

# Safety Data Sheet

## MODIFIED TWORT'S FAST GREEN

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Modified Twort's Fast Green

**Catalog Numbers:** SO-800CLX

**Company Identification:** Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

### Section 2 - Hazards Identification

#### GHS Classifications

H227-Flammable liquids: 4

H320-Serious eye damage/eye Irritation: 2B

H371-Specific target organ toxicity, single exposure: 2

H373-Specific target organ toxicity, repeated exposure: 2

9% of the mixture consists of ingredients of unknown acute dermal toxicity.

#### Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Warning

## Hazard statements:

H227-Combustible liquid

H320-Causes eye irritation

H371-May cause damage to organs (target organs: respiratory system, central nervous system, and optic nerve).

H373-May cause damage to organs through prolonged or repeated exposure (target organs: kidney, liver, spleen, and blood).

## Precautionary Statements:

P210-Keep away from flames and hot surfaces. No smoking.

P260-Do not breathe dust/fume/gas/mist/vapours/spray.

P264-Wash thoroughly after handling.

P270-Do not eat, drink, or smoke when using this product.

P280-Wear protective gloves/eye protection/face protection.

P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P309+P311-If exposed or if you feel unwell: Call a Poison Center or doctor/physician.

P314-Get medical advice/attention if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378-In case of fire: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam for extinction.

P403+P235-Store in a well-ventilated place. Keep cool.

P405-Store locked up.

P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

## Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
2353-45-9	Fast Green FCF	<0.02 w/v
64-17-5	Ethyl alcohol	<9 v/v
67-56-1	Methyl alcohol	<0.5 v/v
7732-18-5	Water	Balance

## Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention.

**Oral Exposure:** If swallowed, seek immediate medical advice. Rinse mouth with water.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

#### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

**Hazardous Combustion Products:** Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, irritating and toxic fumes and gases.

**Flash Point:** >55°C (>131°F) (CC)

**Autoignition Temperature:** Not available

**Explosion Limits, Lower:** Not available

**Upper:** Not available

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

#### Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s):**

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Eliminate all sources of ignition. Keep away from heat.

**Methods for Cleaning up:** Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains. Use only non-sparking tools and explosion-proof equipment.

#### Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Store in a cool, dry, and well-ventilated area. Keep in a tightly closed and non-metal container. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting/equipment. Use proper grounding procedures to avoid static electricity. Keep away from incompatible materials. Protect from heat. Vapors heavier than air may travel considerable distance and ignite or explode.

NOTE: Static discharge could act as an ignition source.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**Exposure Limits:**

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA - Final PELs
Fast Green FCF CAS#2353-45-9	Not listed	Not listed	Not listed
Ethanol CAS#64-17-5	1000 ppm STEL	1000 ppm TWA 1900 mg/m3 TWA 3300 ppm IDLH	1000 ppm TWA 1900 mg/m3 TWA
Methanol CAS#67-56-1	200 ppm TWA 250 ppm STEL	200 ppm TWA 260 mg/m3 TWA 250 ppm STEL 325 mg/m3 STEL 6000 ppm IDLH	200 ppm TWA 260 mg/m3 TWA

**OSHA Vacated PELs:** Ethanol: 1000 ppm TWA; 1900 mg/m3 TWA  
Methanol: 200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 STEL

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Green

**Odor:** Alcohol-like

**Vapor Pressure:** Not available

**Odor Threshold:** Not available

**Vapor Density:** Not available

**pH:** Not available

**Relative Density:** Not available

**Melting point/freezing point:** Not available

**Solubility:** Soluble in water

**Boiling Point:** Not available

**Flash Point:** >55°C (>131°F) (CC)  
**Evaporation Rate:** Not available  
**Flammability (solid, gas):** Not available  
**Partition coefficient: n-octanol/water:** Not available  
**Auto-ignition Temperature:** Not available  
**Decomposition Temperature:** Not available  
**Viscosity:** Not available  
**Specific Gravity/Density:** Not available

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat, and freezing.  
**Incompatibilities with Other Materials:** Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, and potassium dioxide.  
**Hazardous Decomposition Products:** Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, irritating and toxic fumes and gases.

## Section 11 - Toxicological Information

### **CAS#2353-45-9 Fast Green FCF: RTECS#: BQ4425000**

LD50 Oral: >2 g/kg (rat)  
LD50 Dermal: Not available  
LC50 Inhalation: Not available  
Note: Tumorigen, mutagen by RTECS.

**Carcinogenicity:** Fast Green FCF CAS#2353-45-9 is not listed by NTP, ACGIH, OSHA, or California Prop 65. Fast Green FCF is listed by IARC (Group 3, Not classifiable as to its carcinogenicity to humans).

### **CAS#64-17-5 Ethyl Alcohol: RTECS#: KQ6300000**

LD50 Oral: 10470 mg/kg (rat)  
LD50 Dermal: Not available  
LC50 Inhalation: 124.7 mg/L (rat) 4h

Draize test, rabbit, eye: 500 mg/24h Mild Irritant  
Skin: Repeated exposure may cause skin dryness or cracking.  
Ethyl Alcohol overexposure may lead to headache, dizziness, tiredness, nausea and vomiting.

**Carcinogenicity:** Ethyl Alcohol CAS#64-17-5 is not listed by OSHA. Ethyl Alcohol is listed by IARC (Group 1, Carcinogenic to Humans), NTP (Known Carcinogen), and ACGIH (A3, Animal Carcinogen). Ethyl Alcohol is listed by California Prop. 65 as a developmental carcinogen (alcoholic beverages only).

**CAS#67-56-1 Methyl Alcohol: RTECS#: PC1400000**

LD50 Oral: 100.1 mg/kg

LD50 Dermal: 300.1 mg/kg

LC50 Inhalation: 3.1 mg/L 4h (rat)

May cause skin and eye irritation.

Methyl Alcohol may cause blindness: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

**Carcinogenicity:** Methyl Alcohol CAS#67-56-1 is not listed by IARC, NTP, ACGIH, or OSHA. Methyl Alcohol is listed by California Prop. 65 as a developmental carcinogen.

**Epidemiology:** Not available.

**Teratogenicity:** Not available.

**Reproductive Effects:** Not available.

**Developmental Effects:** Not available.

**Neurotoxicity:** Not available.

**Mutagenicity:** Not available.

**Specific Organ Toxicity, Single Exposure:** Respiratory system, central nervous system, and optic nerve.

**Specific Organ Toxicity, Repeated Exposure:** Kidney, liver, spleen, and blood.

Note: Prolonged or repeated exposure can defat the skin and lead to irritation, cracking, and/or dermatitis. Eye contact may result in corneal damage or blindness. Causes damage to organs if in contact with skin, if inhaled or if swallowed.

**The toxicological properties of this material have not been thoroughly investigated.**

Section 12 - Ecological Information
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**Ecotoxicity:** Do not release to the environment. Do not release to drains. Toxic to aquatic life. May cause long-term adverse effects to the environment.

**CAS#64-17-5 Ethyl Alcohol:**

EC50, freshwater algae: 275 mg/L 72h (chlorella vulgaris)

LC50, freshwater fish: 14200 mg/L 96h (pimephales promelas)(fathead minnow)

EC50, water flea: 9268 mg/L 48h, 10800 mg/L 24h

EC50, water flea: 10800 mg/L 24h

EC50, microtox: 34634 mg/L 30min (photobacterium phosphoreum)

EC50, microtox: 35470 mg/L 5min (photobacterium phosphoreum)

**CAS#67-56-1 Methyl Alcohol:**

LC50, freshwater fish: >10000 mg/L 96h (pimephales promelas)(fathead minnow)

EC50, water flea: >10000mg/L 24 h

EC50, algae: 22000 mg/L 96h static (pseudokirchneriella subcapitata)(green algae)

IC50, bacteria: >1000 mg/L 3h static (activated sludge)

EC50, microtox: 39000 mg/L 25min

EC50, microtox: 40000 mg/L 15min  
EC50, microtox: 43000 mg/L 5min

**Persistence and degradability:** Not available.

**Bio-accumulative potential:** Not available.

**Mobility:** Will likely be mobile in the environment due to its water solubility.

### Section 13 - Disposal Considerations

**DISPOSAL:** Dispose of in accordance with all federal, state, and local regulations.

### Section 14 – Transport Information

**DOT**

Non-Regulated

### Section 15 - Regulatory Information

#### Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

### Section 16 - Additional Information

**SDS Creation Date:** 10/21/12

**Revision #1.** 11/14/13

**Revision #2.** 8-19-22

**Revision #3.** 10-19-22

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