732-18-5	X	-	231-791-2	X	X		X	X	KE-35400
9-Octadecenoic acid (Z)-,	2717-15-9	X	-	220-311-7	X	X	X	X	X	-

compound with 2,2',2''-nitrilotris[ethanol](1:1)										
Sodium carbonate	497-19-8	X	-	207-838-8	X	X	X	X	X	KE-31380
Alcohols, C12-14-secondary, ethoxylated	84133-50-6	X	-	-	X	X	X	X	X	KE-00456
Tetrasodium EDTA	64-02-8	X	-	200-573-9	X	X	X	X	X	KE-13654
Polyethylene glycol	25322-68-3	X	-	-	X	X	X	X	X	KE-20228
Sodium oleate	143-19-1	X	-	205-591-0	X	X	X	X	X	KE-26519
Sodium bicarbonate	144-55-8	X	-	205-633-8	X	X	X	X	X	KE-31360

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

### U.S. Federal Regulations

<b>SARA 313</b>	Not applicable
<b>SARA 311/312 Hazard Categories</b>	See section 2 for more information
<b>CWA (Clean Water Act)</b>	Not applicable
<b>Clean Air Act</b>	Not applicable
<b>OSHA - Occupational Safety and Health Administration</b>	Not applicable
<b>CERCLA</b>	Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

### **U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-

### **U.S. Department of Transportation**

Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

### Other International Regulations

**Mexico - Grade** No information available

### **Authorisation/Restrictions according to EU REACH**

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Sodium carbonate	-	Use restricted. See item 75. (see link for restriction details)	-
Tetrasodium EDTA	-	Use restricted. See item 75. (see link for restriction details)	-

<https://echa.europa.eu/substances-restricted-under-reach>

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Water	7732-18-5	Listed	Not applicable	Not applicable	Not applicable
9-Octadecenoic acid (Z)-, compound with 2,2',2''-nitrilotris[ethanol](1:1)	2717-15-9	Not applicable	Not applicable	Not applicable	Not applicable
Sodium carbonate	497-19-8	Listed	Not applicable	Not applicable	Not applicable
Alcohols, C12-14-secondary, ethoxylated	84133-50-6	Listed	Not applicable	Not applicable	Not applicable
Tetrasodium EDTA	64-02-8	Listed	Not applicable	Not applicable	Not applicable
Polyethylene glycol	25322-68-3	Listed	Not applicable	Not applicable	Not applicable
Sodium oleate	143-19-1	Not applicable	Not applicable	Not applicable	Not applicable
Sodium bicarbonate	144-55-8	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Water	7732-18-5	Not applicable	Not applicable	Not applicable	Not applicable
9-Octadecenoic acid (Z)-, compound with 2,2',2''-nitrilotris[ethanol](1:1)	2717-15-9	Not applicable	Not applicable	Not applicable	Not applicable
Sodium carbonate	497-19-8	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C12-14-secondary, ethoxylated	84133-50-6	Not applicable	Not applicable	Not applicable	Not applicable
Tetrasodium EDTA	64-02-8	Not applicable	Not applicable	Not applicable	Not applicable
Polyethylene glycol	25322-68-3	Not applicable	Not applicable	Not applicable	Not applicable
Sodium oleate	143-19-1	Not applicable	Not applicable	Not applicable	Not applicable
Sodium bicarbonate	144-55-8	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

### Prepared By

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### Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**