



Safety Data Sheet

FRAGRANCE FREE STERILLIUM RUB SURGICAL HAND SCRUB

Section 1. Identification

Product Identifier	FRAGRANCE FREE STERILLIUM RUB SURGICAL HAND SCRUB		
Synonyms	MSC097057; MSC097058; MSD_SDS0172		
Manufacturer Stock Numbers	MSC097057; MSC097058		
Recommended use	In-door use Disinfectants and general biocidal products. For further information, refer to the product technical data sheet.		
Uses advised against	N/A		
Manufacturer Contact Address	Medline Industries, Inc. One Medline Place Mundelein, IL, 60060 USA		
	Phone	Emergency Phone	Fax
	(800) 633-5463	(800) 424-9300 CHEMTREC	(847) 643-4436
	Website		
	www.Medline.com		

Section 2. Hazards Identification

Classification	EYE DAMAGE/IRRITATION - Category 2B FLAMMABLE LIQUIDS - Category 2
Signal Word	Danger
Pictogram	Two hazard pictograms are shown side-by-side. The first is a red diamond containing a black flame symbol, representing flammable liquids. The second is a red diamond containing a black exclamation mark, representing irritant or harmful substances.
Hazard Statements	Causes eye irritation Highly flammable liquid and vapor

Precautionary Statements

Response

If eye irritation persists: Get medical advice/attention.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Prevention

Ground/bond container and receiving equipment.
Keep away from heat.
Keep container tightly closed.
Take precautionary measures against static discharge.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Wash affected area thoroughly after handling.
Wear protective gloves/eye protection/face protection

Storage

Store in a well-ventilated place. Keep cool.

Disposal

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

Ingredients of unknown toxicity

0%

Hazards not Otherwise Classified

Emergency Overview:

Hazard Summary:
Take measures to prevent the build up of electrostatic charge. According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.

Other Hazards:

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 10.07%

Section 3. Ingredients

CAS	Ingredient Name	Weight %
112-72-1	1-Tetradecanol	1% - 2.5%
71-23-8	1-Propanol	1% - 3%
64-17-5	Ethyl alcohol	70% - 90%

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

General Advice:	Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. If you feel unwell, seek medical advice (show the label where possible).
Eye Contact:	Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses, if worn. If irritation persists, seek medical attention.
Skin Contact:	If irritation develops wash area with water. Get medical attention if irritation persists.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if discomfort continues or if you feel unwell.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if discomfort occurs
Most important symptoms and effects, both acute and delayed:	No information available.
Indication of any immediate medical attention and special treatment needed:	For specialist advice physicians should contact the Poison Information Service.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	In case of fire, use Water spray, Dry Chemical, Alcohol-resistant foam or Carbon Dioxide (CO ₂)
Unsuitable Extinguishing Media	None known
Specific hazards arising from the chemical:	Hazardous combustion products: No hazardous combustion products are known.
Advice for firefighters:	Special Protective Equipment for Firefighters: Use personal protective equipment.
	Additional Information: Standard procedure for chemical fires.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:	Ensure adequate ventilation.
Environmental Precautions:	Should not be released into the environment.
Flammable Small Spill:	Absorb with an inert dry material and place in an appropriate waste disposal container.
Flammable Large Spill:	Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with dry earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed.

Section 7. Handling and Storage

Handling Flammable:	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/ fumes/ vapor/ spray. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice. Do not get in eyes.
Storage Flammable:	Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
Specific End use(s):	No data available.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	1-Tetradecanol	N/A	N/A	N/A
	1-Propanol	100 ppm TWA 200 ppm 500 mg/m3 NIOSH ST 250 ppm 625 mg/m3 NIOSH	200 ppm 500 mg/m3	250 ppm 625 mg/m3
	Ethyl alcohol	STEL: 1,000 ppm Note: Upper respiratory track irritation. Confirmed animal carcinogen with unknown relevance to humans.	TWA: 1,000 ppm 1,900mg/mm3 29 CFR 1910.1000 Table Z-1 Limits	N/A
Personal Protective Equipment	N/A			
Engineering Controls:	No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety. Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.			
Respiratory Protection:	None required under normal use conditions.			
Skin Protection:	None required for normal use. For prolonged exposure, use appropriate goggles, protective clothing and gloves.			
Eye Protection:	None required for normal use. For prolonged exposure, use appropriate goggles, protective clothing and gloves.			
Other protective equipment:	Not expected to be necessary under normal conditions of use. Where exposure cannot be adequately controlled, use appropriate protective clothing or equipment			
Environmental Exposure Controls:	Should not be released into the environment.			
Work/hygienic practices:	Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.			

