Safety Data Sheet

Sudan IV Fat Stain, Herxheimer

CAROLINA®
www.carolina.com

Section 1 Product Description

Product Name: Sudan IV Fat Stain, Herxheimer
Recommended Use: Science education applications
Synonyms: Sudan IV Fat Stain
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER

Highly flammable liquid and vapor. Harmful if swallowed, in contact with skin or if inhaled. Causes eye irritation. May cause drowsiness or dizziness. May cause cancer. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life.

GHS Classification:
Carcinogenicity Category 1A, Flammable Liquid Category 2, Serious Eye Damage/Eye Irritation Category 2B, Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2, Hazardous to the aquatic environment - Acute Category 2, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3, Acute Toxicity - Inhalation Dust / Mist Category 4, Acute Toxicity - Dermal Category 4, Acute Toxicity - Oral Category 4

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%
Acetone	67-64-1	49.97
Ethyl alcohol	64-17-5	28.53
Water	7732-18-5	16.73
Isopropyl Alcohol	67-63-0	2.99
Methanol	67-56-1	1.43
Methyl Isobutyl Ketone	108-10-1	0.3
Sudan IV	85-83-6	0.05

Section 4 First Aid Measures

Emergency and First Aid Procedures
Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
Skin Contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN: Wash with plenty of soap and water.
Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Section 5 Firefighting Procedures

Extinguishing Media:	Water fog in flooding quantities. Apply water from as far a distance as possible. Use dry chemical, CO2 or appropriate foam.
Fire Fighting Methods and Protection:	Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards:	Fire or excessive heat may produce hazardous decomposition products. Vapors may travel back to ignition source. Closed Containers exposed to heat may explode.
Hazardous Combustion Products:	Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Ventilate the contaminated area.
Methods for Clean-up	Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

Section 7 Handling and Storage

Handling:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Storage:	Keep container tightly closed. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Suitable for any general chemical storage.
Storage Code:	Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

Section 8 Protection Information

	ACGIH		OSHA PEL	
Chemical Name	**(TWA)**	**(STEL)**	**(TWA)**	**(STEL)**
Acetone	500 ppm TWA	750 ppm STEL	1000 ppm TWA; 2400 mg/m3 TWA	N/A
Ethyl alcohol	N/A	1000 ppm STEL	1000 ppm TWA; 1900 mg/m3 TWA	N/A
Isopropyl Alcohol	200 ppm TWA	400 ppm STEL	400 ppm TWA; 980 mg/m3 TWA	N/A
Methanol	200 ppm TWA	250 ppm STEL	200 ppm TWA; 260 mg/m3 TWA	N/A
Methyl Isobutyl Ketone	20 ppm TWA	75 ppm STEL	100 ppm TWA; 410 mg/m3 TWA	N/A
Sudan IV	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: Respiratory protection will be required when handling this product. Use respirators only if ventilation cannot be used to eliminate symptoms or reduce the exposure to below acceptable levels.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: No information available

Section 9 Physical Data

Formula: See Section 3
Molecular Weight: No data available
Appearance: Dark Red Colorless Liquid
Odor: Strong Fruity
Odor Threshold: No data available
pH: No data available
Melting Point: No data available
Boiling Point: No data available
Flash Point: No data available
Flammable Limits in Air: No data available

Vapor Pressure: No data available
Evaporation Rate (BuAc=1): No data available
Vapor Density (Air=1): No data available
Specific Gravity: No data available
Solubility in Water: Soluble
Log Pow (calculated): No data available
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: 83%

Section 10 Reactivity Data

Reactivity: Not generally reactive under normal conditions.

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Temperatures above flash point in combination with sparks, open flames, or other sources of ignition. Sparks, open flame, other ignition sources, and elevated temperatures. Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition.

Incompatible Materials: Caustics (bases), Peroxides, Strong acids, Oxidizing materials, Halogens, Water-reactive materials, Strong oxidizing agents, Acids, Strong reducing agents, Magnesium

Hazardous Decomposition Products: Carbon oxides

Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry Inhalation, Ingestion, and Skin contact., Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): Eye disorders, Dizziness, Depressed Activity, Central Nervous System Depression
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Acetone	67-64-1	Oral LD50 Mouse 3000 mg/kg	Dermal LD50 Rabbit 20000 mg/kg	Inhalation LC50 (8h) Rat 50.1 MG/L
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
Isopropyl Alcohol	67-63-0	Oral LD50 Rat 5045 mg/kg Oral LD50 Mouse 3600 mg/kg		INHALATION LC50 Rat 16000 PPM 8H
Methanol	67-56-1	Oral LD50 Mouse 7300 mg/kg		INHALATION LC50 Rat 64000 PPM 4H
Sudan IV	85-83-6			

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Acetone	67-64-1	Not listed	Not listed	Not listed
Ethyl alcohol	64-17-5	Listed	Listed	Listed
Isopropyl Alcohol	67-63-0	Listed	Not listed	Not listed
Methanol	67-56-1	Not listed	Not listed	Not listed
Methyl Isobutyl Ketone	108-10-1	Listed	Not listed	Listed
Sudan IV	85-83-6	Not listed	Not listed	Not listed

Chronic Effects:
Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: Central Nervous System, Cardiovascular system, Eyes
Chronic: Male Reproductive System, Eyes

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: Biodegradation
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Acetone	67-64-1	96 HR LC50 LEPOMIS MACROCHIRUS 8300 MG/L 96 HR LC50 PIMEPHALES PROMELAS 6210 - 8120 MG/L [STATIC] 96 HR LC50 ONCORHYNCHUS MYKISS 4.74 - 6.33 ml/l 48 HR EC50 DAPHNIA MAGNA 12600 - 12700 MG/L 48 HR EC50 DAPHNIA MAGNA 10294 - 17704 MG/L [STATIC]
Ethyl alcohol	64-17-5	96 HR LC50 PIMEPHALES PROMELAS 13400 - 15100 MG/L [FLOW-THROUGH] 96 HR LC50 PIMEPHALES PROMELAS > 100 MG/L [STATIC] 96 HR LC50 ONCORHYNCHUS MYKISS 12 - 16 ML/L [STATIC] 48 HR EC50 DAPHNIA MAGNA 2 MG/L [STATIC] 24 HR EC50 DAPHNIA MAGNA 10800 MG/L 48 HR LC50 DAPHNIA MAGNA 9268 - 14221 MG/L
Water	7732-18-5	No data available
Isopropyl Alcohol	67-63-0	96 HR LC50 LEPOMIS MACROCHIRUS > 1400000 MG/L 96 HR LC50 PIMEPHALES PROMELAS 11130 MG/L [STATIC] 96 HR LC50 PIMEPHALES PROMELAS 9640 MG/L [FLOW-THROUGH] 48 HR EC50 DAPHNIA MAGNA 13299 MG/L 72 HR EC50 DESMODESMUS SUBSPICATUS > 1000 MG/L 96 HR EC50 DESMODESMUS SUBSPICATUS > 1000 MG/L
Methanol	67-56-1	96 HR LC50 LEPOMIS MACROCHIRUS 13500 - 17600 MG/L [FLOW-THROUGH] 96 HR LC50 ONCORHYNCHUS MYKISS 18 - 20 ML/L [STATIC] 96 HR LC50 ONCORHYNCHUS MYKISS 19500 - 20700 MG/L [FLOW-THROUGH] 96 HR LC50 PIMEPHALES PROMELAS > 100 MG/L [STATIC] 96 HR LC50 PIMEPHALES PROMELAS 28200 MG/L [FLOW-THROUGH]
Methyl Isobutyl Ketone	108-10-1	96 HR LC50 PIMEPHALES PROMELAS 496 - 514 MG/L [FLOW-THROUGH] 48 HR EC50 DAPHNIA MAGNA 170 MG/L 96 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA 400 MG/L
Sudan IV	85-83-6	

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): If discarded, this product is considered a RCRA ignitable waste, D001.

Section 14 Transport Information

Ground - DOT Proper Shipping Name:
UN1993
Flammable Liquid, N.O.S. (Acetone, Ethanol, 2-Propanol, Methanol)
Class 3
P.G. II

Air - IATA Proper Shipping Name:
UN1993
Flammable Liquid, N.O.S. (Acetone, Ethanol, 2-Propanol, Methanol)
Class 3
P.G. II

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Acetone	67-64-1	No	No	5000 lb final RQ; 2270 kg final RQ	No	No
Isopropyl Alcohol	67-63-0	Isopropyl alcohol	No	No	No	No
Methanol	67-56-1	Methanol	No	5000 lb final RQ; 2270 kg final RQ	No	No
Methyl Isobutyl Ketone	108-10-1	Methyl isobutyl ketone	No	5000 lb final RQ; 2270 kg final RQ	No	No
Sudan IV	85-83-6	No	No	No	No	No

California Prop 65:

WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

Section 16 Additional Information

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency for Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
IDLH	Immediately dangerous to life and health