

Material Safety Data Sheet
Sutherland Welles Ltd.®
P.O. Box 180
North Hyde Park, VT 05665

SECTION 1 - PRODUCT IDENTIFICATION

MANUFACTURER: SUTHERLAND WELLES LTD.® **EMERGENCY PHONE #:** (800) 322-1245 **FAX:** (802) 635-2722

MANUFACTURER ADDRESS: P.O. BOX 180, 5575 ROUTE 100 NORTH, NORTH HYDE PARK, VT. 05665

TRADE NAME: DI-CITRUSOL™

CHEMICAL FAMILY: TERPENE HYDROCARBON

FORMULA: DI-CITRUSOL™

UN #- 2319

PACKING GROUP III

SECTION 2 - HAZARD IDENTIFICATION

THIS MATERIAL IS CONSIDERED TO BE HAZARDOUS ACCORDING TO REGULATORY GUIDELINES (SEE (M)SDS SECTION 15).

POTENTIAL PHYSICAL / CHEMICAL EFFECTS

COMBUSTIBLE. MATERIAL CAN RELEASE VAPORS THAT READILY FORM FLAMMABLE MIXTURES. VAPOR ACCUMULATION COULD FLASH AND/OR EXPLODE IF IGNITED. MATERIAL CAN ACCUMULATE STATIC CHARGES WHICH MAY CAUSE AN IGNITION.

POTENTIAL HEALTH EFFECTS

REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. IF SWALLOWED, MAY BE ASPIRATED AND CAUSE LUNG DAMAGE. MAY BE IRRITATING TO THE EYES, NOSE, THROAT, AND LUNGS.



GHS08 · SIGNAL WORD: WARNING

P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES.

H320 CAUSES EYE IRRITATION

P264 WASH THOROUGHLY AFTER HANDLING.

P280 WEAR PROTECTIVE GEAR. PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION.

P305+P351+P338 IF IN YES: RINSE CAUTIOUSLY FOR SEVERAL MINUTES.REMOVE CONTACT LENSES, IF PRESENT, AND CONTINUE RINSING.

HMIS RANKING:

HEALTH:.....1

FIRE:2

REACTIVITY:. 0

HMIS CODE:

0= LEAST

1= SLIGHT

2= MODERATE

3= HIGH

4= EXTREME

NOTE: THIS MATERIAL SHOULD NOT BE USED FOR ANY OTHER PURPOSE THAN THE INTENDED USE IN SECTION 1 WITHOUT EXPERT ADVICE. HEALTH STUDIES HAVE SHOWN THAT CHEMICAL EXPOSURE MAY CAUSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON.

SECTION 3 – COMPOSITION INFORMATION

NAME:	% BY WGT:	CAS # :	TLV:
DI-CITRUSOL™	100%	5989-27-5	UNDETERMINED

SECTION 4 – FIRST AID MEASURES

EYE CONTACT:

FLUSH WITH WATER FOR 15 MINUTES. SEE DOCTOR.

INHALATION:

MOVE TO FRESH AIR. SEE DOCTOR.

SKIN CONTACT:

WASH WITH SOAP AND WATER. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.

INGESTION:

CALL A DOCTOR IMMEDIATELY. DO NOT INDUCE VOMITING.

NOTE TO PHYSICIAN: PERFORM GASTRIC LAVAGE IN ACCORDANCE WITH PROCEDURE FOR INGESTION OF PETROLEUM PRODUCTS.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 113°F >400 ASTM-D-56

EXTINGUISHING MEDIA: CARBON DIOXIDE, FOAM, OR DRY CHEMICAL

SPECIAL FIRE FIGHTING PROCEDURE: COOL CLOSED CONTAINERS EXPOSED TO HEAT BY WATER.
USUAL PRECAUTIONS FOR COMBUSTIBLE LIQUIDS.

SECTION 6 – ACCIDENTAL RELEASE (SPILL) MEASURES

STEPS TO BE TAKEN IN CASE OF SPILL OR LEAKAGE:

SMALL SPILLS - WIPE UP WITH RAGS.

LARGE SPILLS - USE NON-FLAMMABLE ABSORBENT. KEEP AWAY FROM FLAME OR SPARK.

WASTE DISPOSAL METHOD: LANDFILL OR INCINERATE IN ACCORDANCE WITH ALL LOCAL STATE AND FEDERAL REGULATIONS.

EYE CONTACT: MODERATELY IRRITATING TO THE EYES. FLUSH WITH WATER.

SKIN CONTACT: PROLONGED OR REPEATED CONTACT WITH SKIN CAN BE MILDLY IRRITATING AND RESULT IN DRYING AND IRRITATION, WASH WITH SOAP AND WATER.

INHALATION: HIGH VAPOR CONCENTRATIONS MAY IRRITATE RESPIRATORY AIRWAYS, NOSE AND THROAT.

INGESTION: DO NOT INDUCE VOMITING! SEEK MEDICAL ATTENTION.

NOTE TO PHYSICIAN: PERFORM GASTRIC LAVAGE IN ACCORDANCE WITH PROCEDURE FOR INGESTION OF PETROLEUM PRODUCTS.

SECTION 7 - HANDLING AND STORAGE

STABILITY: STABLE UNDER MOST CONDITIONS.

CONDITIONS TO AVOID: EXCESSIVE HEAT

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZING AGENTS AND ACIDS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE IS A PRODUCT OF INCOMPLETE COMBUSTION.

HAZARDOUS POLYMERIZATION: NONE.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING : TO BE HANDLED WITH GOOD INDUSTRIAL PRACTICE.

OTHER PRECAUTIONS: NONE.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION



RESPIRATORY PROTECTION: USE AIR SUPPLIED MASKS IN CLOSED AND CONFINED SPACES.
VENTILATION:
LOCAL EXHAUST: YES, IN ENCLOSED AREAS.
MECHANICAL: IN ENCLOSED AREAS
SPECIAL:
OTHER:



PROTECTIVE RUBBER OR PLASTIC GLOVES: YES



EYE PROTECTION SPLASH PROOF GLASSES OR GOGGLES: YES

OTHER PROTECTIVE EQUIPMENT AS REQUIRED BY YOUR COMPANY: NONE.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 310°F 154°C
ODOR: MILD CITRUS
APPEARANCE: CLEAR

SPECIFIC GRAVITY: .85
PERCENT VOLATILE: 100 % BY WEIGHT

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: STABLE UNDER MOST CONDITIONS.
CONDITIONS TO AVOID: EXCESSIVE HEAT
INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZING AGENTS AND ACIDS

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

ROUTE OF EXPOSURE	CONCLUSION / REMARKS
INHALATION:	HIGH VAPOR CONCENTRATIONS MAY IRRITATE RESPIRATORY AIRWAYS, NOSE AND THROAT
TOXICITY	MINIMALLY TOXIC, BASED ON TEST DATA FOR STRUCTURALLY SIMILAR MATERIALS
IRRITATION	NEGLECTIBLE HAZARD AT AMBIENT/NORMAL HANDLING TEMPERATURES.

INGESTION:	
TOXICITY - LD50>5000 mg/kg	MINIMALLY TOXIC. BASED ON TEST DATA FOR STRUCTURALLY SIMILAR MATERIALS

SKIN:	
TOXICITY – LD50>5000 mg/kg	MINIMALLY TOXIC. BASED ON TEST DATA FOR STRUCTURALLY SIMILAR MATERIALS
IRRITATION	MILDLY IRRITATING TO SKIN WITH PROLONGED EXPOSURE

EYE:	
IRRITATION	MAY CAUSE MILD, SHORT-LASTING DISCOMFORT TO EYES

SECTION 12 – ECOLOGICAL INFORMATION

THE INFORMATION GIVEN IS BASED ON DATA AVAILABLE FOR THE MATERIAL, THE COMPONENTS OF THE MATERIAL, AND SIMILAR MATERIALS.

ECOTOXICITY

MATERIAL – PRODUCT IS A MARINE POLLUTANT AND TOXIC TO AQUATIC ORGANISMS

PERSISTENCE AND DEGRADABILITY

BIODEGRADATION:

MATERIAL – 92.7% IN 21 DAYS PER METHOD CEC L33T82

HYDROLYSIS:

MATERIAL – TRANSFORMATION DUE TO HYDROLYSIS NOT EXPECTED TO BE SIGNIFICANT

PHOTOLYSIS:

MATERIAL – TRANSFORMATION DUE TO PHOTOLYSIS NOT EXPECTED TO BE SIGNIFICANT

ATMOSPHERIC OXIDATION:

MATERIAL – EXPECTED TO DEGRADE RAPIDLY IN AIR

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL RECOMMENDATIONS BASED ON MATERIAL AS SUPPLIED. DISPOSAL MUST BE IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS, AND MATERIAL CHARACTERISTICS AT TIME OF DISPOSAL.

DISPOSAL RECOMMENDATIONS

SUPERVISED INCINERATION AT VERY HIGH TEMPERATURES TO PREVENT FORMATION OF UNDESIRABLE COMBUSTION PRODUCTS.

LANDFILL IN ACCORDANCE WITH ALL LOCAL STATE AND FEDERAL REGULATIONS.

REGULATORY DISPOSAL INFORMATION

RCRA INFORMATION: DISPOSAL OF UNUSED PRODUCT MAY BE SUBJECT TO RCRA REGULATIONS (40 CFR 261). DISPOSAL OF THE UNUSED PRODUCT MAY ALSO BE REGULATED DUE TO IGNITABILITY, CORROSIVITY, REACTIVITY OR TOXICITY AS DETERMINED BY THE TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP). POTENTIAL RCRA CHARACTERISTICS: **IGNITABILITY**

EMPTY CONTAINERS

EMPTY CONTAINERS SHOULD BE TAKEN FOR RECYCLING, RECOVERY, OR DISPOSAL THROUGH SUITABLY QUALIFIED OR LICENSED CONTRACTORS AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS.

SECTION 14 – TRANSPORT INFORMATION

LAND (DOT)

PROPER SHIPPING NAME: TERPENE HYDROCARBONS, N.O.S.

HAZARD CLASS & DIVISION: COMBUSTIBLE LIQUID

ID NUMBER: 2319

PACKING GROUP: III

ERG NUMBER: 128

LABEL(S): NONE

TRANSPORT DOCUMENT NAME: UN2319, TERPENE HYDROCARBONS, N.O.S., COMBUSTIBLE LIQUID, PG III

FOOTNOTE: THE FLASHPOINT OF THIS MATERIAL IS GREATER THAN 100F. REGULATORY CLASSIFICATION OF THIS MATERIAL VARIES. DOT: FLAMMABLE LIQUID OR COMBUSTIBLE LIQUID. OSHA: COMBUSTIBLE LIQUID. IATA/IMO: FLAMMABLE LIQUID. THIS MATERIAL IS NOT REGULATED UNDER 49 CFR IN A CONTAINER OF 119 GALLON CAPACITY OR LESS WHEN TRANSPORTED SOLELY BY LAND, AS LONG AS THE MATERIAL IS NOT A HAZARDOUS WASTE, A MARINE POLLUTANT, OR SPECIFICALLY LISTED AS A HAZARDOUS SUBSTANCE.

LAND (TDG)

PROPER SHIPPING NAME: TERPENE HYDROCARBONS, N.O.S.

HAZARD CLASS & DIVISION: 3

ID NUMBER: 2319

PACKING GROUP: III

FOOTNOTE: IN CONTAINERS OF 454 LITRES OR LESS THIS MATERIAL IS EXEMPT FROM TDG REGULATIONS.

SEA (IMDG)**PROPER SHIPPING NAME:** TERPENE HYDROCARBONS, N.O.S.**HAZARD CLASS & DIVISION:** COMBUSTIBLE LIQUID**EMS NUMBER:** F-E, S-E**UN NUMBER:** 2319**PACKING GROUP:** III**LABEL(S):** 3**TRANSPORT DOCUMENT NAME:** UN2319, TERPENE HYDROCARBONS, N.O.S. COMBUSTIBLE LIQUID, PG III, (40°C c.c.)**AIR (IATA)****PROPER SHIPPING NAME:** TERPENE HYDROCARBONS, N.O.S..**HAZARD CLASS & DIVISION:** COMBUSTIBLE LIQUID**UN NUMBER:** 2319**PACKING GROUP:** III**LABEL(S) / MARK(S):** 3**TRANSPORT DOCUMENT NAME:** UN2319 TERPENE HYDROCARBONS, N.O.S., COMBUSTIBLE LIQUID, PG III**SECTION 15 – REGULATORY INFORMATION****OSHA HAZARD COMMUNICATION STANDARD:** WHEN USED FOR ITS INTENDED PURPOSE, THIS MATERIAL IS CLASSIFIED AS HAZARDOUS IN ACCORDANCE WITH OSHA 29CFR 1910.1200**NATIONAL CHEMICAL INVENTORY LISTING:** AICS, IECSC, DSL, EINECS, ENCS, KECI, PICCS, TSCA**EPCRA:** THIS MATERIAL CONTAINS NO EXTREMELY HAZARDOUS SUBSTANCES.**SARA (311/312) REPORTABLE HAZARD CATEGORIES:** FIRE**SARA (313) TOXIC RELEASE INVENTORY:** THIS MATERIAL CONTAINS NO CHEMICALS SUBJECT TO THE SUPPLIER NOTIFICATION REQUIREMENTS OF THE SARA 313 TOXIC RELEASE PROGRAM.**THE FOLLOWING INGREDIENTS ARE CITED ON THE LISTS BELOW:**

<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>LIST CITATIONS</u>
TEREPENE HYDROCARBON	5989-27-5	17, 18, 19

-REGULATORY LISTS SEARCHED-

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

CODE KEY: CARC=CARCINOGEN; REPRO=REPRODUCTIVE**SECTION 16 – OTHER INFORMATION****THIS MATERIAL SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**

REVISION CHANGES:

THE FORMAT AND ORDER OF THIS (MSDS) SHEET HAS BEEN CHANGED TO BE COMPLIANT WITH THE HAZARD COMMUNICATION STANDARD (HCS) REQUIREMENTS STARTING JUNE 1, 2015. INCLUDED IN THE FORMAT AND ORDERING CHANGES TO THIS (MSDS) SHEET ARE:

SECTION 12: THIS SECTION'S ENTIRETY WAS ADDED TO MEET JUNE 1, 2015 STANDARD REQUIREMENTS**SECTION 13:** THIS SECTION'S ENTIRETY WAS ADDED TO MEET JUNE 1, 2015 STANDARD REQUIREMENTS**SECTION 14:** THIS SECTION'S ENTIRETY WAS ADDED TO MEET JUNE 1, 2015 STANDARD REQUIREMENTS**SECTION 15:** THIS SECTION'S ENTIRETY WAS ADDED TO MEET JUNE 1, 2015 STANDARD REQUIREMENTS**SECTION 2:** POTENTIAL PHYSICAL / CHEMICAL EFFECTS HAVE BEEN MODIFIED**SECTION 2:** POTENTIAL HEALTH EFFECTS HAVE BEEN MODIFIED**SECTION 4:** FORMATTING FOR THIS SECTION HAS BEEN MODIFIED

REVISED: 01/02/17