



SAFETY DATA SHEET

Revision Date April 3, 2017

Version 3

1. IDENTIFICATION

Product identifier

Product Name Eco-HPS® 100/Eco-HTS 100/Eco-SDS A

Other means of identification

Product Code 9002618, 9002622, 9005169, 9011256
SKU(s) 9002618, 9002622, 9005169, 9011256

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

Manufacturer Address

Tennant Company
701 North Lilac Drive
P.O. Box 1452
Minneapolis, MN 55440-1452
Phone: 1-763-540-1200

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)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B

Emergency Overview

Danger

Hazard statements

Harmful if inhaled
 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 May cause an allergic skin reaction
 May cause genetic defects
 May cause cancer



Appearance No information available **Physical state** liquid **Odor** No information available

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
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 In case of inadequate ventilation wear respiratory protection
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

- May be harmful if swallowed
 - May be harmful in contact with skin
 - Harmful to aquatic life with long lasting effects
- Unknown acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Polymeric Isocyanate	28182-81-2	60 - 100	*
Aromatic 100	64742-95-6	0.1 - 1	*
Hexamethylene-1,6-diisocyanate	822-06-0	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.
Skin Contact	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before reuse.
Inhalation	Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. May cause allergic respiratory reaction.
Ingestion	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically. Symptoms may be delayed. May cause sensitization by skin contact. May cause sensitization by inhalation and skin contact.
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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

No information available.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

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	Ensure adequate ventilation, especially in confined areas.
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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 containment 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. Use personal protective equipment as required. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

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.

Incompatible materials Incompatible with oxidizing agents. Strong bases. Water. Alcohols. Amines. Copper.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hexamethylene-1,6-diisocyanate 822-06-0	TWA: 0.005 ppm	-	Ceiling: 0.020 ppm 10 min Ceiling: 0.140 mg/m ³ 10 min TWA: 0.005 ppm TWA: 0.035 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 Wear protective gloves and protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

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	liquid	Odor	No information available
Appearance	No information available	Odor threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling point / boiling range	>= 125 °C / 257 °F	
Flash point	168 °C / 334 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.16	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	9.63 lbs/gal
Bulk density	No information available
Percent solids by weight	99.3%
Percent volatile by weight	0.7%
Percent solids by volume	99.1%
Actual VOC (lbs/gal)	0.1
Actual VOC (grams/liter)	7.7
EPA VOC (lbs/gal)	0.1
EPA VOC (grams/liter)	7.7
EPA VOC (lb/gal solids)	0.1

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

Extremes of temperature and direct sunlight.

Incompatible materials

Incompatible with oxidizing agents. Strong bases. Water. Alcohols. Amines. Copper.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	May cause sensitization by inhalation.
Eye contact	May cause irritation.
Skin Contact	May cause irritation. May cause sensitization by skin contact.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Polymeric Isocyanate 28182-81-2	-	-	= 18500 mg/m ³ (Rat) 1 h
Aromatic 100 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
Hexamethylene-1,6-diisocyanate 822-06-0	= 710 µL/kg (Rat)	= 593 mg/kg (Rabbit)	= 0.06 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	May cause sensitization by skin contact. May cause sensitization by inhalation and skin contact.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
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

Ecotoxicity

Harmful to aquatic life with long lasting effects

99.23% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Aromatic 100 64742-95-6	-	9.22: 96 h Oncorhynchus mykiss mg/L LC50	6.14: 48 h Daphnia magna mg/L EC50
Hexamethylene-1,6-diisocyanate 822-06-0	-	26.1: 96 h Brachydanio rerio mg/L LC50 static	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

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.

14. TRANSPORT INFORMATION

DOT

Not regulated

15. REGULATORY INFORMATION

International Inventories

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

* 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

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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)
Hexamethylene-1,6-diisocyanate 822-06-0	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hexamethylene-1,6-diisocyanate 822-06-0	X	X	-
Di-isoButyl Ketone 108-83-8	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Hazardous air pollutants (HAPS) content

This product contains no reportable Hazardous Air Pollutants

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

NFPA	Health hazards 1	Flammability 1	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 1*	Flammability 1	Physical hazards 0	Personal protection X

Chronic Hazard Star Legend * = Chronic Health Hazard

Current Revision Date 03-Apr-2017

Last Revision Date 10-Dec-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.