



Safety Data Sheet

Spartan Chemical Company, Inc.

Revision Date: 02-Jul-2021

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: ORANGE TOUGH 90
Product Number: 2290
Recommended Use: Cleaning agent
Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier: Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee, Ohio 43537 USA
800-537-8990 (Business hours)
www.spartanchemical.com

24 Hour Emergency Phone Numbers:

Medical Emergency/Information: 888-314-6171
Transportation/Spill/Leak: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

GHS Classification

Skin Corrosion/Irritation: Category 2
Serious Eye Damage/Eye Irritation: Category 1
Skin Sensitization: Category 1
Aspiration Toxicity: Category 1
Flammable Liquids: Category 3

GHS Label Elements

Signal Word:

Danger

Symbols:



Hazard Statements:

Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
May be fatal if swallowed and enters airways
Flammable liquid and vapor.

Precautionary Statements:

Prevention:

Wash hands and any exposed skin thoroughly after handling.
Wear eye / face protection
Wear protective gloves
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground container and receiving equipment.

	Use explosion-proof electrical equipment Use only non-sparking tools Take precautionary measures against static discharge
Response:	
-Eyes	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor
-Skin	IF ON SKIN (or hair): Take off immediately all contaminated clothing Wash with plenty of soap and water Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.
-Ingestion:	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting.
-Specific Treatment:	See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.
Fire:	In case of fire: Use CO2, dry chemical, or foam for extinction
Storage:	Store locked up. Store in a well-ventilated place. Keep cool
Disposal:	Dispose of contents and container in accordance with local, state and federal regulations.
Hazards Not Otherwise Classified:	Not Applicable
Other Information:	<ul style="list-style-type: none"> • May be harmful if swallowed • Inhalation of vapors or mist may cause respiratory irritation. • 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 before disposal or discard in special containers designed for this purpose. • Keep out of reach of children

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Limonene	5989-27-5	30-60
C13-14 Alkane	64742-47-8	30-60
C12-13 Pareth-5	66455-14-9	5-10
C9-11 Pareth-6	68439-46-3	3-7
Colorant	92257-31-3	<0.1
Colorant	PROPRIETARY	<0.1

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

-Eye Contact:	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
-Skin Contact:	Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical attention.
-Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.
-Ingestion:	IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Do NOT induce vomiting.
Note to Physicians:	Contains petroleum distillates. Possible aspiration hazard.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Water spray, fog or regular foam, Dry chemical or CO2
Unsuitable Extinguishing Media:	Do not use a solid water stream as it may scatter and spread fire.
Specific Hazards Arising from the Chemical:	Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.
Hazardous Combustion Products:	May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.

Protective Equipment and Precautions for Firefighters: Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Remove all sources of ignition. Use personal protective equipment as required.

Environmental Precautions: Do not dispose of this product by pouring on the ground, into storm sewers, waterways or other surface waters. Consult with local, federal and state authorities prior to disposal of any d-limonene containing product into the sanitary sewer system.

Methods for Clean-Up: Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Rags, towels or mops soaked with this product are subject to spontaneous combustion if not handled properly.

7. HANDLING AND STORAGE

Advice on Safe Handling: Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use personal protective equipment as required.

Storage Conditions: Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Suggested Shelf Life: Minimum of 2 years from date of manufacture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits: None established

Engineering Controls: Provide good general ventilation. If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered.

Personal Protective Equipment

Eye/Face Protection: Wear splash goggles.

Skin and Body Protection: Wear rubber or other chemical-resistant gloves.

Respiratory Protection: Not required with expected use. If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.

General Hygiene Considerations: Wash hands and any exposed skin thoroughly after handling. See 29 CFR 1910.132-138 for further guidance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State:	Liquid
Color:	Orange
Odor:	Orange
pH:	Not applicable
Melting Point / Freezing Point:	No information available
Boiling Point / Boiling Range:	208 °C / 406 °F Estimated
Flash Point:	50 °C / 122 °F ASTM D56
Evaporation Rate:	< 1 (Butyl acetate = 1)
Flammability (solid, gas)	No information available
Upper Flammability Limit:	No information available
Lower Flammability Limit:	No information available
Vapor Pressure:	No information available
Vapor Density:	No information available
Specific Gravity:	0.831
Solubility(ies):	Miscible in water
Partition Coefficient:	No information available
Autoignition Temperature:	No information available
Decomposition Temperature:	No information available
Viscosity:	No information available