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Colourless
Odor	Alcohol-like
Odor Threshold	N.D.
Solubility	Completely miscible
Partition coefficient Water/n-octanol	N.D.
VOC%	N/A
Viscosity	N.D.
Specific Gravity	N/A
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	20°C
FP Method	ISO 3679
Ph	No data available
Melting Point	N.D.
Boiling Point	N.D.
Boiling Range	N.D.
LEL	N/A
UEL	N/A
Evaporation Rate	N.D.
Flammability	N.D.
Decomposition Temperature	N.D.
Auto-ignition Temperature	N.D.
Vapor Pressure	No data available
Vapor Density	0,81 g/cm ³ (20°C)

Lower Explosion Limit: Lower flammability limit
62 g/m³
(20°C)

Method: DIN EN 1839

Section 10. Stability and Reactivity

Reactivity: No decomposition if stored and applied as directed.
Chemical Stability: The product is chemically stable.
Possibility of Hazardous Reactions: None reasonably foreseeable.
Conditions to avoid: Keep away from heat. Open flame. Sparks. Direct sunlight.
Incompatibility (Materials to Avoid): None known.
Hazardous Decomposition or Byproducts: N.D.

Section 11. Toxicological Information

Acute Toxicity: Inhalation	Acute Toxicity estimate: > 20 mg/l Test atmosphere: Vapour Method: Calculation method
Skin corrosion/irritation:	Product: Result: No skin irritation
Serious eye damage/Eye irritation:	Product: Result: Mild eye irritation
Respiratory/Skin Sensitization:	Product: No data available.
Germ cell Mutagenicity:	Product: No data available.
Carcinogenicity:	Product: Remarks: This information is not available.
Reproductive Toxicity:	Product: Effects on fertility: Remarks: This information is not available. Effects on fetal development: Remarks: This information is not available.
Specific Target Organ Toxicity - Single exposure:	No information available.
Specific Target Organ Toxicity - Repeated exposure:	No information available.
Repeated dose toxicity:	Remarks: This information is not available.
Aspiration Toxicity:	No data available.
Acute Toxicity:	Components: Ethanol CAS-No. 64-17-5 Acute Oral Toxicity LD50 Oral rat: 6.200 mg/kg Acute Inhalation Toxicity LC50 rat: 124,7 mg/l Exposure time: 4 h Propan-1-ol CAS-No. 71-23-8 Acute Oral Toxicity LD50 Oral rat: 8.000 mg/kg Acute Inhalation Toxicity LC50 rat: > 33,8 mg/l Exposure time: 4h Method: OECD Test Guideline 403 Acute Dermal Toxicity LD50 Dermal rabbit: 4.032 mg/kg Method: Calculation method Tetradecanol CAS-No. 112-72-1

Acute Oral Toxicity
LD50 rat: >5.000 mg/kg
Method: OECD Test Guideline 401

Acute Inhalation Toxicity
LC50 rat: 0,375 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute Dermal Toxicity:
LD50 rabbit: >5.000 mg/kg

Skin corrosion/irritation:

Ethanol CAS-No. 64-17-5
Species: Rabbit
Exposure time: 24 h
Result: Mild skin irritation
Method: Draize Test

Propan-1-ol CAS-No. 71-23-8
Species: Rabbit
Result: No skin irritation

Tetradecanol CAS-No. 112-72-1
Result: No skin irritation
Method: OECD Test Guideline 404

Serious eye damage/Eye irritation:

Ethanol CAS-No. 64-17-5
Species: Rabbit
Exposure Time: 24 h
Result: Mild eye irritation
Method: Draize Test

Propan-1-ol CAS-No. 71-23-8
Species: Rabbit
Result: Irreversible effects on the eye

Tetradecanol CAS-No. 112-72-1
Result: Eye irritation
Method: OECD Test Guideline 405

Respiratory/Skin Sensitization:

Propan-1-ol CAS-No. 71-23-8
Test Method: Maximisation Test
Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.
Method: OECD Test Guideline 406

Tetradecanol CAS-No. 112-72-1
Result: Did not cause sensitisation on laboratory animals.
Method: OECD Test Guideline 406

Germ cell Mutagenicity:

Propan-1-ol CAS-No. 71-23-8
Genotoxicity in vitro
Type: in vitro assay
Result: negative

Section 12. Ecological Information

Toxicity:

Product:

Toxicity to Fish

Remarks: No data available. Product

Toxicity to Daphnia and Other Aquatic Invertebrates

Remarks: No data available. Product

Toxicity to algae:

