SAFETY DATA SHEET

Revision Date 16-Jun-2015

1. IDENTIFICATION

Product identifier **Product Name** TERREX GREEN LF Other means of identification Product Code TP950GAL TP950GAL SKU(s) Recommended use of the chemical and restrictions on use Recommended Use No information available. Uses advised against No information available Details of the supplier of the safety data sheet Supplier Address TISCO

PO Box 82222 Lincoln, NE 68501 Phone: 402-476-6558 Fax: 402-476-6749

Emergency telephone number Emergency Telephone

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Emergency Overview

Danger

Hazard statements

May cause an allergic skin reaction May cause genetic defects Suspected of causing cancer Causes damage to organs through prolonged or repeated exposure May be fatal if swallowed and enters airways Flammable liquid and vapor Version 1



Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Contaminated work clothing should not be allowed out of the workplace Wear protective gloves Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Keep away from heat/sparks/open flames/hot surfaces. - No smoking Keep container tightly closed Ground/bond container and receiving equipment Use only non-sparking tools Take precautionary measures against static discharge Use explosion-proof electrical/ ventilating/ lighting/ equipment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

- Causes mild skin irritation
- Harmful to aquatic life with long lasting effects

• Harmful to aquatic life Unknown acute toxicity

9.2% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Solvent Naphtha, Medium Aliphatic	64742-88-7	15 - 40	*
Talc (powder)	14807-96-6	1 - 5	*
Stoddard Solvent	8052-41-3	1 - 5	*
Xylene	1330-20-7	1 - 5	*
Titanium dioxide	13463-67-7	1 - 5	*
Methyl Ethyl Ketoxime	96-29-7	0.1 - 1	*

Ethyl Benzene	100-41-4	0.1 - 1	*
Cobalt 2-ethylhexanoate	136-52-7	0.1 - 1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures				
General advice	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.			
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.			
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.			
Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a physician immediately.			
Ingestion	Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.			
Self-protection of the first aider	Use personal protective equipment as required.			
Most important symptoms and effe	ects, both acute and delayed			
Symptoms	No information available.			
Indication of any immediate medic	Indication of any immediate medical attention and special treatment needed			
Note to physicians	Treat symptomatically.			
5. FIRE-FIGHTING MEASURES				

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical Flammable.

Fiammable.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Remove all sources of ignition. Use personal protective equipment as required.

Environmental precautions

Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.		
Methods and material for contain	ment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.		
Methods for cleaning up	Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.		
	7. HANDLING AND STORAGE		
Precautions for safe handling			
Advice on safe handling	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray Do not eat, drink or smoke when using this product.		
Conditions for safe storage, including any incompatibilities			
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).		

Incompatible materials Chlorinated compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Talc (powder) 14807-96-6	TWA: 2 mg/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	(vacated) TWA: 2 mg/m ³ respirable dust <1% Crystalline silica, containing no Asbestos TWA: 20 mppcf if 1% Quartz or more, use Quartz limit	IDLH: 1000 mg/m ³ TWA: 2 mg/m ³ containing no Asbestos and <1% Quartz respirable dust
Stoddard Solvent 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³	IDLH: 20000 mg/m³ Ceiling: 1800 mg/m³ 15 min TWA: 350 mg/m³
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m ³	-
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Ethyl Benzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 125 ppm (vacated) STEL: 545 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls

Showers Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles.
Skin and body protection	No special technical protective measures are necessary.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	liquid No information available No information available	Odor Odor threshold	No information available No information available
Property pH Melting point/freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density Specific Gravity Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Explosive properties	ValuesNo information availableNo information available>= 111 °C / 231 °F39 °C / 102 °FNo information availableNo information available	<u>Remarks • Method</u>	
Oxidizing properties	No information available		
Other Information			
Softening point Molecular weight VOC Content (%) Density Bulk density Percent solids by weight Percent volatile by weight Percent solids by volume Actual VOC (lbs/gal) Actual VOC (grams/liter)	No information available No information available No information available 8.06 lbs/gal No information available 53.4% 46.6% 42.3% 3.8 450.2		

EPA VOC (lbs/gal)	3.8
EPA VOC (grams/liter)	450.2
EPA VOC (lb/gal solids)	8.9

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials Chlorinated compounds.

omormated compounds.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Solvent Naphtha, Medium Aliphatic 64742-88-7	> 5000 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	> 5.28 mg/L (Rat)4 h
Xylene 1330-20-7	= 3500 mg/kg(Rat)	> 1700 mg/kg (Rabbit)> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat)4 h = 5000 ppm (Rat)4 h
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Methyl Ethyl Ketoxime 96-29-7	= 930 mg/kg (Rat)	= 0.2 mg/kg(Rabbit)	= 20 mg/L (Rat)4 h
Ethyl Benzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat)4 h

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Germ cell mutagenicity Carcinogenicity	No information	No information available. No information available. No information available.		
Chemical Name	ACGIH	IARC	NTP	OSHA
Talc (powder)	-	Group 3	-	-
14807-96-6				

Xylene 1330-20-7	-	Group 3	-	-	
Titanium dioxide 13463-67-7	-	Group 2B	-	Х	
Ethyl Benzene 100-41-4	A3	Group 2B	-	Х	
Cobalt 2-ethylhexanoate 136-52-7	-	Group 2B	-	Х	
ACGIH (American Conference of Governmental Industrial Hygienists) A3 - Animal Carcinogen IARC (International Agency for Research on Cancer) Group 2B - Possibly Carcinogenic to Humans Group 3 - Not classifiable as a human carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present Reproductive toxicity STOT - single exposure STOT - repeated exposure Chronic toxicity Mo information available. STOT - repeated exposure Chronic toxicity Mo information available. STOT - single exposure Chronic toxicity Mo information available. Chronic toxicity Mo information available. Chronic toxicity Mo information available. Chronic toxicity Mo information available. STOT - single exposure Chronic toxicity Mo information available. Store - repeated exposure Chronic toxicity Mo information available. Ethylbenzene has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B). Prolonged or repeated overexposure to ethylbenzene may result in adverse effects to the kidneys, liver, respiratory system, thyroid, testicles, and pituitary glands.					
Target Organ Effects Central nervous system, Central Vascular System (CVS), Eyes, kidney, lungs, Respin system, Skin.			idney, lungs, Respiratory		
Aspiration hazard No information available.					

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg mg/l

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.

Ecotoxicity

Harmful to aquatic life with long lasting effects

51.97% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Solvent Naphtha, Medium Aliphatic 450: 96 h Pseudokirchneriella 64742-88-7 subcapitata mg/L EC50		800: 96 h Pimephales promelas mg/L LC50 static	100: 48 h Daphnia magna mg/L EC50
Talc (powder) 14807-96-6	-	100: 96 h Brachydanio rerio g/L LC50 semi-static	-
Xylene 1330-20-7	-	13.4: 96 h Pimephales promelas mg/L LC50 flow-through 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 19: 96 h Lepomis macrochirus mg/L LC50 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static 780: 96 h Cyprinus carpio mg/L LC50 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static	3.82: 48 h water flea mg/L EC50 0.6: 48 h Gammarus lacustris mg/L LC50
Methyl Ethyl Ketoxime 96-29-7	83: 72 h Desmodesmus subspicatus mg/L EC50	777 - 914: 96 h Pimephales promelas mg/L LC50 flow-through 760: 96 h Poecilia reticulata mg/L LC50 static 320 - 1000: 96 h Leuciscus idus mg/L LC50 static	750: 48 h Daphnia magna mg/L EC50

Ethyl Benzene	4.6: 72 h Pseudokirchneriella	11.0 - 18.0: 96 h Oncorhynchus	1.8 - 2.4: 48 h Daphnia magna mg/L
100-41-4	subcapitata mg/L EC50 438: 96 h	mykiss mg/L LC50 static 4.2: 96 h	EĊ50
	Pseudokirchneriella subcapitata	Oncorhynchus mykiss mg/L LC50	
	mg/L EC50 2.6 - 11.3: 72 h	semi-static 7.55 - 11: 96 h	
	Pseudokirchneriella subcapitata	Pimephales promelas mg/L LC50	
	mg/L EC50 static 1.7 - 7.6: 96 h	flow-through 32: 96 h Lepomis	
	Pseudokirchneriella subcapitata	macrochirus mg/L LC50 static 9.1 -	
	mg/L EC50 static	15.6: 96 h Pimephales promelas	
	-	mg/L LC50 static 9.6: 96 h Poecilia	
		reticulata mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Xylene 1330-20-7	2.77 - 3.15
Methyl Ethyl Ketoxime 96-29-7	0.65
Ethyl Benzene 100-41-4	3.118

Other adverse effects

No information available

D001 U239

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Xylene	-	Included in waste stream:	-	U239
1330-20-7		F039		
Ethyl Benzene	-	Included in waste stream:	-	-
100-41-4		F039		

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Xylene	Toxic
1330-20-7	Ignitable
Ethyl Benzene 100-41-4	Toxic Ignitable
Cobalt 2-ethylhexanoate 136-52-7	Тохіс

14. TRANSPORT INFORMATION

DOT

Not regulated

Marine pollutant

This product contains a chemical which is listed as a marine pollutant according to DOT.

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies *
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies *
KECL	Does not comply
PICCS	Does not comply
AICS	Complies *

* This product contains an unknown chemical, therefore, this product's compliance to the inventory list is NOT DETERMINED

Legend:

 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

 ENCS - Japan Existing and New Chemical Substances

 IECSC - China Inventory of Existing Chemical Substances

 KECL - Korean Existing and Evaluated Chemical Substances

 PICCS - Philippines Inventory of Chemicals and Chemical Substances

 AICS - Australian Inventory of Chemical Substances

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %	
Xylene - 1330-20-7	1.0	
Ethyl Benzene - 100-41-4	0.1	

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

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Xylene 1330-20-7	100 lb	-	-	Х
Ethyl Benzene 100-41-4	1000 lb	X	Х	Х

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Xylene	100 lb	-	RQ 100 lb final RQ
1330-20-7			RQ 45.4 kg final RQ

ſ	Ethyl Benzene 100-41-4	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ
_ L	100 11 1			red for high lind i red

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen
Ethyl Benzene - 100-41-4	Carcinogen
Crystalline Silica - 14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Solvent Naphtha, Medium Aliphatic 64742-88-7	X	-	<u>-</u>
Talc (powder) 14807-96-6	Х	X	Х
Stoddard Solvent 8052-41-3	Х	X	Х
Xylene 1330-20-7	Х	Х	Х
Titanium dioxide 13463-67-7	Х	X	Х
Ethyl Benzene 100-41-4	Х	X	Х
Cobalt 2-ethylhexanoate 136-52-7	Х	-	Х
Diethylene Glycol Butyl Ether 112-34-5	Х	-	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Hazardous air pollutants (HAPS) content

LIST OF HAZARDOUS AIR POLLUTANTS SUBJECT TO THE PROVISIONS OF THE CLEAN AIR ACT, TITLE I SECTION 112 'National Emission Standards for Hazardous Air Pollutants':

Chemical Name	Weight % of HAPS in Product	Pounds HAPS / Gal Product
Xylene	2.40%	0.19
1330-20-7		

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards 2	Flammability 2	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 2 *	Flammability 2	Physical hazards 0	Personal protection X

* = Chronic Health Hazard

Chronic Hazard Star Legend

Revision Date 16-Jun-2015

Revision Note No information available

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. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

End of Safety Data Sheet