10. STABILITY AND REACTIVITY

Reactivity:	This material is considered to be non-reactive under normal conditions of use.
Chemical Stability:	Stable under normal conditions.
Possibility of Hazardous Reactions:	Not expected to occur with normal handling and storage.
Conditions to Avoid:	Heat, flames and sparks. Direct sunlight.
Incompatible Materials:	Strong oxidizing agents. Strong acids.
Hazardous Decomposition Products:	May include carbon monoxide, carbon dioxide (CO ₂) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Eyes, Skin, Ingestion, Inhalation.
Symptoms of Exposure:	
-Eye Contact:	Pain, redness, swelling of the conjunctiva and tissue damage. Eye contact may cause permanent damage.
-Skin Contact:	Pain, redness and cracking of the skin. May cause sensitization by skin contact
-Inhalation:	Nasal discomfort and coughing.
-Ingestion:	Pain, nausea, vomiting and diarrhea. Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.
Immediate, Delayed, Chronic Effects	
Product Information:	Data not available or insufficient for classification.
Chronic Toxicity:	Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons.
Numerical Measures of Toxicity	
The following acute toxicity estimates (ATE) are calculated based on the GHS document.	
ATEmix (oral):	3661 mg/kg
ATEmix (dermal):	3339 mg/kg
ATEmix (inhalation-dust/mist):	53.1 mg/l

Component Acute Toxicity Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Limonene 5989-27-5	= 5200 mg/kg (Rat) = 4400 mg/kg (Rat)	> 5 g/kg (Rabbit)	Not Available

C13-14 Alkane 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
C12-13 Pareth-5 66455-14-9	> 10 g/kg (Rat)	Not Available	Not Available
C9-11 Pareth-6 68439-46-3	= 1400 mg/kg (Rat)	Not Available	Not Available

Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
Limonene 5989-27-5	Not Available	0.619 - 0.796: 96 h Pimephales promelas mg/L LC50 flow-through 35: 96 h Oncorhynchus mykiss mg/L LC50	Not Available	Not Available
C13-14 Alkane 64742-47-8	Not Available	45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static	Not Available	Not Available

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Marine Pollutant: Yes.

Other Adverse Effects: No information available

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Dispose of in accordance with federal, state and local regulations. Do not dispose of this product by pouring on the ground, into storm sewers, waterways or other surface waters. Consult with local, federal and state authorities prior to disposal of any d-limonene containing product into the sanitary sewer system.

Contaminated Packaging: Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT:

UN/ID No:

UN1993

Proper Shipping Name:

Flammable liquids, n.o.s., (contains d-limonene)

Hazard Class:

3

Packing Group:

III

Special Provisions:

Class 3, Packing Group III materials meet the exception requirements of section 49 CFR 173.150 when individual containers of not more than 1.3 gallons are packed in a strong outer packaging and ground transportation is utilized. Such containers may be reclassified as "Limited Quantity".

Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Check with a trained hazardous materials transportation expert for information specific to your situation.

IMDG:

UN/ID No:

UN1993

Proper Shipping Name: Flammable liquids, n.o.s., (contains d-limonene), Marine Pollutant
Hazard Class: 3
Packing Group: III
Marine Pollutant: Yes.
Additional information: According to IMDG Code 2.10.2.7, marine pollutants packed in single or inner packagings with a capacity of not more than 5 L or 5 kg are excluded from marine pollutant marking requirements.

15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)

All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313

This product does not contain listed substances above the "de minimus" level

SARA 311/312 Hazard Categories

Acute Health Hazard:	Yes
Chronic Health Hazard:	Yes
Fire Hazard:	Yes
Sudden release of pressure hazard:	No
Reactive Hazard:	No

California Proposition 65

This product is not subject to warning requirements under California Proposition 65.

16. OTHER INFORMATION

NFPA	Health Hazards: 2	Flammability: 2	Instability: 0	Special: N/A
HMIS	Health Hazards: 2*	Flammability: 2	Physical Hazards: 0	

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Reasons for Revision: Section, 14

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet