Garlock
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SAFETY DATA SHEET

1. Identification

Product identifier **Gylon® Style 3505 & Gylon® Style 3505 Stress Saver®**

Other means of identification

Product code 35135, 37030, 36030

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 hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not 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

Inhalation No specific intervention is indicated as the product is not likely to be hazardous by inhalation. Consult a physician if necessary. If exposed to fumes from overheating or combustion, move to fresh air. Consult physician if symptoms persist.

Skin contact The product is not likely to be hazardous by skin contact, but cleansing the skin after use is 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 Direct contact with eyes may cause temporary irritation.

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

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

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 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. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Cobalt Aluminum Blue Spinel (CAS 1345-16-0)	TWA	0.02 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Expanded Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		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	*
	1 µg/l	Cobalt	Blood	*

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

Appropriate engineering controls General ventilation normally adequate.

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.

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

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 Sheets or Gaskets

Color Blue

Odor None.

Odor threshold Not available.

pH Not Applicable

Melting point/freezing point 620.6 °F (327 °C)

Initial boiling point and boiling range Not Applicable

Flash point Not Applicable

Evaporation rate Not Applicable

Flammability (solid, gas) Not available.

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 (n-octanol/water) Not Applicable

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

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	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

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	No adverse effects due to skin contact are expected.
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 toxicity	No 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	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye 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 1910.1001-1050)

Not listed.

Reproductive toxicity	This 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 Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

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 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	No

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 (SDWA) Not regulated.

US state regulations WHMIS Classification: Not Controlled

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Expanded Perlite (CAS 93763-70-3)

US. New Jersey Worker and Community Right-to-Know Act

Cobalt Aluminum Blue Spinel (CAS 1345-16-0)
Expanded Perlite (CAS 93763-70-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Expanded Perlite (CAS 93763-70-3)
Polytetrafluoroethylene (PTFE) (CAS 9002-84-0)

US. Rhode Island RTK

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

US. California Proposition 65

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	Inventory name	On inventory (yes/no)*
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	No

*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 04-14-2015

Revision date 04-22-2015

Version # 02

Further information This SDS supersedes the SDS dated: Aprl 14, 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.

Revision Information	Handling and storage: Precautions for safe handling Exposure controls/personal protection: Exposure guidelines GHS: Classification