

Part of Thermo Fisher Scientific

SAFETY DATA SHEET

Creation Date 13-Jul-2009 Revision Date 26-Jan-2015 Revision Number 1

1. Identification

Product Name Saccomanno Fluid

Cat No.: 22050215

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Emergency Telephone Number

Chemtrec US: (800) 424-9300 Chemtrec EU: 001 (202) 483-7616

2. Hazard(s) identification

Classification

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

Flammable liquids

Specific target organ toxicity (single exposure)

Category 1

Category 1

Target Organs - Central nervous system (CNS).

Specific target organ toxicity - (repeated exposure) Category 2

Target Organs - Kidney, Liver, Blood.

Label Elements

Signal Word

Danger

Hazard Statements

Flammable liquid and vapor May cause drowsiness or dizziness Causes damage to organs May cause damage to organs through prolonged or repeated exposure



Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Keep cool

Response

IF exposed: Call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other hazards

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm. **Unknown Acute Toxicity**

.? % of the mixture consists of ingredients of unknown toxicity.

3. Composition / information on ingredients

Component	CAS-No	Weight %
Methylene blue trihydrate	7220-79-3	< 0.001
FD&C yellow No. 5	1934-21-0	< 0.001
Polyethylene glycol	25322-68-3	2.0 - 2.5
Isopropyl alcohol	67-63-0	2.0 - 2.5
Ethyl alcohol	64-17-5	40 - 41
Methyl alcohol	67-56-1	1.5 - 2.5
Water	7732-18-5	52 - 54

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Obtain medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth

resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a

respiratory medical device. Obtain medical attention.

Ingestion Do not induce vomiting. Obtain medical attention.

Most important symptoms/effects

Breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness,

nausea and vomiting Treat symptomatically

Notes to Physician

5. Fire-fighting measures

Unsuitable Extinguishing Media No information available

 $\begin{array}{lll} \textbf{Flash Point} & 27.2 \ ^{\circ}\text{C} \ / \ 80.96 \ ^{\circ}\text{F} \\ \textbf{Method -} & \text{No information available} \\ \end{array}$

Autoignition Temperature

Explosion Limits

No information available

Upper 19 vol % **Lower** 2.6 vol %

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO2)

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

NFPA

Health	Flammability	Instability	Physical hazards
3	3	0	N/A

6. Accidental release measures

Personal Precautions Remove all sources of ignition. Use personal protective equipment. Take precautionary

measures against static discharges. Do not get in eyes, on skin, or on clothing.

Environmental Precautions Should not be released into the environment. See Section 12 for additional ecological information.

Methods for Containment and Clean Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, **Up** closed containers for disposal. Take precautionary measures against static discharges.

	7. Handling and storage
Handling	Wear personal protective equipment. Ensure adequate ventilation. Use explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing.

StorageKeep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Flammables area.

8. Exposure controls / personal protection

Exposure Guidelines

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Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl alcohol	TWA: 200 ppm STEL: 400 ppm	(Vacated) TWA: 400 ppm (Vacated) TWA: 980 mg/m³ (Vacated) STEL: 500 ppm (Vacated) STEL: 1225 mg/m³ TWA: 400 ppm TWA: 980 mg/m³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³
Ethyl alcohol	STEL: 1000 ppm	(Vacated) TWA: 1000 ppm (Vacated) TWA: 1900 mg/m³ TWA: 1000 ppm TWA: 1900 mg/m³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m³
Methyl alcohol	Methyl alcohol TWA: 200 ppm STEL: 250 ppm Skin		IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Isopropyl alcohol	TWA: 400 ppm	TWA: 400 ppm	TWA: 200 ppm
	TWA: 985 mg/m ³	TWA: 980 mg/m ³	STEL: 400 ppm
	STEL: 500 ppm	STEL: 500 ppm	
	STEL: 1230 mg/m ³	STEL: 1225 mg/m ³	
Ethyl alcohol	TWA: 1000 ppm	TWA: 1000 ppm	STEL: 1000 ppm
	TWA: 1880 mg/m ³	TWA: 1900 mg/m ³	
Methyl alcohol	TWA: 200 ppm	TWA: 200 ppm	TWA: 200 ppm
	TWA: 262 mg/m ³		STEL: 250 ppm
	STEL: 250 ppm	STEL: 250 ppm	Skin
	STEL: 328 mg/m ³	STEL: 310 mg/m ³	
	Skin		

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Ensure adequate ventilation, especially in confined areas. Use explosion-proof **Engineering Measures**

electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers

are close to the workstation location.

Personal Protective Equipment

Eye/face Protection 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.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard **Respiratory Protection**

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

Physical State Liquid Light green **Appearance** Odor Strong

Odor Threshold No information available No information available **Melting Point/Range** No data available

Boiling Point/Range85 °C / 185 °FFlash Point27.2 °C / 80.96 °FEvaporation RateNo information availableFlammability (solid,gas)No information available

Flammability or explosive limits

 Upper
 19 vol %

 Lower
 2.6 vol %

 Vapor Pressure
 46 mmHg

 Vapor Density
 1.5

 Relative Density
 0.950

SolubilitySoluble in waterPartition coefficient; n-octanol/waterNo data availableAutoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Heat, flames and sparks.

Incompatible Materials Strong oxidizing agents, Strong acids, Acid anhydrides, Acid chlorides

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

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		
Polyethylene glycol	28 g/kg (Rat)	20 g/kg(Rabbit)20 mL/kg(Rabbit)	Not listed		
Isopropyl alcohol	5840 mg/kg (Rat)	13900 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4 h		
Ethyl alcohol	7060 mg/kg (Rat)	Not listed	20000 ppm/10H (Rat)		
Methyl alcohol	6200 mg/kg (Rat)	15800 mg/kg (Rabbit)	64000 ppm (Rat) 4 h 22500 ppm (Rat) 8 h		

Toxicologically Synergistic

No information available

Products

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

 Irritation
 Irritating to eyes and skin

 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	
Methylene blue	7220-79-3	Not listed					

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trihydrate						
FD&C yellow No. 5	1934-21-0	Not listed				
Polyethylene glycol	25322-68-3	Not listed				
Isopropyl alcohol	67-63-0	Not listed				
Ethyl alcohol	64-17-5	Group 1	Not listed	A3	Х	Not listed
Methyl alcohol	67-56-1	Not listed				
Water	7732-18-5	Not listed				

Mutagenic Effects Mutagenic effects have occurred in humans.

Reproductive Effects Adverse reproductive effects have occurred in humans.

Developmental Effects Substances known to cause developmental toxicity in humans.

Teratogenicity Teratogenic effects have occurred in humans.

Central nervous system (CNS) STOT - single exposure

STOT - repeated exposure Kidney Liver Blood

Aspiration hazard No information available

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

delayed **Endocrine Disruptor Information**

No information available

Tumorigenic effects have been reported in experimental animals. The toxicological **Other Adverse Effects**

properties have not been fully investigated. See actual entry in RTECS for complete

information.

12. Ecological information

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Polyethylene glycol	Not listed	LC50 = 10 g/L/96h	Not listed	Not listed
Isopropyl alcohol	1000 mg/L EC50 > 96 h 1000 mg/L EC50 > 72 h	1400000 μg/L LC50 96 h 11130 mg/L LC50 96 h 9640 mg/L LC50 96 h	= 35390 mg/L EC50 Photobacterium phosphoreum 5 min	13299 mg/L EC50 = 48 h 9714 mg/L EC50 = 24 h
Ethyl alcohol EC50 (72h) = 275 mg/l (Chlorella vulgaris)		LC50 = 14200 mg/l/96h	Photobacterium phosphoreum:EC50 = 34634 mg/L/30 min Photobacterium phosphoreum:EC50 = 35470 mg/L/5 min	3 .
Methyl alcohol	Not listed	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	EC50 > 10000 mg/L 24h

Persistence and Degradability Bioaccumulation/ Accumulation No information available No information available.

Mobility

Component	log Pow
Isopropyl alcohol	0.05
Ethyl alcohol	-0.32
Methyl alcohol	-0.74

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.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Methyl alcohol - 67-56-1	U154	=

14. Transport information

DOT

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group III

TDG

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group III

<u>IATA</u>

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3 Packing Group III

IMDG/IMO

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group III

15. Regulatory information

All of the components in the product are on the following Inventory lists:

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
FD&C yellow No. 5	Х	Х	-	217-699-5	-		Χ	Х	Х	Х	Х
Polyethylene glycol	X	X	-	-	-	>1<4.5 mol ethoxyl ated units, consist ing of 50% w/w or more of specie s of the same molecu lar weight		X	X	X	X
Isopropyl alcohol	Х	Х	-	200-661-7	-		Χ	Х	Х	Х	Х
Ethyl alcohol	Х	Х	-	200-578-6	-		X	Х	Χ	Х	Х
Methyl alcohol	X	X	-	200-659-6	-		Χ	Χ	X	Х	Х
Water	Х	Χ	-	231-791-2	-		Χ	-	Χ	Х	Х

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated

polymer made with any free-radical initiator regardless of the amount used.

- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- 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).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)

Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Isopropyl alcohol	67-63-0	2.0 - 2.5	1.0
Methyl alcohol	67-56-1	1.5 - 2.5	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Not applicable

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Methyl alcohol	X		-

OSHA Occupational Safety and Health Administration Not applicable

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	
Methyl alcohol	5000 lb	-	

California Proposition 65

This product contains the following Proposition 65 chemicals: Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Ethyl alcohol	64-17-5	Developmental	-	Developmental Carcinogen
Methyl alcohol	67-56-1	Developmental	-	Developmental

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methylene blue trihydrate	-	-	-	X	-
Isopropyl alcohol	Χ	X	X	-	Х
Ethyl alcohol	X	X	X	X	X
Methyl alcohol	X	X	X	Х	Х
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 Serious risk, Grade 3

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

B2 Flammable liquid
D2A Very toxic materials



16. Other information

Prepared By Regulatory Affairs

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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 on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS