

Zip-Chem Products
Sur Prep 5672 Aerosol
Material Safety Data Sheet

Section: 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Sur Prep 5672 Aerosol **For Additional Product Information:** 1 (800) 648-2661

Chemical Family: Contact Cleaner & Degreaser

Manufacturer: Zip-Chem Products **In Emergency:** 1 (800) 424-9300
 400 Jarvis Drive
 Morgan Hill, CA 95037

Section: 2 COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

FOR EXPOSURE LIMITS SEE SECTION 8
 FOR OTHER TOXICOLOGICAL INFORMATION SEE SECTION 11

HAZARDOUS INGREDIENTS

Descriptive Name	CAS Number	Percentage Range	Hazard Type per CFR 1910.1200	Exposure Limits	LD ₅₀	LC ₅₀	NTP, IARC, Or OSHA Carcinogen
Methyl Nonafluoroisobutyl ether	163702-08-7	<1%	Not Hazardous	750 ppm	Not Determined	Not Determined	No
Methyl Nonafluorobutyl ether	163702-07-6	<1%	Not Hazardous	750 ppm	Not Determined	Not Determined	No
1,2-Trans-Dichloroethylene	156-60-5	40%	Not Hazardous	OSHA TWA: 200 ppm ACGIH TWA: 200ppm	Not Determined	Not Determined	No
Ethyl Nonafluoroisobutyl Ether	163702-06-5	7%	Not Hazardous	200 ppm	Not Determined	Not Determined	No
Ethyl Nonafluorobutyl Ether	163702-05-4	5%	Not Hazardous	200 ppm	Not Determined	Not Determined	No
1,1-Difluoroethane	75-37-6	45%	Physical Hazard: Flammable Gas	ACGIH TLV- 1000 ppm	Not Determined	>200000 ppm	No

Section: 3 HAZARDS IDENTIFICATION

PHYSICAL HAZARDS:

ACUTE HEALTH EFFECTS: Breathing high concentrations of vapors may cause temporary nervous system depression with anesthetic effects such as dizziness, headache, or nausea.

CHRONIC HEALTH EFFECTS: Prolonged exposure to extremely high concentrations of the vapors may lead to narcosis, cardiac irregularities, unconsciousness or death.

IATA CLASSIFICATION: Not flammable according to IATA 3.2.5.2.a & b.

FLAME PROJECTION TEST: Not flammable according to the flame projection test (IATA 3.2.5.2.a, ASTM D 3065, FSHA Sec. 1500.45)

HMS RATINGS:

Health: 2
 Flammability: 0
 Reactivity: 0
 Protective Equipment: E

WHMIS CLASS AND DIVISION: Not available

TDG CLASS AND DIVISION: Not available

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Section: 4 FIRST AID MEASURES

EYES: May be an eye irritant. Flush immediately with water for 15 minutes and take to physician.
SKIN: Wash affected area, treat for frostbite if necessary, and consult a physician if irritation persists.
INGESTION: Call a physician and/or transport to emergency facility immediately. Do not induce vomiting so as to avoid aspiration of material into the lungs.
INHALATION: Remove from exposure and restore breathing. Seek medical attention.

Section: 5 FIRE AND EXPLOSION HAZARDS

FLAMMABILITY DATA:

FLAMMABLE/COMBUSTIBLE/PYROPHORIC: Not flammable
FLASH POINT AND METHOD: None
AUTOIGNITION TEMPERATURE: Not established

FLAMMABLE LIMITS AT NORMAL TEMPERATURE AND PRESSURE (PERCENT VOLUME IN AIR):

LEL: 6.7% **UEL:** 13.7%

NFPA WAREHOUSE LEVEL (per NFPA 30B): 1

EXPLOSION DATA:

SENSITIVITY TO MECHANICAL IMPACT: Not Sensitive
SENSITIVITY TO STATIC DISCHARGE: Not Sensitive

EXTINGUISHING MEDIA: Foam, Alcohol Foam, CO₂, Dry Chemical, Water Fog

FIRE FIGHTING TECHNIQUES AND COMMENTS: Use standard firefighting techniques to fight fires involving this material

HAZARDOUS COMBUSTION PRODUCTS: Perfluorinated Acid Fluorides

Section: 6 ACCIDENTAL SPILL/RELEASE INFORMATION

FOR ALL TRANSPORTATION ACCIDENTS CALL CHEMTREC AT 1-800-424-9300.

REPORTABLE QUANTITY: Not Applicable

SPILL MITIGATION PROCEDURES:

Stop source of spill as soon as possible and notify appropriate personnel. Burm around spill area to prevent spill from spreading. Ventilate area. Do not flush into sewers.

AIR RELEASE:

Vapors may be suppressed by use of water fog or spray. Contain all liquid for treatment or neutralization.

WATER RELEASE:

Contain liquid for treatment.

LAND SPILL:

Create a trench to contain materials. Spilled materials may be contained using sand, clay, earth or a commercial absorbent. Do not place materials back in their original container.

SPILL RESIDUES:

Dispose of per guidelines under section 13, DISPOSAL CONSIDERATIONS.

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PERSONNEL PROTECTION FOR EMERGENCY SPILL AND FIRE FIGHTING SITUATIONS:

Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to gloves, apron, and safety glasses.

Section: 7 HANDLING AND STORAGE

DO NOT TAKE INTERNALLY. AVOID CONTACT WITH EYES AND CLOTHING. UPON CONTACT WITH SKIN OR EYES WASH OFF WITH WATER.

STORAGE CONDITIONS:

Store in a cool, dry, well-ventilated place.

STORE AT TEMPERATURES BELOW 120°F. DO NOT STORE OR USE NEAR HEAT, SPARKS, OR FLAMES. AVOID BREATHING VAPORS. VAPORS ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW AREAS AND OTHER CONFINED AREAS.

PRODUCT STABILITY AND COMPATIBILITY:

SHELF LIFE LIMITATIONS: 36 months from date of shipment

INCOMPATIBLE MATERIALS FOR STORAGE OR TRANSPORT: None known

INCOMPATIBLE MATERIALS FOR PACKAGING: N/A

Section: 8 PREVENTIVE MEASURES

PERSONAL PROTECTION FOR ROUTINE USE OF THIS PRODUCT:

RESPIRATORY PROTECTION: Breathing apparatus recommended if exposure to product will exceed recommended exposure limit. Refer to NIOSH publication No. 89-105 and NIOSH No. 87-116. See OSHA requirement under 29 CFR 1910.1025 and 29 CFR 1910.134.

SKIN AND EYE PROTECTIVE EQUIPMENT: Impervious gloves are recommended to prevent skin contact. Safety glasses to prevent eye contact are recommended.

ENGINEERING CONTROLS

VENTILATION: Local or mechanical to keep Section II ingredients below their exposure limits.

EQUIPMENT SPECIFICATIONS (WHEN APPLICABLE):

RESPIRATOR TYPE: None required

PROTECTIVE CLOTHING TYPE: (This includes: gloves, boots, apron, protective suit):

Impervious gloves, safety glasses

WASTE DISPOSAL:

Spilled material collected in absorbent material should be transferred to steel disposal or recovery drums. If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste under Subpart D. If this product becomes a waste, it should be disposed of in accordance with local, state and federal regulations by incineration.

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Section: 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE(gas, liquid, solid): Liquid
APPEARANCE: Clear and colorless
ODOR: Slight ethereal odor
FREEZING POINT: Not Determined
BOILING RANGE: Not Determined
DECOMPOSITION TEMPERATURE: Not Determined
SPECIFIC GRAVITY (H2O=1): 1.3
BULK DENSITY: 10.8 lbs/gal @ 70 Deg F
pH @ 25 Deg C: Not Applicable
VAPOR PRESSURE @ 25 Deg C: Not Determined
SOLUBILITY IN WATER: Negligible
VOLATILES, PERCENT BY WEIGHT: 100%
EVAPORATION RATE: Not Determined
VAPOR DENSITY: Heavier than air
VOLATILE ORGANIC COMPOUND 511
(less H₂O and exempt solvents) G/L:

Section: 10 STABILITY AND REACTIVITY DATA

CONDITIONS UNDER WHICH THIS PRODUCT MAY BE UNSTABLE:

MECHANICAL SHOCK OR IMPACT: No
ELECTRICAL (STATIC) DISCHARGE: No
HAZARDOUS POLYMERIZATION: Will Not Occur
INCOMPATIBLE MATERIALS: Alkali or alkaline earth metals-powdered Al, Zn, Be, etc.
CONDITIONS OF REACTIVITY: None known
HAZARDOUS DECOMPOSITION PRODUCTS: Perfluorinated Acid Fluorides

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Section: 11 TOXICOLOGICAL PROPERTIES

ROUTES OF ABSORPTION

Inhalation of high concentrations may cause heart irregularities, unconsciousness, or death.

WARNING STATEMENTS AND WARNING PROPERTIES:

DO NOT TAKE INTERNALLY. MAY CAUSE FROSTBITE.

SIGNS, SYMPTOMS AND EFFECTS OF EXPOSURE

INHALATION

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

SKIN

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

EYE

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

INGESTION

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

INTERACTIONS WITH OTHER CHEMICALS THAT ENHANCE TOXICITY: Do not use epinephrine in conjunction with this material.

TARGET ORGAN: Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY: There are no known or reported effects on reproductive function or fetal development.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

MUTAGENICITY: This product is not known to be mutagenic.

EXPOSURE LIMITS: Not Determined

Section: 12 ECOLOGICAL INFORMATION

AQUATIC TOXICITY: Testing results indicate that ethyl nonafluoroisobutyl ether, ethyl nonafluorobutyl ether, methyl nonafluoroisobutyl ether and methyl nonafluorobutyl ether have insignificant toxicity to aquatic organisms at their saturation point (Lowest LC50, EC50, or IC50 > substance water solubility). 1,2-Trans-dichloroethylene is harmful to aquatic organisms (10 mg/L < Lowest LC50, EC50, or IC50 < 100 mg/L). These compounds are highly volatile and have high Henry's Law constants and are thus expected to move rapidly through vaporization from solution in an aquatic compartment or from a soil surface in a terrestrial compartment to the atmosphere.

BIOCONCENTRATION: Ethyl nonafluoroisobutylether, ethyl nonafluorobutylether, methyl nonafluoroisobutylether, and methyl nonafluorobutylether are highly insoluble and very volatile. Bioconcentration is therefore unlikely and not expected as they are not likely to enter aqueous waste streams from typical uses and disposal, or, in the case of a spill, remain in the aquatic or terrestrial compartments. The high potential for these components to move from aquatic or terrestrial environments to the atmosphere indicates bioconcentration is unlikely to occur as they are not expected to be bioavailable. Thus, emphasis has been placed on the atmospheric fate.

1,2-Trans-dichloroethylene has an octanol/water partition coefficient of <3

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indicating it is unlikely to bioconcentrate.

Section: 13 DISPOSAL CONSIDERATIONS

Spilled material collected in absorbent material should be transferred to steel disposal or recovery drums.

If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste under Subpart D.

If this product becomes a waste, it should be disposed of in accordance with local, state and federal regulations by incineration.

Section: 14 TRANSPORT INFORMATION

DOT SHIPPING NAME: Consumer Commodity
 DOT HAZARD CLASS: ORM-D
 DOT PACKING GROUP: None
 DOT REPORTABLE QUANTITY: None found in 49 CFR 172.101

Section: 15 REGULATORY INFORMATION

INTERNATIONAL

All components of this product are listed on the following inventories: MITI (Japan) EINECS (EEC) DSL (Canada).

FEDERAL

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The components of this product are listed on the TSCA inventory.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT TITLE III (SARA):

Section 302/304

Requires emergency planning based on 'Threshold Planning Quantities' (TPQs), and release reporting based on Reportable Quantities (RQs) of 'Extremely Hazardous Substances' (EHS) listed in Appendix A of 40 CFR 355. There are no components of this material with known CAS numbers that are on the EHS list.

Section 311 & 312

Based upon the available information, this material and/or components is classified as a health and/or physical hazards according to Section 311 & 312:

Descriptive Name	CAS Number	Percentage Range	Hazard Type per CFR 1910.1200	Exposure Limits	LD ₅₀	LC ₅₀	NTP, IARC, Or OSHA Carcinogen
1,2-Trans-Dichloroethylene	156-60-5	40%	Not Hazardous	OSHA TWA: 200 ppm ACGIH TWA: 200ppm	Not Determined	Not Determined	No
1,1-Difluoroethane	75-37-6	45%	Physical Hazard: Flammable Gas	ACGIH TLV-1000 ppm	Not Determined	>200000 ppm	No

Section 313

This material does not contain chemicals with known CAS numbers subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

This material does not contain chemical(s) with known CAS numbers classified as hazardous substances subject to the reporting requirements of CERCLA (40 CFR 302) and to the release reporting requirements of SARA (Section 302) based on reportable quantities (RQs):

OSHA Regulations

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'Chemical-specific' U. S. Occupational Safety and Health Administration (OSHA) regulations (1910.1002 to 1910.1050) presented under 29 CFR 1910 do not apply to this material or its components.

Other EPA Regulations

No additional information available.

State

California Safe Drinking Water and Toxic Enforcement Act of 1988- Proposition 65

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels that would be subject to the proposition

California South Coast Air Quality Management District (SCAQMD) Rule 443.1 (VOC's)

A Volatile Organic Compound (VOC) is any volatile compound of carbon excluding methane, carbon monoxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, 1,1,1-trichloroethane, methylene chloride, FC-23, CFC-113, CFC-12, CFC-11, CFC-22, CFC-114, and CFC-115. By this definition, this is a VOC material.

Massachusetts Right to Know Substance List (MSL) [105 CMR 670.000]

Hazardous Substances (MSL-HS) on the MSL must be identified when present in materials at levels greater than state specified criterion. The criterion is: $\geq 1\%$. Components with CAS numbers present in this material at a level which could require reporting under the statute are:

<u>Chemical</u>	<u>CAS Number</u>
1,2-Trans-Dichloroethylene	156-60-5

Extraordinarily Hazardous Substances (MSL-EHS) on the MSL must be identified when present in materials at levels greater than state specified criterion. The criterion is $\geq 0.0001\%$. There are no materials present that could require reporting under this statute.

Pennsylvania Right to Know Hazardous Substance List

Hazardous Substances (PA-HS) must be identified when present in materials at levels greater than the state specified criterion. The criterion is $\geq 1\%$. Components with CAS numbers present in this material at a level that could require reporting under the statute are:

<u>Chemical</u>	<u>CAS Number</u>
1,2-Trans-Dichloroethylene	156-60-5

Section: 16 PREPARATION INFORMATION
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REVISION INFORMATION:	Added information to Section 12
PREPARED BY:	J Smith
APPROVAL DATE:	11/8/05
SUPERSEDES:	7/19/05

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