Garlock' an EnPro Industries family of companies

SAFETY DATA SHEET

1. Identification

Product identifier Gylon® Style 3504 & Gylon® EPIX™ Style 3504EPX Gylon® Style 3504 Stress Saver®

Other means of identification

Product code 35120, 35120EPX, 35040, 37035, 36031

Recommended use Gasket Material

Recommended restrictions Maximum Service Temperature should not exceed 500°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 The mixture does not meet the criteria for classification.

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.

Heating PTFE to temperatures in excess of 500° F can evolve toxic fluorine compounds. Additional information concerning PTFE is available in the "Guide to the Safe Handling of Fluoropolymer Resins" published by the Fluoropolymers Division of the Society of the Plastics

Industry, Inc.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Polytetrafluoroethylene (PTFE)		9002-84-0	80 - < 90
Expanded Perlite		93763-70-3	10 - < 20
Cobalt Aluminum Blue Spinel		1345-16-0	< 1

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

4. First-aid measures

No specific intervention is indicated as the product is not likely to be hazardous by inhalation. Inhalation

Consult a physician if necessary. If exposed to fumes from overheating or combustion, move to

fresh air. Consult physician if symptoms persist.

The product is not likely to be hazardous by skin contact, but cleansing the skin after use is Skin contact

Direct contact with eyes may cause temporary irritation.

advisable.

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

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

the chemical

Specific hazards arising from

During fire, gases hazardous to health may be formed.

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

Do not use water jet as an extinguisher, as this will spread the fire.

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

Hydrogen fluoride fumes emitted during a fire can react with water to form hydrofluoric acid. Wear

neoprene gloves when handling refuse from fire

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

None known.

Methods and materials for containment and cleaning up

None necessary.

Environmental precautions

None known.

7. Handling and storage

Precautions for safe handling

Avoid grinding, abrading or other mechanical actions. 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. Avoid contamination of cigarettes or tobacco with dust from this material.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Туре	Value	Form
Expanded Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Thresho	old Limit	Values
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Components	Туре	Value		
Cobalt Aluminum Blue Spinel (CAS 1345-16-0)	TWA	0.02 mg/m3		
US. NIOSH: Pocket Guide to C	hemical Hazards			
Componento	Tyroo	Value	Form	

Components	Туре	Value	Form	
Expanded Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.	
33.33.73.3,		10 mg/m3	Total	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Cobalt Aluminum Blue Spinel (CAS 1345-16-0)	15 μg/l	Cobalt	Urine	*

^{* -} For sampling details, please see the source document.

Appropriate engineering

General ventilation normally adequate.

controls

Individual protection measures, such as personal protective equipment

Eye/face protection 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 When handling hot material, use heat resistant gloves. Glove selection must take into account any

solvents and other hazards present.

Other Not normally needed.

Use a particulate filter respirator for particulate concentrations exceeding the Occupational Respiratory protection

Exposure Limit.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene 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 considerations

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Solid. Physical state

Sheets or Gaskets **Form**

Color Blue Odor None.

Odor threshold Not available. Not Applicable 620.6 °F (327 °C) Melting point/freezing point Initial boiling point and boiling Not Applicable

range

Not Applicable Flash point **Evaporation rate** Not Applicable Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

Not Applicable

(%)

Flammability limit - upper

(%)

Not Applicable

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available. Vapor pressure Not available.

Vapor density Not available. Relative density Not available.

Solubility(ies)

Solubility (water) Not Soluble

Partition coefficient Not Applicable

(n-octanol/water)

Auto-ignition temperature 968 - 1040 °F (520 - 560 °C)

Decomposition temperature > 500 °F (> 260 °C)

Viscosity Not Applicable

Other information

Density 1.65 g/cm3
Specific gravity 1.65

10. Stability and reactivity

ReactivityThe 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 Incompatible or can react with finely divided metal powders (e.g. aluminum and magnesium),

molten alkali metals, and potent oxidizers like fluorine and related compounds like chlorine

trifluoride. Contact with incompatibles can cause fire or explosion.

Hazardous decomposition

products

Composition of by-products from the result of a fire or thermal decomposition will vary depending on the specific conditions. Hazardous gases/vapors possibly evolved include smoke, hydrogen fluoride, carbonyl fluoride, perfluorocarbon olefins and carbon monoxide. There may be others

unknown to us.

11. Toxicological information

Information on likely routes of exposure

InhalationNo adverse effects due to inhalation are expected.Skin contactNo adverse effects due to skin contact are expected.Eye contactDirect 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 toxicityNo effects due to exposure to the product are anticipated. If exposed to thermal decomposition

products of the PTFE, temporary symptoms of polymer fume fever, a temporary flu-like illness with chills, fever, and sometimes cough, of approximately 24 hours duration may arise. There are some reports in the literature of persistent pulmonary effects in individuals, especially smokers, who have repeated episodes of polymer fume fever. Because of complicating factors, such as mixed exposures and smoking history, these findings are uncertain. Small amounts of carbonyl fluoride and hydrogen fluoride may also be evolved when PTFE is overheated or burned.

Skin corrosion/irritation

Serious eye damage/eye

irritation

Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity IARC has classified cobalt and cobalt compounds as possibly carcinogenic to humans (Group 2B,

Monograph 52). Cobalt Aluminate Blue Spinel pigment is the result of high temperature calcinations of the component substances. Due to its unique crystalline structure the properties of the finished pigment do not necessarily reflect the properties of the component metals or oxides.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cobalt Aluminum Blue Spinel (CAS 1345-16-0) 2B Possibly carcinogenic to humans.

Polytetrafluoroethylene (PTFE) (CAS 9002-84-0) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Cobalt Aluminum Blue Spinel (CAS 1345-16-0)

Reasonably Anticipated to be a Human Carcinogen.

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.

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

No data is available on the degradability of this product.

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 regulations Dispose 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

the IBC Code

15. Regulatory information

US federal regulations All components are on the U.S. EPA TSCA Inventory List.

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.

TSCA Chemical Action Plans, Chemicals of Concern

Polytetrafluoroethylene (PTFE) (CAS 9002-84-0) Long-Chain Perfluorinated Chemicals (PFCs) Action Plan

CERCLA Hazardous Substance List (40 CFR 302.4)

Cobalt Aluminum Blue Spinel (CAS 1345-16-0) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Cobalt Aluminum Blue Spinel (CAS 1345-16-0)

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 regulations

California Proposition 65



WARNING: California 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.

International Inventories

Country(s) or region

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
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Yes

Toxic Substances Control Act (TSCA) Inventory *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 country(s).

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

Issue date 01-16-2018 **Revision date** 01-16-2018

Version # 04

United States & Puerto Rico

Further information This SDS supersedes the SDS dated: April 20, 2015

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.

On inventory (yes/no)*

No