Garlock

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SAFETY DATA SHEET

1. Identification

Product identifier Gylon® Style 3530

Other means of identification

Product code 35101

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 | |
| GRAPHITE (NATURAL) | | 7782-42-5 | 20 - < 30 | |

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

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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.

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

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

Unsuitable extinguishing media

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

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

Methods and materials for

containment and cleaning up

None necessary.

Environmental precautions

None known.

None known.

7. Handling and storage

Precautions for safe handling

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. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Туре | Value | Form |
|---------------------------------------|---------|----------|----------------------|
| GRAPHITE (NATURAL) (CAS 7782-42-5) | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| US. OSHA Table Z-3 (29 CFR 191 | 0.1000) | | |
| Components | Туре | Value | |
| GRAPHITE (NATURAL) (CAS 7782-42-5) | TWA | 15 mppcf | |

US. ACGIH Threshold Limit Values Form Value Components Type **GRAPHITE (NATURAL)** TWA 2 mg/m3 Respirable fraction. (CAS 7782-42-5) **US. NIOSH: Pocket Guide to Chemical Hazards Form** Components **Type** Value

GRAPHITE (NATURAL) TWA 2.5 mg/m3 Respirable. (CAS 7782-42-5)

No biological exposure limits noted for the ingredient(s). **Biological limit values**

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

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

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 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

Black Sheet, Gasket or Seal Element **Appearance**

Solid. Physical state

Form Sheets or Gaskets

Color Black. Odor None.

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

range

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

Relative density Solubility(ies)

Solubility (water) Not Soluble Partition coefficient Not Applicable

(n-octanol/water)

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

> 500 °F (> 260 °C) **Decomposition temperature** Not Applicable **Viscosity**

Other information

Density 2.10 g/cm3

10. Stability and reactivity

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

Material is stable under normal conditions. Chemical stability

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. Strong oxidizing agents.

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.

Species Test Results Components

GRAPHITE (NATURAL) (CAS 7782-42-5)

Acute Oral

LD50 Rat > 10000 mg/kg

* Estimates for product may be based on additional component data not shown.

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

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

This product is not expected to cause skin sensitization. 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 Monographs. Overall Evaluation of Carcinogenicity

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.

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

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.

No data is available on the degradability of this product. 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 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.

Not available. Contaminated packaging

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

Not applicable.

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)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No 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.

(SDWA)

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

GRAPHITE (NATURAL) (CAS 7782-42-5)

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

GRAPHITE (NATURAL) (CAS 7782-42-5)

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

GRAPHITE (NATURAL) (CAS 7782-42-5) Polytetrafluoroethylene (PTFE) (CAS 9002-84-0)

US. Rhode Island RTK

Not regulated.

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 | ory (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 | Yes |
| *A "Yes" indicates that all compo | nents of this product comply with the inventory requirements administered by the governing countr | v(s) |

A rest indicates that an components of this product comply with the inventory requirements authinistered by the governing country(s)

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

Issue date 04-28-2015

Version # 01

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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).

Further information

Disclaimer

This SDS supersedes the SDS dated: January 6, 2012

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: Gylon® Style 3530 SDS US