SAFETY DATA SHEET

Poly Tree Fusion

Version	Revision Date:	SDS Number:	Date of last issue: 10/22/2020
2.0	05/10/2021	000000261010	Date of first issue: 10/22/2020

SECTION 1. IDENTIFICATION

Product name : Poly Tree Fusion

Product code : 000000000059102743

Manufacturer or supplier's details

Company name of supplier : Colorbiotics, LLC

Address : 201 POLITO AVE
Lyndhurst NJ 07071

Emergency telephone : ChemTel: +1-813-248-0585

Recommended use of the chemical and restrictions on use

Recommended use : Product for construction chemicals

Restrictions on use : Reserved for industrial and professional use.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity (Inhalation) : Category 4

Skin irritation : Category 2

Eye irritation : Category 2B

Respiratory sensitization : Category 1

Skin sensitization : Category 1

Carcinogenicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

Specific target organ toxicity - repeated exposure (Inhalation) : Category 2 (Respiratory system, Olfactory organs)

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H315 + H320 Causes skin and eye irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs (Respiratory system, Olfactory organs) through prolonged or repeated exposure if inhaled.

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P285 In case of inadequate ventilation wear respiratory protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously 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.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

CONTAINS ISOCYANATES. INHALATION OF ISOCYANATE MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM

EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. ANIMAL TESTS INDICATE THAT SKIN CONTACT MAY PLAY A ROLE IN CAUSING RESPIRATORY SENSITIZATION.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Aromatic isocyanates

Components

Chemical name	CAS-No.	Concentration (% w/w)
Isocyanic acid, polymethylenepoly-phenylene ester, polymer with methylo xirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-p ropanediol (3:1)	58228-06-1	>= 50 - < 75
Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8	>= 15 - < 20
Methylenediphenyl diisocyanate	26447-40-5	>= 5 - < 7
Isocyanic acid, polymethylenepoly-phenylene ester (P-MDI)	9016-87-9	>= 3 - < 5
1,3-Diazetidine-2,4-dione, 1,3-bis[4-[(4-isocyanatophenyl)methyl]phenyl]-	17589-24-1	>= 0.1 - < 0.2

SECTION 4. FIRST AID MEASURES

General advice : First aid personnel should pay attention to their own safety.
Remove contaminated clothing.

If inhaled : If generated vapours are inhaled, move to fresh air.
Seek medical attention.

In case of skin contact : Wash thoroughly with soap and water
Under no circumstances should organic solvent be used.
If irritation develops, seek medical attention.

In case of eye contact : Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.
Remove contact lenses, if present, after first 5 minutes, then continue rinsing for an additional 15 minutes.

If swallowed : Rinse mouth and then drink 200-300 ml of water.
DO NOT induce vomiting unless directed to do so by a physi-cian or poison control center.

Most important symptoms and effects, both acute and delayed : Causes skin and eye irritation.
May cause an allergic skin reaction.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficul-

ties if inhaled.
May cause respiratory irritation.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure if inhaled.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Foam
Water spray
Dry powder
Carbon dioxide (CO2)

Unsuitable extinguishing media : water jet

Hazardous combustion products : nitrous gases
fumes/smoke
isocyanate
vapor

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Keep containers cool by spraying with water if exposed to fire.
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special protective equipment for fire-fighters : Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Clear area.
Ensure adequate ventilation.
Wear suitable personal protective clothing and equipment.

Environmental precautions : Contain contaminated water/firefighting water.
Do not discharge into drains/surface waters/groundwater.

Methods and materials for containment and cleaning up : Pick up and transfer to properly labeled containers.
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling : Provide suitable exhaust ventilation at the processing ma-

chines.
Ensure thorough ventilation of stores and work areas.
Avoid aerosol formation.
Avoid skin contact.
When handling heated product, vapours of the product should be ventilated, and respiratory protection used.
Wear respiratory protection when spraying.
Danger of bursting when sealed gastight.
Protect against moisture.
If bulging of drum occurs, transfer to well ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : Keep only in the original container in a cool, well-ventilated place.
Protect from direct sunlight.
Store protected against freezing.

Recommended storage temperature : > 39 °F / > 4 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8	TWA value	0.005 ppm	ACGIHTLV
		REL value	0.005 ppm 0.05 mg/m3	NIOSH
		Ceil_Time	0.020 ppm 0.2 mg/m3	NIOSH
		CLV	0.02 ppm 0.2 mg/m3	29 CFR 1910.1000 (Table Z-1)
		CLV	0.02 ppm 0.2 mg/m3	29 CFR 1910.1000 (Table Z-1-A)
		TWA	0.005 ppm	ACGIH
		C	0.02 ppm 0.2 mg/m3	OSHA Z-1
		C	0.02 ppm 0.2 mg/m3	OSHA P0
		TWA	0.005 ppm 0.05 mg/m3	NIOSH REL
		C	0.02 ppm	NIOSH REL

			0.2 mg/m3	
Methylenediphenyl diisocyanate	26447-40-5	C	0.02 ppm 0.2 mg/m3	OSHA Z-1
		C	0.02 ppm 0.2 mg/m3	OSHA P0
		TWA	0.005 ppm 0.05 mg/m3	NIOSH REL
		C	0.02 ppm 0.2 mg/m3	NIOSH REL
Isocyanic acid, polymethylenepolyphenylene ester (P-MDI)	9016-87-9	C	0.02 ppm 0.2 mg/m3	OSHA Z-1
		C	0.02 ppm 0.2 mg/m3	OSHA P0
		TWA	0.005 ppm 0.05 mg/m3	NIOSH REL
		C	0.02 ppm 0.2 mg/m3	NIOSH REL

Engineering measures : Ensure adequate ventilation.

Personal protective equipment

Respiratory protection : When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place.
For emergency or non-routine, high exposure situations, including confined space entry, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection

Remarks : Chemical resistant protective gloves should be worn to prevent all skin contact. Suitable materials may include chloroprene rubber (Neoprene) nitrile rubber (Buna N) chlorinated polyethylene polyvinylchloride (Pylox) butyl rubber depending upon conditions of use.

Eye protection : Tightly fitting safety goggles (chemical goggles).
Wear face shield if splashing hazard exists.

Skin and body protection : Cover as much of the exposed skin as possible to prevent all skin contact.
Suitable materials may include
saran-coated material
depending upon conditions of use.

Protective measures : Wear protective clothing as necessary to prevent contact.
Eye wash fountains and safety showers must be easily accessible.
Observe the appropriate PEL or TLV value.

Hygiene measures	:	When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Remove contaminated clothing immediately and clean before re-use or dispose it if necessary.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	paste
Color	:	tan
Odor	:	mild, aromatic
Odor Threshold	:	not determined
pH	:	No data available
Melting point	:	No data available
Boiling point	:	No data available
Flash point	:	250 °F / 121 °C Method: Standard Method of Test for Flash Point by Setaflash Closed Tester
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not classified as a flammability hazard
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	Heavier than air.
Relative density	:	No data available
Density	:	8.9 lb/USg

		approx. 1.07 g/cm3 (77 °F / 25 °C)
Bulk density	:	1,000 - 1,400 kg/m3
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No decomposition if stored and handled as prescribed/indicated.
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Based on its structural properties the product is not classified as oxidizing.
Self-heating substances	:	No data available
Sublimation point	:	No data available
Molecular weight	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No hazardous reactions if stored and handled as prescribed/indicated.
Chemical stability	:	The product is stable if stored and handled as prescribed/indicated.
Possibility of hazardous reactions	:	The product is stable if stored and handled as prescribed/indicated.
Conditions to avoid	:	See SDS section 7 - Handling and storage.
Incompatible materials	:	Strong acids Strong bases Strong oxidizing agents Strong reducing agents
Hazardous decomposition products	:	No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if inhaled.

Product:

Acute inhalation toxicity : Acute toxicity estimate: 1.76 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes eye irritation.

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs (Respiratory system, Olfactory organs) through prolonged or repeated exposure if inhaled.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks : Health injuries are not known or expected under normal use. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : Do not release untreated into natural waters.
Do not allow to enter soil, waterways or waste water channels.
The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with national, state and local regulations.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not discharge into drains/surface waters/groundwater.

Contaminated packaging : Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8	>= 10 - < 20 %
Isocyanic acid, polymethylene-polyphenylene ester (P-MDI)	9016-87-9	>= 1 - < 5 %

US State Regulations

Pennsylvania Right To Know

Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8
Isocyanic acid, polymethylenepolyphenylene ester (P-MDI)	9016-87-9

New Jersey Right To Know

Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8
Methylenediphenyl diisocyanate	26447-40-5
Isocyanic acid, polymethylenepolyphenylene ester (P-MDI)	9016-87-9

The ingredients of this product are reported in the following inventories:

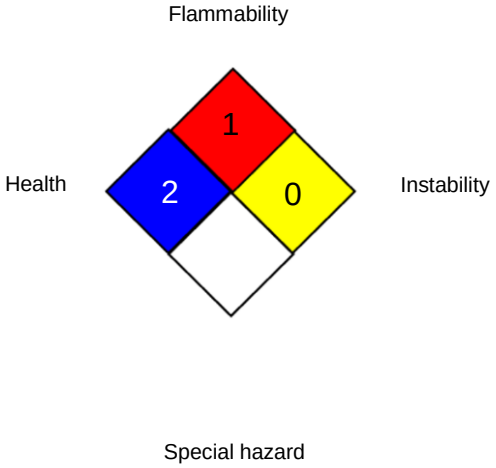
TSCA : All substances listed as active on the TSCA inventory

DSL : All components of this product are on the Canadian DSL

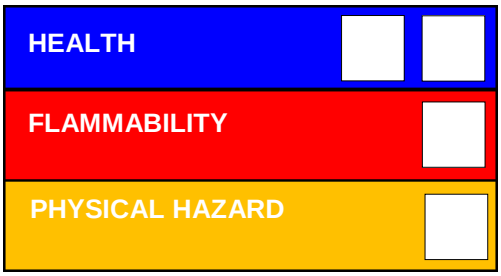
SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

29 CFR 1910.1000 (Table Z-1-A)	:	OSHA - Table Z-1-A (29 CFR 1910.1000)
29 CFR 1910.1000 (Table Z-1)	:	OSHA - Table Z-1 (Limits for Air Contaminants) 29 CFR 1910.1000
ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIHTLV	:	American Conference of Governmental Industrial Hygienists - threshold limit values (US)
NIOSH	:	NIOSH Pocket Guide to Chemical Hazards (US)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA P0	:	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
29 CFR 1910.1000 (Table Z-1-A) / CLV	:	Ceiling Limit Value:
29 CFR 1910.1000 (Table Z-1) / CLV	:	Ceiling Limit Value:
ACGIH / TWA	:	8-hour, time-weighted average
ACGIHTLV / TWA value	:	Time Weighted Average (TWA):
NIOSH / Ceil_Time	:	Ceiling Limit Value and Time Period (if specified):
NIOSH / REL value	:	Recommended exposure limit (REL):
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / C	:	Ceiling value not be exceeded at any time.
OSHA P0 / C	:	Ceiling limit
OSHA Z-1 / C	:	Ceiling

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency

Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 05/10/2021

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.

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