Remarks: No data available Product

Toxicity to Daphnia and Other Aquatic Invertebrates (Chronic toxicity)

Remarks: No data available Product

Toxicity to bacteria

Remarks: No data available

Components:

Ethanol CAS-No. 64-17-5

Toxicity to fish

LC50 (Fish): 13.000 mg/l

Exposure time: 96 h

Toxicity to Daphnia and Other Aquatic Invertebrates

EC50 (Daphnia magna (Water flea)): 12.340 mg/l

Exposure time: 48h

Toxicity to algae

EC50 (Pseudokirchneriella subcapitata (green algae)): 5.000 mg/l

Exposure Time: 72 h

Propan-1-ol CAS-No. 71-23-8

Toxicity to fish

LC50 (Pimephales promelas (fathead minnow)): 4.555 mg/l

Exposure time: 96 h

Test method: flow-through test

Toxicity to daphnia and other aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 3.644 mg/l

Exposure time: 48 h

Method: DIN 38412

Toxicity to algae:

NOEC (Chlorella vulgaris (Fresh water algae)): 1.150 mg/l

Exposure time: 48 h

Toxicity to bacteria:

IC50 (Bacteria): > 1.000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Tetradecanol CAS-No. 112-72-1

Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Method: ISO 7346/2

Toxicity to daphnia and other aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae:
EC50 (Desmodesmus subspicatus (green algae)): >1 mg/l
Exposure time: 72 h
Test Type: Static test
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
NOEC: 0,0016 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity): 1

Persistence and
degradability:

Product:
Biodegradability
Result: Readily biodegradable
Remarks: The data is estimated based on the component aquatic toxicity
classification.

Bioaccumulative potential:

Product:
Bioaccumulation
Remarks: no data available

Mobility in soil:

Product:
Distribution among environmental compartments:
Remarks: No data available

Results of PBT and vPvB
assessment:

Product:
Assessment:
This substance/mixture contains no components considered to be either persistent,
bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB)
at levels of 0.1% or higher.

Other adverse effects:

Product:
Adsorbed organic bound halogens (AOX)
Remarks: No data available

Section 13. Disposal

Waste Treatment Methods:

Product:
Dispose of as hazardous waste in compliance with local and national regulations.

Waste Code:

The following Waste Codes are only suggestions:

Contaminated packaging:

070601* aqueous washing liquids and mother liquors
Empty remaining contents. Store containers and offer for recycling of material when
in accordance with the local regulations.

Section 14. Transport Information

UN Number 1993
UN Proper Shipping Name FLAMMABLE LIQUID, N.O.S. (ethanol, n-propanol)
DOT Classification 3
Packing Group II
ADR - UN Number: 1993
IMDG - UN Number 1993
IATA - UN Number: 1993
ADR - UN Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethanol, n-propanol)
IMDG - UN Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethanol, n-propanol)
IATA - UN Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethanol, n-propanol)
ADR - Hazard Class: 3
IMDG - Hazard Class: 3
IATA - Hazard Class: 3
ADR - Packaging Group: ADR
Packaging Group: II
Classification Code: F1
Hazard Identification Number: 33
Labels: 3
Tunnel restriction code: D/E

IMDG
Packaging group: II
Labels:3
EmS Number: F-E, S-E

IATA
Packaging Group: II
Labels: 3
Environmental hazards: ADR
Environmentally hazardous: No

IMDG:
Marine pollutant: No

IATA
Environmentally hazardous: No

Section 15. Regulatory Information

SARA 311/312:	N.A.
SARA 302:	N.A.
SARA 313:	N.A.
TSCA:	N.A.
CERCLA Hazardous Substance List:	N.A.
Clean Air Act (CAA) Section 112, 112 (r):	N.A.
New Jersey Right to Know Components:	ETHYL ALCOHOL. PROPYL ALCOHOL.
Massachusetts Right to Know Components:	Ethanol. PROPYL ALCOHOL.
Pennsylvania Right to Know Components:	Ethanol. 1-PROPANOL.
Rhode Island Right to Know Components:	ethyl alcohol. n-propyl alcohol.

Section 16. Other Information

Revision Date 01/18/2016

Legend N.A. - Not Applicable
N.E. - Not Established
N.D. - Not Determined

HMIS (U.S.A.): Health Hazard	1
HMIS (U.S.A.): Flammability	3
HMIS (U.S.A.): Reactivity	1
National Fire Protection Association (U.S.A): Health Hazard	1
National Fire Protection Association (U.S.A): Flammability	3
National Fire Protection Association (U.S.A): Instability Hazard	1

Additional Information

The information contained herein is furnished without warranty or legal responsibility of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees