

SAFETY DATA SHEET

PERBUNAN 4456 F

Version 1.0 Revision Date: 04/11/2019 SDS Number: 103000008093 Date of previous issue: -
Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : PERBUNAN 4456 F
Material number : 57712099
Recommended use : Rubber

Manufacturer or supplier's details

Supplier : ARLANXEO USA LLC
111 RIDC Park West Drive
PITTSBURGH PA 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

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : butadiene-acrylonitrile-rubber (NBR).

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene	68610-51-5	>= 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 circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

Specific hazards during fire fighting : Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

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

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 emergency 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 soil, waterways, drains and sewers.

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Methods and materials for containment and cleaning up : Move containers from spill area.
Vacuum or sweep up material and place in a designated, labeled 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 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.

Protect from moisture.

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 contamination.

Keep away from direct sunlight or strong incandescent light.
Protect from moisture.

Recommended storage temperature : < 95 °F (< 35 °C)

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 worker 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

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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.
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, beige

Odor : slight, aromatic

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 : No data available

Solubility(ies)
Solubility in other solvents : Description: soluble

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Partition coefficient: n-octanol/water : No data available

Ignition temperature : > 392 °F (> 200 °C)

Decomposition temperature : > 392 °F (> 200 °C)

Viscosity : No data available

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 reactions : 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:

Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401

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GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 165 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Not classified based on available information.

Components:

Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:

Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
GLP: yes
Remarks: Mild skin irritation
(not subject to classification)

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405
GLP: yes

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:

Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:

Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Did not cause sensitization on laboratory animals.
GLP: yes

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Germ cell mutagenicity

Not classified based on available information.

Components:**Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:**

Genotoxicity in vitro : Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
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.

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:**Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:**

Effects on fetal development : Species: Rat
Application Route: Oral
Dose: 15 milligram per kilogram
Frequency of Treatment: 7 days/week
Embryo-fetal toxicity.: NOAEL: 15 mg/kg body weight
Method: OECD Test Guideline 415
GLP: yes

Species: Rat
Application Route: Oral
Dose: 50 milligram per kilogram
Frequency of Treatment: 7 days/week
Developmental Toxicity: NOAEL: 50 mg/kg body weight
Method: OECD Test Guideline 414
GLP: yes

Species: Rat
Application Route: Oral
Dose: 50 milligram per kilogram
Frequency of Treatment: 7 days/week
General Toxicity Maternal: NOAEL: 50 mg/kg body weight
Method: OECD Test Guideline 414
GLP: yes

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Species: Rat
Application Route: Oral
Dose: 1000 milligram per kilogram
General Toxicity Maternal: 1,000 mg/kg body weight
Developmental Toxicity: 1,000 mg/kg body weight
Result: negative

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:

Species: Rat, male and female
NOAEL: 500 mg/kg
Application Route: Oral
Dose: 500 mg/kg
Method: OECD Test Guideline 408
Remarks: Subchronic toxicity

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:

Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.2 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

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GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 0.2 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae : NOEC (Selenastrum capricornutum (green algae)): > 0.2 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

Persistence and degradability**Components:****Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:**

Biodegradability : aerobic
Result: Not readily biodegradable.
Biodegradation: 1 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

Bioaccumulative potential**Components:****Phenol, 4-methyl-, reaction products with dicyclo pentadiene and isobutylene:**

Partition coefficient: n-octanol/water : log Pow: 7.170 - 8.170
Method: OECD Test Guideline 117

Mobility in soil

No data available

Other adverse effects**Product:**

Additional ecological information : 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 Act : 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)

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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 precautions for product.
Avoid dispersal of spilled material and runoff and contact with 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

Reportable Quantity

This material does not contain any components with a CERCLA RQ.

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

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Acrylonitrile-Butadiene Copolymer 9003-18-3 > 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

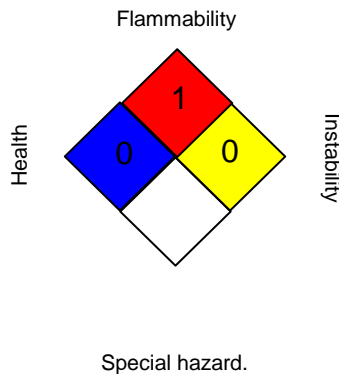
No substances are subject to a Significant New Use Rule.

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

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS® IV:

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

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.

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