SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information

Product Name: Tec-Flon Green Product Code: TFWB6076-12S

TECTORIUS
56732 MOUND ROAD
SHELBY TOWNSHIP, MICHIGAN 48316
(586) 232-3999

Emergency Contact:
InfoTrac
USA 800-535-5053
International 352-323-3500

Product Use: Industrial Use Only
Not recommended for:

Section 2 - Hazards Identification

GHS Ratings:

Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Reproductive toxin	1B	Presumed, Based on experimental animals

GHS Hazards

H315	Causes skin irritation
H319	Causes serious eye irritation
H360	May damage fertility or the unborn child

GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P264	Wash … thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P321	Specific treatment (see … on this label)
P362	Take off contaminated clothing and wash before reuse
P302+P352	IF ON SKIN: Wash with soap and water
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P337+P313	Get medical advice/attention
P405	Store locked up
P501	Dispose of contents/container to an approved waste disposal plant.

Signal Word: Danger

Potential Health Effects:
Contains polymer(s). Effects due to processing releases residual monomer: Irritating to eyes, respiratory system and skin. May cause allergic respiratory reaction. Prolonged or repeated exposure may cause: headache, drowsiness, nausea, and weakness. (Severity of effects depends on extent of exposure) .
Medical conditions aggravated by overexposure:

Respiratory disease or diminished respiratory capacity. Asthma. (Data for residual monomer that may be released during processing)

Other:

This product may release fumes and/or vapors of variable composition depending on processing time and temperature. Possible release of traces of residual monomer. Isocyanates may cause acute irritation and/or sensitisation of the respiratory system leading to tightness of the chest, wheeziness and an asthmatic condition. Possible cross sensitization with other acrylates and methacrylates

Section 3 - Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
2-Butoxyethanol	111-76-2	1.00% - 5.00%
Triethylamine	121-44-8	1.00% - 5.00%
Formaldehyde	50-00-0	0.01%
Hexamethoxymethylmelamine	68002-20-0	1.00% - 5.00%
Water	7732-18-5	30.00% - 40.00%
N Methyl Pyrrolidone	872-50-4	20.00% - 30.00%

Section 4 - First Aid Measures

Inhalation:

If inhaled, remove victim to fresh air.

Eyes:

Immediately flush eye(s) with plenty of water.

Skin:

In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Ingestion:

If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

Section 5 - Fire Fighting Measures

Flash Point: none

LEL: 1.00 UEL: 13.00

This produst is water-based and does not sustain combustion.

Extinguishing Media (suitable):

Water spray, Carbon dioxide (CO2), Foam, Dry chemical

Fire and explosion hazards:

When burned, the following hazardous products of combustion can occur:

Carbon oxides
Nitrogen oxides
hydrogen cyanide
Isocyanates
Amines
Hazardous organic compounds
Polymerization is exothermic and can degenerate into an uncontrolled reaction.

Further Firefighting Advice:

Fight fire from a protected location.
Cool closed containers exposed to fire with water spray.
Closed containers of this material may explode when subjected to heat from surrounding fire.
Fire fighting equipment should be thoroughly decontaminated after use.
Do not allow run-off from fire fighting to enter drains or water courses.

Protective Equipment:

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand / NIOSH approved or equivalent).

Section 6 - Accidental Release Measures

In case of spill or leak:

Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Avoid generation of vapors. Contain and collect spillage with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable properly labeled containers for prompt disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Section 7 - Handling and Storage

Handling:

General information on handling:
Avoid prolonged or repeated contact with skin.
Wash thoroughly after handling.
Emptied container retains vapor and product residue.
Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.
This product should be consumed in its entirety.
If this product freezes, heat it slowly and mix gently.
Avoid breathing any processing vapor or mist.

Storage

General information on storage conditions:
Keep in a dry, cool place. Store in closed containers, in a secure area to prevent container damage and subsequent spillage. Store out of direct sunlight in a cool well-ventilated place. Keep stabilizer levels constant to avoid explosive polymerization. An air space is required above the liquid in all containers; avoid storage under an oxygen-free atmosphere.

Storage stability - Remarks:
Inhibitor levels should be maintained. The typical shelf-life for this product is 6 months.

