



Revision Date: 14-Nov-2025

Safety Data Sheet

Spartan Chemical Company, Inc.

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name: ORANGE TOUGH 40
Product Code: 2240
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
Specific target organ toxicity (repeated exposure): Category 2
Aspiration hazard: Category 1
Flammable liquids: Category 3

Label elements

Signal word:

Symbols:

Danger



Hazard statements:

Causes serious eye damage
Causes skin irritation
May cause an allergic skin reaction
May cause damage to organs through prolonged or repeated exposure
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
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves/clothing and eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
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
	Get medical advice/attention if you feel unwell
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]. Wash contaminated clothing before reuse. If skin irritation 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:	In case of fire: Use water spray (fog), carbon dioxide, foam, dry chemical for extinction
Precautionary Statements - Storage:	Store locked up. Store in a well-ventilated place. Keep cool.
Precautionary Statements - Disposal:	Dispose of contents and container in accordance with local, state and federal regulations.
Hazards not otherwise classified (HNOC):	Not applicable
Other hazards:	<ul style="list-style-type: none"> • May be harmful if swallowed • Inhalation of vapors or mist may cause respiratory irritation. • Keep out of reach of children

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Water	7732-18-5	10-30
Limonene	5989-27-5	10-30
C13-14 Alkane	64742-47-8	10-30
Triethanolamine	102-71-6	7-13
C12-13 Alcohols Ethoxylated	66455-14-9	5-10
C9-11 Alcohols Ethoxylated	68439-46-3	1-5
Alkylbenzene Sulfonic Acid	68584-22-5	1-5
Hexylene Glycol	107-41-5	1-5
2-Butoxyethanol	111-76-2	1-5
Ethylhexyloxyethanol	1559-35-9	1-5
Tetrasodium EDTA	64-02-8	1-5
Cyclocarboxypropyloleic Acid	53980-88-4	1-5
Potassium Hydroxide	1310-58-3	0.1-1
Diethylene glycol mono(2-ethylhexyl) ether	1559-36-0	0.1-1
Colorant	PROPRIETARY	<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. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse.
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:	Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell. 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 rinse spill onto the ground, into storm sewers or bodies of water. 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:	Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.
Storage Conditions:	Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children.
Incompatible materials	Strong oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Triethanolamine 102-71-6	TWA: 5mg/m ³	-	-
Hexylene Glycol 107-41-5	TWA: 25 ppm vapor fraction STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only	(vacated) Ceiling: 25 ppm (vacated) Ceiling: 125 mg/m ³	Ceiling: 25 ppm Ceiling: 125 mg/m ³
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) Sk* Sk*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Potassium Hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

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.
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Individual protection measures, such as 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

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>
pH:	8.5-9.5	
Melting Point / Freezing Point:	No data available	
Boiling Point / Boiling Range:	99 °C / 210 °F	
Flash Point:	53 °C / 127 °F	ASTM D56
Evaporation Rate:	< 1	
Flammability (solid, gas):	No data available	No information available
Flammability Limits in Air:		No information available
Upper Flammability Limit:	No data available	
Lower Flammability Limit:	No data available	
Vapor Pressure:	No data available	No information available
Vapor Density:	No data available	No information available
Relative Density:	0.954	
Solubility(ies):	Soluble in water	
Partition Coefficient:	No data available	No information available
Autoignition Temperature:	Not applicable	
Decomposition Temperature:	Not applicable	
Kinematic Viscosity:	No information available	No information available
Particle characteristics:	Not applicable	

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:	Extremes of temperature and 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.

Immediate, Delayed, Chronic Effects

Product Information:	Data not available or insufficient for classification.
Target organ effects:	Central nervous system. Eyes. Respiratory system. Skin. Blood. hematopoietic system. Kidney. Liver.

Acute toxicity**Numerical measures of toxicity:**

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

ATEmix (oral) 3,561.10 mg/kg

ATEmix (dermal) 3,003.70 mg/kg

ATEmix (inhalation-vapor) 117.40 mg/l

Component Information:

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
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
Triethanolamine 102-71-6	= 4190 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	-
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)	-	-
Alkylbenzene Sulfonic Acid 68584-22-5	= 775 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	-
Hexylene Glycol 107-41-5	= 3700 mg/kg (Rat)	= 12300 mg/kg (Rabbit)	> 310 mg/m ³ (Rat) 1 h
2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h = 486 ppm (Rat) 4 h
Ethylhexyloxyethanol 1559-35-9	= 3080 mg/kg (Rat)	= 2120 mg/kg (Rabbit)	-
Tetrasodium EDTA 64-02-8	= 1658 mg/kg (Rat)	-	-
Cyclocarboxypropyloleic Acid 53980-88-4	= 6176 mg/kg (Rat)	-	-
Potassium Hydroxide 1310-58-3	= 284 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)	-	-
Triethanolamine 102-71-6	EC50: =216mg/L (72h, Desmodesmus subspicatus)	LC50: 10600 - 13000mg/L (96h, Pimephales promelas)	-	-

	EC50: =169mg/L (96h, <i>Desmodesmus subspicatus</i>)	LC50: >1000mg/L (96h, <i>Pimephales promelas</i>) LC50: 450 - 1000mg/L (96h, <i>Lepomis macrochirus</i>)		
Alkylbenzene Sulfonic Acid 68584-22-5	-	LC50: =3mg/L (96h, <i>Oncorhynchus mykiss</i>)	-	EC50: =2.9mg/L (48h, <i>Daphnia magna</i>)
Hexylene Glycol 107-41-5	-	LC50: 10500 - 11000mg/L (96h, <i>Pimephales promelas</i>) LC50: =10000mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =8690mg/L (96h, <i>Pimephales promelas</i>) LC50: =10700mg/L (96h, <i>Pimephales promelas</i>)	-	EC50: 2700 - 3700mg/L (48h, <i>Daphnia magna</i>)
2-Butoxyethanol 111-76-2	-	LC50: =1490mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =2950mg/L (96h, <i>Lepomis macrochirus</i>)	-	EC50: >1000mg/L (48h, <i>Daphnia magna</i>)
Tetrasodium EDTA 64-02-8	-	LC50: =41mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =59.8mg/L (96h, <i>Pimephales promelas</i>)	-	-

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

14. TRANSPORT INFORMATION

UN/ID No: UN1993
Proper Shipping Name: Flammable liquids, n.o.s., (contains d-limonene), Marine Pollutant
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

2-Butoxyethanol - 111-76-2

CAS No 111-76-2 applies to R-(OCH₂CH₂)_n-OR', where n = 1, 2, or 3, R=Alkyl C7 or less, or R = Phenyl or Alkyl substituted phenyl, R' = H or Alkyl C7 or less, or OR' consisting of Carboxylic acid ester, Sulfate, Phosphate, Nitrate, or Sulfonate Chemical Category N230

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

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

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Revision Note: Section, 2, 3, 7, 9, 11, 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