THERBAN 4367



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SECTION 1. IDENTIFICATION

Product name : THERBAN 4367

Material number : 05977452

Recommended use : crude product for the production of technical rubber articles

Manufacturer or supplier's details

Supplier : ARLANXEO USA LLC

111 RIDC Park West Drive PITTSBURGHPA 15275-1112

USA

Telephone : +18005269377 For information: US/Canada

+14128091000 International

Emergency telephone : Chemtrec (800) 424-9300

International (703) 527-3887

Lanxess Emergency Phone (800) 410-3063

SECTION 2. HAZARDS IDENTIFICATION

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

The polymer is not hazardous in the form in which it is placed on the market as long as the hazardous component is included in the polymer matrix.

GHS label elements

The polymer is not hazardous in the form in which it is placed on the market as long as the hazardous component is included in the polymer matrix.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Hydrogenated acrylonitrile-butadiene-rubber (HNBR)

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Triphenyl Phosphine	603-35-0	>= 0.1 - < 1

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

SECTION 4. FIRST AID MEASURES

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and water.

Get medical attention if symptoms occur.

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In case of eye contact : Flush eyes with water as a precaution.

Get medical attention if symptoms appear.

If swallowed : Get medical attention if symptoms appear.

Most important symptoms and effects, both acute and delayed

Symptoms : Skin: Reddening, burning, and possible permanent damage.

Effects : Contact with hot material causes thermal skin burns.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray

Foam Dry chemical

Carbon dioxide (CO2)

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Unsuitable extinguishing

media

None known.

Specific hazards during fire

fighting

Toxic and irritating gases/fumes may be given off during burn-

ing or thermal decomposition.

Hazardous combustion prod-

ucts

Carbon dioxide (CO2)
Carbon monoxide

Nitrogen oxides (NOx)

Further information : 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 emer-

gency procedures

No action shall be taken involving any personal risk or without

suitable training.

Put on appropriate personal protection equipment. Do not touch or walk through spilled material.

Evacuate personnel to safe areas.

Keep unnecessary and unprotected personnel from entering.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with

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soil, waterways, drains and sewers.

Methods and materials for : Move containers from spill area.

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containment and cleaning up Vacuum or sweep up material and place in a designated, la-

beled waste container.

Dispose of wastes in an approved waste disposal facility. Do not allow spilled material or wash water to enter sewers,

surface waters, or groundwater systems.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Remove contaminated clothing and protective equipment be-

fore 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.

Conditions for safe storage : 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 closed when not in use.

Containers that have been opened must be carefully resealed

and kept upright to prevent leakage. Do not store in unlabeled containers.

Use appropriate container to avoid environmental contamina-

tion.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation should be sufficient to control work-

er exposure to airborne contaminants.

Personal protective equipment

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.

Hand protection

Remarks : Wear suitable gloves.

Eye protection : Safety glasses with side-shields

Skin and body protection : Wear suitable protective clothing.

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.

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Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

Appearance : rubber bales

Color : light brown

Odor : rubber

Odor Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit : No data available

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : No data available

Density : 0.98 g/cm³ (68 °F (20 °C))

Solubility(ies) : No data available

Partition coefficient: n-

octanol/water

No data available

Ignition temperature : $> 572 \, ^{\circ}\text{F} \, (> 300 \, ^{\circ}\text{C})$

Decomposition temperature : > 572 °F (> 300 °C)

Viscosity : No data available





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Explosive properties : No data available

Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No specific test data related to reactivity available for this

product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reac-

tions

None known.

Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : No specific data.

Hazardous decomposition products

Thermal decomposition : Caused by smouldering and incomplete combustion toxic

fumes mainly consisting of CO and CO2 may be developed. Degradation products of the polymers and their additives may

also be formed.

SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

Information on likely routes of exposure

Inhalation

Skin contact

Acute toxicity

Not classified based on available information.

Components:

Triphenyl Phosphine:

Acute oral toxicity : LD50 (Rat): > 700 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 16.8 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit, male and female): > 4,000 mg/kg

Remarks: Dosage caused no mortality

Skin corrosion/irritation

Not classified based on available information.

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Components:

Triphenyl Phosphine:

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Triphenyl Phosphine:

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:

Triphenyl Phosphine:

Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Components:

Triphenyl Phosphine:

Genotoxicity in vitro : Test system: Bacteria

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Application Route: Intraperitoneal

Result: negative

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

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OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Reproductive toxicity

Not classified based on available information.

Components:

Triphenyl Phosphine:

Effects on fertility : Species: Rat, male and female

Application Route: Oral

Duration of Single Treatment: 91 d Frequency of Treatment: 7 days/week Fertility: NOAEL: 120 mg/kg body weight Method: OECD Test Guideline 408

Effects on fetal development : Species: Rat

Application Route: Oral

Duration of Single Treatment: 6 - 19 d Frequency of Treatment: 7 days/week

Developmental Toxicity: NOAEL: 90 mg/kg body weight

Method: OECD Test Guideline 414

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Components:

Triphenyl Phosphine:

Routes of exposure: Ingestion

Target Organs: Peripheral nervous system, Central nervous system

Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

Triphenyl Phosphine:

Species: Rat, male LOAEL: 2400 mg/m³

Application Route: Inhalation Exposure time: 4 h / d 12 Weeks Remarks: Subacute toxicity

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Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: Under the recommended processing conditions small amounts of emitted substance (e.g. residual monomers, residual solvents, decomposition products) may be discharged. According to our experience and information the product has no harmful effects on health if properly handled.

The substance(s) listed in Chapter 3 is/are encapsulated in this preparation in a polymer and is/are therefore not bioavailable.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Triphenyl Phosphine:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 10,000 mg/l

Exposure time: 96 h Method: DIN 38412

GLP: no

Remarks: Fresh water

No toxicity at the limit of solubility.

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 5 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

Remarks: Fresh water

No toxicity at the limit of solubility.

Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): > 5 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: no

Remarks: Fresh water

EC50 (Desmodesmus subspicatus (green algae)): > 5 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: yes

Remarks: Fresh water

Toxicity to microorganisms : EC50 (activated sludge): > 10,000 mg/l

Exposure time: 30 min Method: DIN 38412

GLP:

Remarks: No toxicity at the limit of solubility.

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Persistence and degradability

Components:

Triphenyl Phosphine:

Biodegradability : aerobic

Inoculum: activated sludge Result: Not readily biodegradable.

Biodegradation: < 20 % Exposure time: 28 d

Method: OECD Test Guideline 301F

GLP: no

Bioaccumulative potential

Components:

Triphenyl Phosphine:

Bioaccumulation : Bioconcentration factor (BCF): 30

Partition coefficient: n-

octanol/water

log Pow: > 2.587

Method: OECD Test Guideline 107

Mobility in soilNo data available

Other adverse effects

Product:

Additional ecological infor-

mation

The product is practically insoluble in water. In view of its consistency and insolubility in water, no ecological problems are to be expected if the product is properly handled. This product is not readily biodegradable.

SECTION 13. DISPOSAL CONSIDERATIONS

RCRA - Resource Conservation and Recovery Authorization

tion Act

Print Date: 09/03/2019

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)

Disposal methods : The generation of waste should be avoided or minimized

wherever possible.

Waste disposal should be in accordance with existing federal.

state, provincial and/or local environmental controls.

This material and its container must be disposed of in a safe

way.

Empty containers retain product residue; observe all precau-

tions for product.

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Avoid dispersal of spilled material and runoff and contact with

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soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

Domestic regulation

DOT

Not regulated as a dangerous good

International Regulations

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.

SECTION 15. REGULATORY INFORMATION

CERCLA

None

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Hydrogenated Acrylonitrile-Butadiene Copolymer 88254-10-8 > 1

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive defects.

TSCA inventory

TSCA : On TSCA Inventory

TSCA list

Print Date: 09/03/2019

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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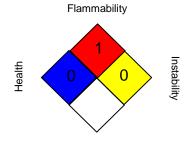


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SECTION 16. OTHER INFORMATION

Further information

NFPA:



Special hazard.

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.

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.

Revision Date : 05/24/2019

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of our knowledge. The information provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information and belief at the date of its publication. We assume no legal responsibility for use of or reliance upon the information in this SDS.

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