



Safety Data Sheet

Spartan Chemical Company, Inc.

Revision Date: 02-Apr-2021

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: ORANGE TOUGH 40
Product Number: 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 Toxicity: Category 1
Flammable Liquids: Category 3

GHS 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 (Respiratory tract)
May be fatal if swallowed and enters airways
Flammable liquid and vapor.

Precautionary Statements:

Prevention:

Do not breathe mist, vapors or spray.
Wash hands and any exposed skin thoroughly after handling.
Wear eye / face protection
Wear protective gloves

	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:	Get medical attention if you feel unwell.
-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 PHYSICIAN.
-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. • 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 Pareth-5	66455-14-9	5-10
C9-11 Pareth-6	68439-46-3	1-5
Alkylbenzene Sulfonic Acid	68584-22-5	1-5
Hexylene Glycol	107-41-5	1-5
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. 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

-Ingestion: poison control center or physician if you feel unwell.
Note to Physicians: IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Do NOT induce vomiting. Contains petroleum distillates. Possible aspiration hazard.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use CO₂, dry chemical, or foam
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: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
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 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).

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

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	Ceiling: 25 ppm	(vacated) Ceiling: 25 ppm (vacated) Ceiling: 125 mg/m ³	Ceiling: 25 ppm Ceiling: 125 mg/m ³
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) S* S*	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.

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:	8.5-9.5
Melting Point / Freezing Point:	No information available
Boiling Point / Boiling Range:	99 °C / 210 °F
Flash Point:	53 °C / 127 °F ASTM D56
Evaporation Rate:	< 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:	0.954
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. 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. Aspiration may cause pulmonary edema and pneumonitis.
Immediate, Delayed, Chronic Effects	
Product Information:	Data not available or insufficient for classification.
Chronic Toxicity:	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.

Target Organ Effects: Central nervous system. -Eyes. Respiratory System. -Skin. Blood. hematopoietic system. kidney. Liver.

Numerical Measures of Toxicity

The following acute toxicity estimates (ATE) are calculated based on the GHS document.

ATEmix (oral): 2576 mg/kg
 ATEmix (dermal): 3284 mg/kg
 ATEmix (inhalation-dust/mist): 38.9 mg/l

Component Acute Toxicity Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	Not Available	Not Available
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
Triethanolamine 102-71-6	= 4190 mg/kg (Rat)	> 20 mL/kg (Rabbit)	Not Available
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
Alkylbenzene Sulfonic Acid 68584-22-5	= 775 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	Not Available
Hexylene Glycol 107-41-5	= 3700 mg/kg (Rat)	Not Available	> 310 mg/m ³ (Rat) 1 h
Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
Ethylhexyloxyethanol 1559-35-9	= 3080 mg/kg (Rat)	= 2120 mg/kg (Rabbit)	Not Available
Tetrasodium EDTA 64-02-8	= 1658 mg/kg (Rat)	Not Available	Not Available
Cyclocarboxypropyloleic Acid 53980-88-4	= 6176 mg/kg (Rat)	Not Available	Not Available
Potassium Hydroxide 1310-58-3	= 284 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
Triethanolamine 102-71-6	216: 72 h Desmodesmus subspicatus mg/L EC50 169: 96 h Desmodesmus subspicatus mg/L EC50	10600 - 13000: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Pimephales promelas mg/L LC50 static 450 - 1000: 96 h Lepomis macrochirus	Not Available	Not Available

		mg/L LC50 static		
Alkylbenzene Sulfonic Acid 68584-22-5	Not Available	3: 96 h Oncorhynchus mykiss mg/L LC50 static	Not Available	2.9: 48 h Daphnia magna mg/L EC50
Hexylene Glycol 107-41-5	Not Available	10500 - 11000: 96 h Pimephales promelas mg/L LC50 flow-through 10000: 96 h Lepomis macrochirus mg/L LC50 static 8690: 96 h Pimephales promelas mg/L LC50 flow-through 10700: 96 h Pimephales promelas mg/L LC50 static	Not Available	2700 - 3700: 48 h Daphnia magna mg/L EC50
Butoxyethanol 111-76-2	Not Available	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	Not Available	1000: 48 h Daphnia magna mg/L EC50
Tetrasodium EDTA 64-02-8	1.01: 72 h Desmodemus subspicatus mg/L EC50	41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas 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.

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 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 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 contains the following listed substances:

Butoxyethanol

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

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