



Revision Date: 08-May-2025

# Safety Data Sheet

## Spartan Chemical Company, Inc.

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

**Product Name:** ORANGE TOUGH 90  
**Product Code:** 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 hazard: Category 1  
Flammable liquids: Category 3

**Label elements**

**Signal word:**

**Symbols:**

**Danger**



**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

**Physical hazards:**

**Precautionary Statements - Prevention:**

Wash face, hands and any exposed skin thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing must not be allowed out of the workplace  
Wear protective gloves/clothing and eye/face protection  
Ground and bond container and receiving equipment  
Use non-sparking tools  
Take action to prevent static discharges  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
Keep container tightly closed

Use explosion-proof electrical, ventilating and lighting equipment

### Precautionary Statements -

#### 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. Rinse skin with water [or shower]. If skin irritation or rash occurs: Get medical advice/attention.

#### Ingestion:

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

#### -Specific Treatment:

See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

#### Fire:

Carbon dioxide (CO<sub>2</sub>), Dry chemical, Water spray, fog or alcohol-resistant foam

#### Precautionary Statements - Storage:

Store locked up. Store in a well-ventilated place. Keep cool.

#### Precautionary Statements -

Dispose of contents and container in accordance with local, state and federal regulations.

#### Disposal:

#### Hazards not otherwise classified (HNOC):

Not applicable

#### Other hazards:

- 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	15-40
C12-13 Alcohols Ethoxylated	66455-14-9	5-10
C9-11 Alcohols Ethoxylated	68439-46-3	3-7
Alcohols, C9-11, ethers with polyethylene glycol mono-Me ether	366009-01-0	3-7
C.I. Solvent Red 164	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 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:

Dry chemical. Water spray (fog). Alcohol resistant foam. Carbon dioxide. Move containers from fire area if you can do it without risk.

#### Specific Hazards Arising from the Chemical:

Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Vapors may travel to areas away from work site before igniting/flashing back to vapor source.

#### 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. Avoid contact with skin, eyes or clothing. 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 cleaning 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).

## 7. HANDLING AND STORAGE

**Advice on safe handling:** Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion proof. Use personal protection equipment.

**Storage Conditions:** Keep tightly closed in a dry and cool place. 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.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:** Wear splash goggles. For severe use-conditions, wear a face shield over the 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

### Information on basic physical and chemical properties

**Physical state:** Liquid

**Color:** Orange

**Odor:** Orange

**Odor Threshold:** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH:</b>	Not applicable	
<b>Melting Point / Freezing Point:</b>	No data available	
<b>Boiling Point / Boiling Range:</b>	208 °C / 406 °F	Estimated
<b>Flash Point:</b>	50 °C / 122 °F	ASTM D56
<b>Evaporation Rate:</b>	< 1	(Butyl acetate = 1)
<b>Flammability (solid, gas):</b>	No data available	No information available

<b>Flammability Limits in Air:</b>		No information available
<b>Upper Flammability Limit:</b>	No data available	
<b>Lower Flammability Limit:</b>	No data available	
<b>Vapor Pressure:</b>	No data available	No information available
<b>Vapor Density:</b>	No data available	No information available
<b>Relative Density:</b>	0.831	
<b>Solubility(ies):</b>	miscible	
<b>Partition Coefficient:</b>	No data available	No information available
<b>Autoignition Temperature:</b>	Not applicable	
<b>Decomposition Temperature:</b>	Not applicable	
<b>Kinematic Viscosity:</b>	No information available	No information available
<b>Particle characteristics:</b>	Not applicable	

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	This material is considered to be non-reactive under normal conditions of use.
<b>Chemical stability:</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Not expected to occur with normal handling and storage.
<b>Conditions to Avoid:</b>	Heat, flames and sparks Extremes of temperature and direct sunlight
<b>Incompatible materials:</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products:</b>	May include carbon monoxide, carbon dioxide (CO <sub>2</sub> ) and other toxic gases or vapors.

## 11. TOXICOLOGICAL INFORMATION

<b>Likely Routes of Exposure:</b>	Eyes, Skin, Ingestion, Inhalation.
<b>Symptoms of Exposure:</b>	
<b>Eye contact:</b>	Pain, redness, swelling of the conjunctiva and tissue damage. Eye contact may cause permanent damage.
<b>Skin contact:</b>	Pain, redness and cracking of the skin. May cause sensitization by skin contact.
<b>Inhalation:</b>	Nasal discomfort and coughing.
<b>Ingestion:</b>	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.
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### Acute toxicity

#### **Numerical measures of toxicity:**

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	4,448.40 mg/kg
ATEmix (dermal)	3,016.30 mg/kg

#### **Component 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 )	-
C13-14 Alkane 64742-47-8	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h
C12-13 Alcohols Ethoxylated 66455-14-9	> 10 g/kg ( Rat )	= 3300 mg/kg ( Rabbit )	-
C9-11 Alcohols Ethoxylated 68439-46-3	= 1400 mg/kg ( Rat )	-	-

**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	-	LC50: 0.619 - 0.796mg/L (96h, Pimephales promelas) LC50: =35mg/L (96h, Oncorhynchus mykiss)	-	-
C13-14 Alkane 64742-47-8	-	LC50: =45mg/L (96h, Pimephales promelas) LC50: =2.2mg/L (96h, Lepomis macrochirus) LC50: =2.4mg/L (96h, Oncorhynchus mykiss)	-	-

**Persistence and Degradability:** No information available.

**Bioaccumulation:** No information available.

**Marine Pollutant:** Yes

**Mobility in Soil:** No information available

**Other adverse effects:** No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste from residues/unused products:** 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:** Regulated  
**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 number or ID number:** 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** (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**

<b>NFPA</b>	Health hazards: 2	Flammability: 2	Instability: 0	Special hazards: -
<b>HMIS</b>	Health hazards: 2*	Flammability: 2	Physical hazards: 0	

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Revision Note:	Section, 2, 3, 7, 9, 12

**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**