

**SPARTAN CHEMICAL COMPANY, INC.
WHMIS MATERIAL SAFETY DATA SHEET**

SECTION I: PRODUCT INFORMATION

PRODUCT IDENTIFIER

BIORENEWABLES INDUSTRIAL DEGREASER

PRODUCT USE: Water-Rinsable Industrial Strength Degreaser

MANUFACTURER'S NAME & ADDRESS

Spartan Chemical Company, Inc.
1110 Spartan Drive, Maumee, OH 43537 USA

MEDICAL EMERGENCY TELEPHONE

888/314-6171 (24 Hours)

PRODUCT INFORMATION

800/537-8990

SECTION II: HAZARDOUS INGREDIENTS

CAS REGISTRY NO.	% W	CHEMICAL NAME(S)	TLV			LD50	LC50
			TWA mg/m ³	STEL mg/m ³	Ceiling mg/m ³		
67784-80-9	50-60	Soybean oil methyl esters	----	Not Established	----	Not available	Not available
64742-47-8	25-35	Petroleum distillates	1200 (Exxon)	---	----	Not available	Not available
34398-01-1	5-10	Alcohol ethoxylate	----	Not Established	----	Not available	Not available
8002-26-4	1-5	Distilled tall oil	----	Not Established	----	Not available	Not available
5989-27-5	1-5	d-Limonene	----	Not Established	----	Not available	Not available

SECTION III: PHYSICAL DATA

BOILING POINT

>204 °C (>400°F)

VAPOUR PRESSURE

Not established

VAPOUR DENSITY (AIR = 1)

Not established

pH

N/A

COEFFICIENT OF WATER/OIL DISTRIBUTION

Not available

SPECIFIC GRAVITY (H₂O = 1)

0.832

EVAPORATION RATE (butyl acetate = 1)

< 1

SOLUBILITY IN WATER

Complete

APPEARANCE AND ODOUR

Pale yellow liquid, mild citrus odor

PERCENT SOLID BY WEIGHT

10-15

FREEZING POINT

Not available

ODOUR THRESHOLD

Not available

PHYSICAL STATE

GAS__ LIQUID X SOLID_____

SECTION IV: FIRE & EXPLOSION DATA

FLASH POINT

82 °C (179°F)

EXTINGUISHING MEDIA

Foam, dry chemical, CO₂,
water fog or spray.

HAZARDOUS COMBUSTION PRODUCTS

Not established

SPECIAL FIRE FIGHTING PROCEDURES

Use self-contained breathing apparatus for maximum respiratory protection. Water may be used to cool containers if not ruptured or leaking.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Combustible liquid and vapors. Keep away from heat, sparks or flame.

METHOD USED

ASTM - D56

CONDITIONS OF FLAMMABILITY

Not applicable

FLAMMABLE LIMITS

Not established

AUTO-IGNITION TEMPERATURE

Not applicable

EXPLOSION DATA

Not applicable

SECTION V: REACTIVITY DATA

STABILITY: STABLE X **CONDITIONS OF INSTABILITY** **CONDITIONS OF REACTIVITY**
Not established Not established

INCOMPATIBILITY (MATERIALS TO AVOID) Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS Carbon dioxide, carbon monoxide

SECTION VI: TOXICOLOGICAL PROPERTIES

PRIMARY ROUTES OF ENTRY: Eye Contact, Skin Contact, Ingestion, Inhalation

EXPOSURE LIMIT

Not established for mixture.

EFFECTS OF ACUTE EXPOSURE:

EYE CONTACT: Causes eye irritation with symptoms such as pain, redness and swelling.

INGESTION: Harmful or fatal if swallowed. Symptoms may include nausea, diarrhea, and intestinal upset.

SKIN CONTACT: Causes skin irritation with symptoms such as pain, redness and swelling.

INHALATION: Breathing vapors or mist may cause respiratory irritation.

EFFECTS OF CHRONIC EXPOSURE

None known

IRRITANCY OF PRODUCT

Causes skin and eye irritation

SENSITIZATION TO PRODUCT

Contains d-limonene and tall oil which may cause skin sensitization with repeated contact.

CARCINOGENICITY

No

REPRODUCTIVE TOXICITY

Not available

TERATOGENICITY

Not available

MUTAGENICITY

Not available

SYNERGISTIC PRODUCTS

Not available

SECTION VII: PREVENTIVE MEASURE

PERSONAL PROTECTIVE EQUIPMENT / ENGINEERING CONTROLS:

Wear nitrile rubber or other impervious gloves and splash goggles. Provide good general ventilation. Local exhaust ventilation may be necessary for some operations. If respiratory irritation can not be prevented by ventilation, use of a NIOSH approved respirator suitable for the conditions of use and chemicals in Section II should be considered. (N95 or higher recommended)

LEAK AND SPILL PROCEDURE: Dike and contain spills with inert material (sand, earth, commercial absorbent, etc.) and transfer to containers for disposal. Keep spill out of storm sewers and waterways.

WASTE DISPOSAL METHOD: Assure conformance with applicable regulations.

HANDLING PROCEDURES: Avoid contact with eyes, skin and clothing. Do not swallow. Avoid breathing product vapors or mist. Wash thoroughly after handling. Mops, towels or rags dampened with this product are combustible and may also be subject to spontaneous combustion. Thoroughly rinse these materials with water to remove product and/or dispose of in covered water filled metal containers.

STORAGE REQUIREMENTS: Keep container closed when not in use. Do not freeze. Do not store above 52°C (125°F). Keep out of reach of children.

SPECIAL SHIPPING INFORMATION: Not regulated: Non-Hazardous Products

SECTION VIII: FIRST AID MEASURES

EYES: Flush eyes with water for at least 15 minutes. Remove contact lenses. Get medical attention.

SKIN: Remove contaminated clothing. Flush skin with water for at least 15 minutes. Get medical attention if irritation persists. Wash contaminated clothing before reuse.

INGESTION: Call a physician immediately for treatment advice. Do not induce vomiting. Do not give anything by mouth to an unconscious person.

INHALATION: In case of respiratory irritation or dizziness, move person to fresh air. Get medical attention if irritation persists.

SECTION IX: PREPARATION INFORMATION

BIORENEWABLES INDUSTRIAL DEGREASER

DATE OF PREPARATION: May 1, 2016

SUPERCEDES: June 1, 2013

PREPARED BY Ronald T. Cook / Manager, Regulatory Affairs / Spartan Chemical Company, Inc.

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