Storage incompatibility - General:
Store separate from:
Strong oxidizing agents

Strong reducing agents
Free radical generators
Inert gas
Oxygen scavenger
Peroxides

Temperature tolerance - Do not store below:
-32 °F (0 °C)

Temperature tolerance - Do not store above:
100 °F (38 °C)

Regulatory Requirements:

None

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
2-Butoxyethanol 111-76-2	50 ppm TWA Table Z 25 ppm TWA skin	20 ppm TWA	IDLH: 700 ppm
Triethylamine 121-44-8	25 ppm TWA Table Z 10 ppm TWA 15 ppm STEL	1 ppm TWA 3 ppm STEL skin	IDLH: 200 ppm
Formaldehyde 50-00-0	0.75 ppm TWA	0.3 ppm Ceiling	NIOSH: 0.016 ppm TWA 0.1 ppm Ceiling (15 min)
Hexamethoxymethylmelamine 68002-20-0	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established
N Methyl Pyrrolidone 872-50-4	Not Established	Not Established	Not Established

Engineering controls:
Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation, if necessary, to minimize exposures or to control exposure levels below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Respiratory protection:
Avoid breathing processing vapor or mist. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency
and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR §

1910.134.

Skin protection:
Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact . Consult glove manufacturer to determine appropriate type glove material for given application. Avoid natural rubber gloves. Wear chemical goggles, a face shield, and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing immediately and wash before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoroughly after handling.

Eye protection:
Use good industrial practice to avoid eye contact.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Odor Pungent	**Physical State** Liquid
Vapor Density Lighter then air	**Evaporation Rate** Slower than ether
Boiling Range 89 to 202 °C	**% Volume Solids** 0.87
% Weight Volatile (VOC) 27.76	**Specific Gravity (SG)** 1.137
Lbs VOC/Gallon Less Water 2.80	

Section 10 - Stability and Reactivity

Materials to avoid:
Strong oxidizing agents
Strong reducing agents
Free radical generators
Inert gas
Oxygen scavenger.
Peroxides

Conditions / hazards to avoid:
This material polymerizes exothermically in the presence of heat, contamination, oxygen free atmosphere, free radicals, peroxides and inhibitor depletion liberating heat. Avoid direct sunlight. Do NOT expose to ultraviolet light.

None

Hazardous decomposition products:
Carbon oxides
Nitrogen oxides
Hydrogen cyanide
Isocyanates
Amines
Acrylates
Hazardous organic compounds

None

Section 11 - Toxicological Information

Mixture Toxicity

Oral Toxicity LD50: 4,587mg/kg
Inhalation Toxicity LC50: 515mg/L

Component Toxicity

111-76-2	2-Butoxyethanol Oral LD50: 320 mg/kg (rabbit) Dermal LD50: 400 mg/kg (rabbit) Inhalation LC50: 700 ppm (mous
121-44-8	Triethylamine Oral LD50: 460 mg/kg (rat) Dermal LD50: 416 mg/kg (rabbit) Inhalation LC50: 6 mg/L (rat)
50-00-0	Formaldehyde Oral LD50: 500 mg/kg (Rat) Dermal LD50: 270 mg/kg (Rabbit) Inhalation LC50: 1 mg/L (Rat)

Repeated Dose Toxicity:

N-Methyl-2-Pyrrolidone: In a two-year rat feeding study, males showed signs of chronic progressive nephropathy. No treatment related tumors were seen. At very high repeated inhalation doses (1.0 mg/L), NMP caused focal pneumonia, bone marrow hypoplasia, and atrophy of lymphoid tissue; 0.5 mg/L was the no effect level.

Triethylamine: Exposure to vapor may cause minor transient edema of the corneal epithelium. This condition, referred to as "glaucopsia", produces a blurring of vision against a general bluish haze and the appearance of halos around bright objects. The effect disappears spontaneously within a few hours of the end of an exposure and leaves no sequelae. Animal studies showed that repeated or prolonged exposures caused kidney and liver damage at 50 ppm. Heart tissue was affected at 100 ppm.

