Garlock an EnPro Industries family of companies

SAFETY DATA SHEET

1. Identification

Product identifier THERMa-PUR™ Style 4122-FC

Other means of identification

Product code 36468

Recommended use High Temperature Gaskets

Recommended restrictions Maximum Service Temperature should not exceed 1832°F

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Garlock Sealing Technologies, LLC

Address 1666 Division Street

Palmyra, NY 14522

United States

Telephone M-F 9:00AM-4:00PM 315-597-4811

FAX 315-597-3039

E-mail GSTSDS@garlock.com

Emergency phone number 315-597-4811

2. Hazard(s) identification

Physical hazardsNot classified.Health hazardsNot classified.Environmental hazardsNot classified.OSHA defined hazardsNot classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement In its manufactured and shipped state, this product is considered to present low hazard. Heating

gasket to temperatures of 800° C and above may result in the transformation of the Talc and / or devitrification of the fiber in this composition, generating various polymorphs of Crystalline Silica (Quartz and /or Cristobalite). Under harsh mechanical treatment or if product becomes embrittled

by high temperature service, hazardous constituents may be released. Maintain dust

concentrations at low levels.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information OSHA Hazard Communication Standard (29 CFR 1910.1200) requirements for Safety Data

Sheets do not apply to the product(s) described in this document. This product is excluded in the

regulation as an Article.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Talc		14807-96-6	75 - < 95
Nitrile Rubber		9003-18-3	- < 5
Glass Fiber		65997-17-3	1 - < 3
Other components below reportable levels			5 - < 10
*D ' ' ' ' ' ' ' ' ' ' '			

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation If irritation of nose or throat develops, move away from source of exposure into fresh air; if irritation

persists or breathing difficulties develop seek immediate medical attention.

Skin contact Wash off with soap and water. If skin irritation occurs: Get medical advice/attention.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion No specific intervention is indicated, as product is not likely to be hazardous by ingestion. Consult

a physician if necessary.

Most important

symptoms/effects, acute and

delayed

Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special

treatment needed

Treat symptomatically.

General information

Get medical attention if symptoms occur.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

None known.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials. Use

water spray to cool unopened containers.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. See Section 8 of the SDS for Personal Protective Equipment. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

This product is miscible in water. No special methods normally required. If dust is generated see

Section 7.
None known.

Environmental precautions

7. Handling and storage Precautions for safe handling

Avoid prolonged exposure. Avoid grinding, abrading or other mechanical actions that could release particulates. Dust generated from this material must be managed by wet wiping or vacuuming with HEPA filtration equipped vacuum cleaners. Do not dry sweep or blow dust with compressed air.

Avoid breathing dust.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container.

Room temperature - normal conditions. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Туре	Value	Form
Talc (CAS 14807-96-6)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.
US. ACGIH Threshold Limit Values			
Components	Туре	Value	Form
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards **Form** Value Components Type Glass Fiber (CAS TWA 3 fibers/cm3 Fiber. 65997-17-3) 3 fibers/cm3 Dust. 5 mg/m3 Fiber, total 5 mg/m3 fibers, total dust **TWA** Talc (CAS 14807-96-6) 2 mg/m3 Respirable.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

General ventilation normally adequate.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). As generally good practice, safety glasses with

side shields are recommended when handling this product to prevent eye contact with particulate

matter.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. When handling hot material, use heat resistant

gloves.

Other Not normally needed.

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

Industrial Hygiene practices, if exposure levels are not known, or if the dust levels exceed occupational exposure limits, use appropriate respiratory protection. The use of a full face respirator with a minimum NIOSH Particulate Filter rating of N95 (or equivalent) is recommended. Comply with OSHA Respiratory Protection Standards, 29 CFR 1910.134 and 29 CFR 1926.103, for the particular hazard or airborne concentrations to be encountered in the work environment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Solid. Sheets or Gaskets

Color White.
Odor None.

Odor threshold Not available.
pH Not Applicable

Melting point/freezing point > 2192 °F (> 1200 °C)

Initial boiling point and boiling

range

Not available.

Flash point

Evaporation rate

Not Applicable

Not Applicable

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not Applicable

Flammability limit - lower

(%) temperature

Not Applicable

Flammability limit - upper

(%)

Not Applicable

Flammability limit - upper

(%) temperature

Not Applicable

Explosive limit - lower (%) Not Applicable

Explosive limit - lower (%)

temperature

Not Applicable

Explosive limit - upper (%)

Not Applicable

Explosive limit - upper (%)

temperature

Not Applicable

Vapor pressureNot ApplicableVapor densityNot ApplicableRelative densityNot available.

Solubility(ies)

Solubility (water) Not Soluble

Partition coefficient Not Applicable

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not Applicable

Other information

Density85.00 lb/ft³Explosive limitNot ApplicableExplosive propertiesNot explosive.Flash point classNot ApplicableOxidizing propertiesNot oxidizing.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from heat, sparks and open flame.

Incompatible materials Strong mineral acids. Strong oxidizing agents. Strong bases.

Hazardous decomposition

products

Composition of by-products from the result of a fire will vary depending on the specific conditions. Possible decomposition products include smoke, carbon monoxide, carbon dioxide, acrylonitrile

monomer and hydrogen cyanide. There may be others unknown to us.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful. Heating gasket to temperatures of 800° C and above may

result in the transformation of the Talc and / or devitrification of the fiber in this composition,

generating various polymorphs of Crystalline Silica (Quartz and /or Cristobalite).

Skin contact May be irritating to the skin.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicityNot known. Harmful and / or toxic vapors may be produced in the event of thermal decomposition.

Skin corrosion/irritationProlonged skin contact may cause temporary irritation. **Serious eye damage/eye**Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitizationNot a respiratory sensitizer. **Skin sensitization**May be irritating to the skin.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

Talc (CAS 14807-96-6) 2B Possibly carcinogenic to humans.

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Not available.

Local disposal regulationsDispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations.

Contaminated packaging Not available.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and

d

the IBC Code

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Material name: THERMa-PUR™ Style 4122-FC

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

Inventory name

(SDWA)

US state regulationsCalifornia Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material

is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Talc (CAS 14807-96-6)

International Inventories

Country(s) or region

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Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

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16. Other information, including date of preparation or last revision

 Issue date
 03-16-2017

 Revision date
 08-07-2017

Version # 02

Further information This SDS supersedes the SDS dated: November 12, 2012

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.

Material name: THERMa-PUR™ Style 4122-FC

SDS US

On inventory (yes/no)*