

Certificate of Compliance

CUSTOMER:	
PURCHASE ORDER:	
ITEM NUMBER:	
ITEM DESCRIPTION:	
PRODUCT NAME:	
MATERIAL:	White BUNA
LOT NUMBER:	
DOM:	
HEAT NUMBER:	

Compliance:

Rubber Fab, a Garlock Hygienic Technologies company certifies that the material from which we manufacture the above mentioned parts has passed:

EC1895/2005
21 FDA 177.2600
REACH/RoHS

Physical Properties:

Physical Properties	Test Method	Results
Hardness, (Shore A)	D2240	68 +- 5
Tensile Strength, (PSI)	D412-98a	1.39
Elongation, (%)	D412-98a	527
Temperature Range (°C)	-34°C to +93°C	
Specific Gravity (g/cm ³)	D792	1.4
Compression Set (%)	D395-97 Method B	84.8%
Color	White	
Shelf Life	10 Years	

The preceding Physical Properties data gives the typical properties of the mentioned material. It is intended to be used as a guide at your discretion and risk.

Certified by:

Date:

L. Levai Quality Assurance

Detectomer® • Sanitary Gaskets • Hoses • Hose Assemblies • Tubing • Fittings • Pump Parts
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Declaration of Compliance

Material: White BUNA Standard

Subject: Rubber Fab, White BUNA Material

To whom it may concern,

we hereby confirm that the material from which our White BUNA sanitary gaskets are manufactured is in compliance with and meets the requirements of the following regulations governing polymer materials for food contact applications.

- Title 21 CFR 177.2600 Rubber articles intended for repeated use
- REACH & RoHS
- USDA Sanitary Standards
- ASME-BPE Standards

It is the end-users responsibility to evaluate and verify the suitability of the equipment and its components for the intended purpose and service conditions. Should you require additional information please feel free to contact Rubber Fab at your convenience.

Compliance Statement

Material: White BUNA

Subject: 21 FDA 177.2600 Compliance

Dear Business Partner,

We hereby confirm that our White BUNA material is in full compliance with the requirements of:

1. FDA Code of Federal Regulations Title 21, Section 177.2600 for rubber articles intended for repeated use.

In addition to the ingredients being acceptable for food contact applications, the permitted degree of release or extraction of the authorized ingredients from the polymer/elastomer is also specified. The extraction is carried out using specified test conditions and media such as water, ethanol and hexane as displayed in the table below.

Method	Test duration [h]	Max. permissible extraction amount [mg/sq.in.]
21CFR177.2600 (first extraction)	7	20
21CFR177.2600 (second extraction)	2	1

As per 21CFR177.2600 our White BUNA material is generally recognized as safe (GRAS) and may be safely used as articles or components of articles intended to come in contact with food.

Part of CFR 21 Section 177.2600:

- e) Rubber articles intended for repeated use in contact with aqueous food shall meet the following specifications: The food-contact surface of the rubber article in the finished form in which it is to contact food, when extracted with distilled water at reflux temperature, shall yield total extractives not to exceed 20 milligrams per square inch during the first 7 hours of extraction, nor to exceed 1 milligram per square inch during the succeeding 2 hours of extraction.
- f) Rubber articles intended for repeated use in contact with fatty foods shall meet the following specifications: The food-contact surface of the rubber article in the finished form in which it is to contact food, when extracted with n -hexane at reflux temperature, shall yield total extractives not to exceed 175 milligrams per square inch during the first 7 hours of extraction, nor to exceed 4 milligrams per square inch during the succeeding 2 hours of extraction.
- g) In accordance with good manufacturing practice finished rubber articles intended for repeated use in contact with food shall be thoroughly cleansed prior to their first use in contact with food.

Compliance Statement

Material: White BUNA

Subject: RoHS II 2011/65/EU and Amendment (EU) 2015/863; REACH “Substances of Very High Concern List 2018”

Dear Customer,

Rubber Fab, a Garlock Hygienic Technologies company, hereby confirms that to the best of our knowledge, with appropriate due diligence, White BUNA Gaskets comply with the RoHS II Directive 2011/65/EU and Its Amendment (EU) 2015/86 and are free from Asbestos and Polychlorinated Biphenyls (PCB's).

RoHS Annex II specifies maximum levels for the following restricted materials:

- Lead (Pb): < 1000 ppm
- Mercury (Hg): < 1000 ppm
- Cadmium (Cd): < 100 ppm
- Hexavalent Chromium: (Cr VI) < 1000 ppm
- Polybrominated Biphenyls (PBB): < 1000 ppm
- Polybrominated Diphenyl Ethers (PBDE): < 1000 ppm
- Bis(2-Ethylhexyl) phthalate (DEHP): < 1000 ppm
- Benzyl butyl phthalate (BBP): < 1000 ppm
- Dibutyl phthalate (DBP): < 1000 ppm
- Diisobutyl phthalate (DIBP): < 1000 ppm

Additionally, Rubber Fab confirms that our White BUNA gaskets complies with REACH SVHC List 2018.

STORAGE PROCEDURES AND SHELF LIFE

ELASTOMERIC & PTFE AND FEP GASKETS, O-RINGS & HOSES

The shelf life of elastomeric, PTFE and FEP gaskets, O-Rings, tubing and hoses is dependent on many factors pertaining to their storage conditions. Products stored in their original packaging in a dry, cool environment away from direct sun light and artificial light should remain in optimal condition for 10 years. We do, however, recommend visual inspection of gaskets for discoloration, hardening and deformation and the hydro testing of pressure rated hoses after three years.

TEMPERATURE:	In order to avoid certain forms of deterioration that may occur at higher temperatures, storage temperatures should be below 77F (25 C). The effects of low temperatures are not permanently damaging, but articles may stiffen more than usual.
HUMIDITY:	Store in a dry environment to avoid condensation.
LIGHT:	Gaskets & hoses should be protected from light, especially direct sunlight and strong artificial light with high ultraviolet content.
OXYGEN AND OZONE:	Whenever possible, gaskets and hoses should be protected from circulating air, ozone is very abrasive toward rubber, storage rooms should not contain any equipment capable of generating ozone such as mercury lamps, electric motors and any other equipment that produces electrical sparks and discharge.
DEFORMATION:	Whenever possible, gaskets and hoses should be stored in a relaxed condition free from tension, compression or other deformation.
CONTACT WITH LIQUID OR SEMI-SOLID MATERIALS:	Rubber should not come in contact with liquids or semi-solid materials, especially solvents, oils and greases at any time during storage.
ROTATION OF STOCKS:	Gaskets and hoses should remain in stores for as short of a period as possible. Therefore, articles should be issued from stores in strict rotation.