Safety Data Sheet
Spartan Chemical Company, Inc.

Revision Date: 16-Mar-2017

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

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin Corrosion/Irritation:	Category 2
Serious Eye Damage/Eye Irritation:	Category 1
Skin Sensitization:	Category 1
Flammable Liquids	Category 3

GHS Label Elements

Signal Word: **Danger**

Symbols:

Hazard Statements:
Harmful if inhaled.
Causes skin irritation.
Causes serious eye damage
May cause an allergic skin reaction
Flammable liquid and vapor.

Precautionary Statements:

Prevention:	Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area 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:	
-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: 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:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell
-Specific Treatment:	See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.
Fire:	In case of fire: Use Water spray, fog or regular foam for extinction
Storage:	Store in a well-ventilated place. Keep cool
Disposal:	Dispose of contents and container in accordance with local, state and federal 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.
Hazards Not Otherwise Classified:	Not Applicable
Other Information:	• Harmful if swallowed • Keep out of reach of children.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
d-limonene	5989-27-5	15-40
water	7732-18-5	10-30
nonylphenol ethoxylate	127087-87-0	10-30
triethanolamine dodecylbenzene sulfonate	27323-41-7	5-10
triethanolamine	102-71-6	3-7
hexylene glycol	107-41-5	1-5
dicarboxylic fatty acid, dipotassium salt	66375-37-9	1-5
tetrasodium ethylenediaminetetraacetate	64-02-8	1-5

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:	Take off immediately all contaminated clothing. Rinse skin with water or shower. 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 control 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.
Note to Physicians:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water spray, fog or regular foam, Dry chemical

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). 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 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).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits: .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
triethanolamine 102-71-6	TWA: 5mg/m³	-	-
hexylene glycol 107-41-5	Ceiling: 25 ppm	(vacated) Ceiling: 25 ppm (vacated) Ceiling: 125 mg/m³	Ceiling: 25 ppm Ceiling: 125 mg/m³

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:	> 100 °C / 212 °F
Flash Point:	51 °C / 124 °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:	0.96
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: Extremes of temperature and direct sunlight.
Incompatible Materials: Strong oxidizing agents. Strong acids.
Hazardous Decomposition Products: May include carbon monoxide, carbon dioxide (CO2) 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.
-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.
Numerical Measures of Toxicity
The following acute toxicity estimates (ATE) are calculated based on the GHS document.
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ATEmix (oral): 2301 mg/kg
ATEmix (dermal): 4814 mg/kg
ATEmix (inhalation-dust/mist): 2.6 mg/l

Component Acute Toxicity Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
d-limonene 5989-27-5	= 4400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	Not Available
water 7732-18-5	> 90 mL/kg (Rat)	Not Available	Not Available
triethanolamine dodecylbenzene sulfonate 27323-41-7	= 2320 mg/kg (Rat)	> 23220 mg/kg (Rabbit)	Not Available

hexylene glycol 107-41-5	= 3692 mg/kg (Rat)	= 8560 µL/kg (Rabbit)	> 310 mg/m³ (Rat) 1 h
tetrasodium ethylenediaminetetraacetate 64-02-8	= 10 g/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
d-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
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 mg/L LC50 static	Not Available	Not Available
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
tetrasodium ethylenediaminetetraacetate 64-02-8	1.01: 72 h Desmodesmus 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	610: 24 h Daphnia magna mg/L EC50

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

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.
US EPA Waste Number: D001

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)
Hazard Class:	3
Packing Group:	III

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:	No
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	

Revision Date:	16-Mar-2017
Reasons for Revision:	Section 8

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