Inhalation Skin Contact Eye Contact Ingestion

Blood Eyes Skin Respiratory System

Effects of Overexposure

Inhalation	Liquid and high vapor concentrations may cause irritation of the respiratory tract. Excessive exposure may cause central nervous system effects: headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure and death.
Skin Contact	Prolonged or repeated skin contact with liquid tends to remove skin oils which may lead to irritation and dermatitis.
Skin Absorption	Toluene is practically nontoxic if absorbed (LD50 >2000 mg/kg); however, skin absorption may add significantly to exposure.
Eye Contact	Vapors are irritating to the eyes. Mists and liquid may cause moderate to severe irritation.
Ingestion	Toluene is moderately toxic if ingested and may cause vomiting. Small amounts aspirated (breathed) into the lungs during ingestion or vomiting may cause pulmonary injury or death.
Systemic Effects	Prolonged, repeated, and excessive exposures may cause other effects - chronic, adverse systemic effects including liver and kidney damage.
	Noise interaction with toluene (mixed solvent) in the work environment may cause signs of hearing loss.

CAS Number	Description	% Weight	Carcinogen Rating
50-00-0	Formaldehyde	0.009	NIOSH: potential occupational carcinogen IARC: Human carcinogen OSHA: listed

111-76-2	2-Butoxyethanol	1 to 5%	A3: Confirmed animal carcinogen with unknown relevance to humans.

Section 12 - Ecological Information

N Methyl Pyrrolidone 872-50-4 (10 to 15)

Water Flea Data
3135 mg/L EC50 water flea 96 h
4897 mg/L EC50 Daphnia magna 48 h

Freshwater Algea Data
500 mg/L EC50 Scenedesmus subspicatus 72 h

Freshwater Fish Species Data
1072 mg/L LC50 Pimephales promelas 96 h
1400 mg/L LC50 Poecilia reticulata 96 h
4000 mg/L LC50 Leuciscus idus 96 h
832 mg/L LC50 Lepomis macrochirus 96 h

Triethylamine 121-44-8 (1 to 5)

Water Flea Data
200 mg/L EC50 Daphnia magna 48 h

Microtox Data
127 mg/L EC50 Nitrosomonas 2 h
95 mg/L EC50 Pseudomonas putida 17 h

Freshwater Fish Species Data
44 mg/L LC50 Pimephales promelas 96 h

Component Ecotoxicity

Formaldehyde	96 Hr LC50 Pimephales promelas: 22.6 - 25.7 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 1510 µg/L [static]; 96 Hr LC50 Brachydanio rerio: 41 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 0.032 - 0.226 mL/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 100 - 136 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.2 - 29.7 mg/L [static] 48 Hr LC50 Daphnia magna: 2 mg/L; 48 Hr EC50 Daphnia magna: 11.3 - 18 mg/L [Static]

Section 13 - Disposal Considerations

Waste disposal:
Disposal via incineration is recommended. Dispose of in accordance with federal, state and local regulations. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

Take appropriate measures to prevent release to the environment.

Section 14 - Transport Information

US Department of Transportation (DOT): not regulated

International Maritime Dangerous Goods Code (IMDG): not regulated

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
	None			

Section 15 - Regulatory Information

Additional regulatory listings, where applicable.

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

- None

Country	Regulation	All Components Listed

EU Risk Phrases

Safety Phrase

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

111-76-2 2-Butoxyethanol 1.0 - 5%

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.

50-00-0 Formaldehyde 0.01%

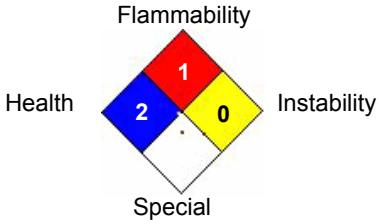
Section 16 - Other Information

Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	F

HMIS & NFPA Hazard Rating Legend
*** = Chronic Health Hazard**
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

National Fire Protection Association (NFPA)



The technical information presented here is believed to be accurate. We rely on the information provided to us from our raw material suppliers to develop this S.D.S. As our suppliers update their information, we will provide an updated S.D.S. at that time. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or process. We assume no responsibility for losses or damage, direct or indirect, as a result of its use. Raw material supplier S.D.S.'s for individual components are available upon request.

Reviewer Revision

Date Prepared: 6/25/2015