


# SAFETY DATA SHEET

## Section 1. Identification

<b>Product identifier</b>	: THERBAN LT 2007
<b>Material Number</b>	: 56270926
<b>Synonym</b>	: Hydrogenated Nitrile Rubber (HNBR)
<b>Chemical family</b>	: Synthetic rubber
<b>Identified uses</b>	: rubber
<b>Supplier/Manufacturer</b>	: LANXESS Corporation Product Safety & Regulatory Affairs 111 RIDC Park West Drive Pittsburgh, PA 15275-1112 USA
	For information: US/Canada (800) LANXESS International +1 412 809 1000
<b>In case of emergency</b>	: Chemtrec (800) 424-9300 International (703) 527-3887 Lanxess Emergency Phone (800) 410-3063.

## Section 2. Hazards identification

<b>HAZCOM Standard Status</b>	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Physical state</b>	: Solid.
<b>Color</b>	: Light brown.
<b>Classification of the substance or mixture</b>	: SKIN SENSITIZATION. - Category 1
	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 100%
<b>Hazard pictograms</b>	: 
<b>Signal word</b>	: Warning
<b>Hazard statements</b>	: May cause an allergic skin reaction.
<b>Hazard Not Otherwise Classified (HNOC)</b>	: None known.
<b>Precautionary statements</b>	
<b>Prevention</b>	: Wear protective gloves. Avoid breathing dust. Contaminated work clothing should not be allowed out of the workplace.
<b>Response</b>	: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Polymer

The following potentially hazardous ingredient(s) are used to formulate this product. As supplied, the ingredient(s) are bound in a polymer matrix. Because they are bound in the matrix, they are not expected to create any unusual hazards when handled and processed. according to good manufacturing and industrial hygiene practices and the guidelines provided by this SDS.

<b>Ingredient name</b>	<b>%</b>	<b>CAS number</b>
Triphenyl Phosphine Resin	0.1 - 1% 0.1 - 1%	603-35-0 Trade secret.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. If not breathing, if breathing is irregular or respiratory arrest occurs, provide artificial respiration, or oxygen by a trained professional, using a pocket type respirator.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Once sensitized, an allergic skin reaction may occur with reddening, swelling, and rash when subsequently exposed to very low levels.
- Ingestion** : No specific data.

## Section 4. First aid measures

### Potential chronic health effects

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Notes to physician** : Treat symptomatically. No specific treatment.

**Protection of first-aiders** : No special measures required.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. In case of fire, use water spray (fog), foam or dry chemical.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up** : Move containers from spill area. Approach release from upwind. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Prevent entry into sewers, water courses, basements or confined areas.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

## Section 7. Handling and storage

**Conditions for safe storage** : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Section 8. Exposure controls/personal protection

### Occupational exposure limits

No exposure limit value known.

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal protection

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Skin protection** : Wear suitable protective clothing and gloves. Suitable protective footwear.

**Eye/face protection** : If contact with product is possible, wear safety glasses with side shields.

**Medical Surveillance** : Not available.

## Section 9. Physical and chemical properties

<b>Physical state</b>	: Solid. [rubber bales]
<b>Color</b>	: Light brown.
<b>Odor</b>	: Characteristic.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Melting point</b>	: Not available.
<b>Flash point</b>	: Closed cup: >300°C (>572°F)
<b>Evaporation rate</b>	: Not available.
<b>Explosion limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Specific gravity (Relative density)</b>	: Not available.
<b>Solubility</b>	: Insoluble in the following materials: cold water
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Ignition temperature</b>	: >300°C
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: >300°C

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: No specific data.
<b>Incompatible materials</b>	: No specific data.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential acute health effects

<b>Eye contact</b>	: No known significant effects or critical hazards.
<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Skin contact</b>	: May cause an allergic skin reaction.
<b>Ingestion</b>	: No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: No specific data.
<b>Inhalation</b>	: No specific data.
<b>Skin contact</b>	: Once sensitized, an allergic skin reaction may occur with reddening, swelling, and rash when subsequently exposed to very low levels.
<b>Ingestion</b>	: No specific data.

### Potential chronic health effects

#### Short term exposure

**Potential immediate effects** : Not available.

#### Long term exposure

**Potential delayed effects** : Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	Test
Triphenyl Phosphine Resin	LD50 Oral LD50 Oral	Rat Rat	>700 mg/kg 2800 mg/kg	- -	- -
Triphenyl Phosphine Resin	LD50 Dermal LD50 Dermal	rabbit - Male, Female Rat	>4000 mg/kg Dosage caused no mortality >2000 mg/kg	- -	- -

## Section 11. Toxicological information

Triphenyl Phosphine	LC50 Inhalation Dusts and mists	Rat	>16.8 mg/l	1 hours	-
	LC50 Inhalation Dusts and mists	Rat	12.5 mg/l	4 hours	-

### Irritation/Corrosion

#### Conclusion/Summary

**Skin** : Triphenyl Phosphine:Non-irritating (Rabbit)  
Resin:Non-irritating

**Eyes** : Triphenyl Phosphine:Non-irritating (Rabbit)  
Resin:Non-irritating

### Sensitization

Product/ingredient name	Route of exposure	Species	Result
Triphenyl Phosphine	skin	Guinea pig	Sensitizing

**Skin** : Triphenyl Phosphine:sensitizer  
Resin:sensitizer

### Chronic toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Triphenyl Phosphine	Sub-chronic NOAEL Oral	Rat - Male, Female	6 mg/kg bw/day	91 days; 7 days per week
	Sub-chronic LOAEL Oral	Rat - Male, Female	60 mg/kg bw/day	91 days; 7 days per week
	Chronic NOAEL Inhalation Dusts and mists	Dog - Male, Female	<0.0018 mg/l	28 days; daily
	Sub-acute LOAEL Inhalation Dusts and mists	Rat - Male	2400 mg/m <sup>3</sup>	12 weeks; 4 hours per day

### Mutagenicity

Product/ingredient name	Test	Experiment	Result
Triphenyl Phosphine	471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	Micronucleus assay	Experiment: In vivo Subject: Mammalian-Animal	Negative

### Carcinogenicity

Product/ingredient name	CAS #	IARC	NTP	OSHA
Triphenyl Phosphine Resin	603-35-0 Trade secret.	Not classified. Not classified.	Not classified. Not classified.	Not classified. Not classified.

### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Species	Dose	Exposure
Triphenyl Phosphine		Rat	Oral: 6 mg/kg bw/ day	91 days; 7 days per week
		Rat	Oral: 120 mg/kg bw/ day	91 days; 7 days per week

## Section 11. Toxicological information

### Acute toxicity estimates

Route	ATE value (Acute Toxicity Estimates)
Not available.	

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Test	Result	Species	Exposure
Triphenyl Phosphine	OECD 201 Alga, Growth Inhibition Test	Acute EC50 >5 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours (biomass), (growth rate)
	DIN 38412 Part 27	Acute EC50 >10000 mg/l	Bacteria - Activated sludge	30 minutes
	OECD 202 <i>Daphnia</i> sp. Acute Immobilization Test DIN 38412, L15	Acute EC50 >5 mg/l Fresh water	<i>Daphnia magna</i>	48 hours
	OECD 201 Alga, Growth Inhibition Test	Acute LC50 >10000 mg/l Fresh water Chronic NOEC >5 mg/l Fresh water	Fish - <i>Leuciscus idus</i> Algae - <i>Desmodesmus subspicatus</i>	96 hours 72 hours

**Conclusion/Summary** : Not available.

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Triphenyl Phosphine	OECD 301F Ready Biodegradability - Manometric Respirometry Test	<20 % - Not readily - 28 days	-	Activated sludge

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Triphenyl Phosphine	-	-	Not readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Triphenyl Phosphine	>2.587	30	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal state, provincial and or local environmental controls laws.

## Section 13. Disposal considerations

**RCRA classification** : : If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

## Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	-	-	-	-		Not regulated.
IMDG Class	-	-	-	-		Not regulated.
IATA-DGR Class	-	-	-	-		Not regulated.

PG\* : Packing group

**RQ** : 0 lbs

## Section 15. Regulatory information

**SARA 311/312** : Immediate (acute) health hazard

**SARA Title III Section 302 Extremely Hazardous Substances** : None

**SARA Title III Section 313 Toxic Chemicals** : None

**US EPA CERCLA Hazardous Substances (40 CFR 302)** : None

### State regulations

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections on the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

The concentrations reported below are maximum values.

<u>Ingredient name</u>	<u>CAS number</u>	<u>State Code</u>	<u>Concentration (%)</u>
Hydrogenated Acrylate Butadiene Acrylonitrile Terpolymer	164843-74-7		95 - 100%

Massachusetts Substances: MA - S  
Massachusetts Extraordinary Hazardous Substances: MA - Extra HS  
New Jersey Hazardous Substances: NJ - HS  
Pennsylvania RTK Hazardous Substances: PA - RTK HS  
Pennsylvania Special Hazardous Substances: PA - Special HS

### California Prop. 65

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

**U.S. Toxic Substances Control Act** : Listed on the TSCA Inventory.



## Section 16. Other information

### Hazardous Material Information System

Health	2
Flammability	1
Physical hazards	0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme  
\*=Chronic

The customer is responsible for determining the PPE code for this material. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

### National Fire Protection Association (U.S.A.)



0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

LANXESS' method of hazard communication is comprised of Product Labels and Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS as a customer service.

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Product Safety and Regulatory Affairs

Indicates information that has changed from previously issued version.

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