



SAFETY DATA SHEET



SAS SEALTRON® 1147

Prepared according to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union REACH Regulation

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SAS SEALTRON® 1147
CHEMICAL FAMILY NAME: Cured Fluorosilicone Elastomer
PRODUCT DESCRIPTION: Silver Plated Nickel filled Fluorosilicones are the powerhouse for applications with exposure to fuels, solvents, and oils having Steel alloy interfaces.
U.N. NUMBER: None
U.N. DANGEROUS GOODS CLASS: Non-Regulated Material
SUPPLIER/MANUFACTURER'S NAME: SAS Industries Inc.
ADDRESS: 100 Corporate Drive, Elizabeth City, NC 27909, USA
EMERGENCY PHONE: Toll-Free in USA/Canada 1-800-424-9300 Chemtrec
BUSINESS PHONE: (631)-727-1441 (Product Information)
DATE OF PREPARATION: 8-Jul-20
DATE OF LAST REVISION: 5-Mar-20

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Product Description: This product is a Cured Fluorosilicone Elastomer with no odor. All ingredients are encapsulated in the elastomeric structure
Health Hazards: Contact with this product is not expected to cause any adverse health effects. Inhalation of fumes from burning polymer may cause temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath.
Flammability Hazards: This product is Non- Flammable with a flash point of >204°C (>399°F).
Reactivity Hazards: None known.
Environmental Hazards: The environmental effects of this product have not been investigated; however it is not expected to cause significant adverse effects.
Emergency Considerations: Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

US DOT SYMBOLS
Non-Regulated

CANADA (WHMIS) SYMBOLS
Classified per WHMIS 2015

GHS Hazard Symbols
None Applicable



Signal Word:
None applicable

GHS LABELING AND CLASSIFICATION:

NOTE: This product is classified as an "article" according to Title 29 of the Code of Federal Regulations, OSHA Part 1910.1200 and the European Union Council Directives 67/548/EEC and subsequent Directives in 76/768/EEC

"Article means a manufactured item other than a fluid or particle, which is formed to a specific shape or design during manufacture which has end use function dependent in whole or in part upon its shape or design during end use, and which under normal conditions of use does not release more than very small quantities or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees."
This product is stable, and poses no immediate hazard to health.

Classification of the substance or mixture according to Annex VI

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EC 231-072-3 Annex VI Index # 013-001-00-6
Remainder of the ingredients are listed in Annex VI
Substances not listed either individually or in group entries must be self classified.

COMPONENTS DETERMINING HAZARDS: None applicable

GHS Hazard Classification(s): Not Classified
Hazard Statement(s): None applicable
Prevention Statement(s): None applicable
Response Statement(s): None applicable
Storage Statement(s): None applicable
Disposal Statement(s): None applicable
OTHER HAZARDS: None applicable

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	GHS CLASSIFICATION
Silver Plated Nickel	Mixture	Not Listed	Not Listed	30 - 75%	NOT CLASSIFIED
Nickel	7440-02-0	231-111-4	0062	35 - 90%	SKIN SENS CAT 1, CARC. CAT 2, STOT RE CAT 1, AQUATIC CHRONIC CAT 3
Silver	7440-22-4	231-131-3	0810	10 - 40%	AQUATIC ACUTE/CHRONIC CAT 1
Fluoropropyl-methylvinyl-siloxane	63148-56-1	613-151-8	Not Listed	10 - 35%	AQUATIC CHRONIC CAT 2
Titanium Dioxide	13463-67-7	236-675-5	Not Listed	< 0.5%	NOT CLASSIFIED
Black Iron Oxide	1317-61-9	215-277-5	Not Listed	< 0.5%	NOT CLASSIFIED

Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

SECTION 4 - FIRST-AID MEASURES

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation develops.
SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing.
INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.
INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known
RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce over-exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): Not Applicable Upper (UEL): Not Applicable

FIRE EXTINGUISHING MATERIALS: As appropriate for surrounding fire condition. Carbon dioxide, foam, dry chemical, halon, water spray, sand, limestone powder.

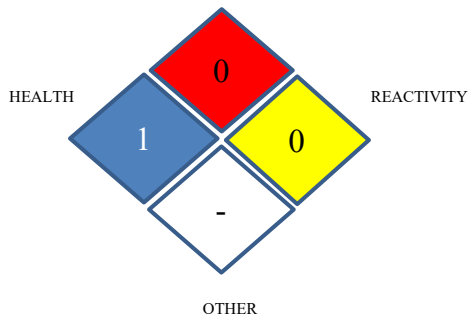
UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is non-flammable with no known explosion hazards.

HAZARDS: Explosion Sensitivity to Mechanical Impact: Not Sensitive.

Explosion Sensitivity to Static Discharge: Not Sensitive.

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM



HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD (BLUE)	1
FLAMMABILITY HAZARD (RED)	0
PHYSICAL HAZARD (YELLOW)	0

PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY



See Sect 8



See Sect 8

For Routine Industrial Use and Handling Applications

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard



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SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas. Do not touch or walk through spilled material.

ENVIRONMENTAL PRECAUTIONS: Construct a dike to prevent spreading. Runoff from fire control or dilution water may cause pollution. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

SPILL AND LEAK RESPONSE: Pick-up spilled article for re-use, recycling or disposal. This product contains Silver and Aluminum and must be disposed of properly.

Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations)

SECTION 7 - HANDLING and STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wash thoroughly after handling this product.

STORAGE AND HANDLING PRACTICES: Store in a cool, dry well-ventilated area below 115°F. Protect from physical damage.

SPECIFIC USES: Silver Plated Nickel filled Fluorosilicones are the powerhouse for applications with exposure to fuels, solvents, and oils having Steel alloy interfaces. Extremely high Shielding performance, combined with excellent material properties and enhanced galvanic compatibility over most other shielding material choices, our 1147 is a common choice for Shipboard and harsh factory environments. Our 1147 is our 70 Durometer version of this particle filled elastomer group

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Chemical Name	CAS #	ACGIH TWA	OSHA TWA	WEEL
Nickel	7440-02-0	1.5 mg/m ³	1.0 mg/m ³	1.0 mg/m ³
Silver	7440-22-4	0.1 mg/m ³	0.1 mg/m ³	0.1 mg/m ³
-	-	-	-	-

Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Not normally required with this product. Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards

SKIN PROTECTION: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE:	Solid			
APPEARANCE & ODOR:	Blue with no odor			
ODOR THRESHOLD (PPM):	None			
FLASH POINT:	>204°C (>399°F)			
FLAMMABLE LIMITS (in air by volume, %):	Lower (LEL):	Not Applicable	Upper (UEL):	Not Applicable
AUTOIGNITION TEMPERATURE:	Not Applicable			
VAPOR PRESSURE (mmHg):	Not Available			
DENSITY:	Not Available			
EVAPORATION RATE (nBuAc = 1):	Not Available			
BOILING POINT (C°):	Not Available			
FREEZING POINT (C°):	Not Available			
pH:	Not Available			
SPECIFIC GRAVITY 20°C: (WATER =1):	Not Available			
SOLUBILITY IN WATER (%):	Non-Soluble			
VISCOSITY:	Not Available			
EXPLOSIVE PROPERTIES:	Not Available			
OXIDISING PROPERTIES:	Not Available			

SECTION 10 - STABILITY AND REACTIVITY

REACTIVITY:	Product is not reactive
STABILITY:	Product is stable
DECOMPOSITION PRODUCTS:	When heated to decomposition this product produces obnoxious and toxic fumes
MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:	None known
HAZARDOUS POLYMERIZATION:	Will not occur.
CONDITIONS TO AVOID:	Heat and open flame

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA: Toxicity data is not available for this product: No LD50 Data Available

Acute toxicity	Based on available data, the classification criteria are not met
Skin corrosion / irritation	Based on available data, the classification criteria are not met
Serious eye damage / irritation	Based on available data, the classification criteria are not met
Respiratory or skin sensitization	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Carcinogenicity	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met

SUSPECTED CANCER AGENT:	None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore is not considered to be, nor suspected to be a cancer-causing agent by these agencies.
IRRITANCY OF PRODUCT:	Contact with this product may be irritating to exposed skin and eyes.
SENSITIZATION OF PRODUCT:	This product is not considered a skin sensitizer.
REPRODUCTIVE TOXICITY INFORMATION:	No information concerning the effects of this product and its components on the human reproductive system.

SECTION 12 - ECOLOGICAL INFORMATION**ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.**

TOXICITY: No specific data available on this product.
PERSISTENCE AND DEGRADABILITY: No specific data available on this product.
BIOACCUMULATIVE POTENTIAL: No specific data available on this product.
MOBILITY IN SOIL: No specific data available on this product.
RESULTS OF PBT AND vPvB ASSESSMENT: No specific data available on this product.
OTHER ADVERSE EFFECTS: No specific data available on this product.
WATER ENDANGERMENT CLASS: May be water endangering in accordance with EU Guideline 91/155-EWG. Do not allow product to reach ground water, water course or sewage system. At present there are no ecotoxicological assessments for this product.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.
 RCRA WASTE CODE: None known
 EU WASTE CODE: None known

SECTION 14 - TRANSPORTATION INFORMATION

US DOT; IATA; IMO; ADR:

THIS PRODUCT IS NOT CLASSIFIED AS DANGEROUS GOODS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME: Non-Regulated Material
 HAZARD CLASS NUMBER and DESCRIPTION: None
 UN IDENTIFICATION NUMBER: None
 PACKING GROUP: None

DOT LABEL(S) REQUIRED: None

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2016): None

MARINE POLLUTANT: This product does not contain ingredients that are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:

This product is not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

This product is not classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:

This product is not classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):

This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15 - REGULATORY INFORMATION**UNITED STATES REGULATIONS**

SARA REPORTING REQUIREMENTS: This product is subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows: None

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312: Acute Health: No Chronic Health: No Fire: No Reactivity: No

U.S. SARA THRESHOLD PLANNING QUANTITY:

The default Federal SDS submission and inventory require There are no specific Threshold Planning Quantities for this product.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):

Chemical Name	CAS-No	California Prop. 65
Titanium Dioxide	13463-67-7	Carcinogen
Nickel	7440-02-0	Carcinogen

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Classified per WHMIS 2015.

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION:

Classification of the mixture according to Regulation (EC) No 1272/2008. See section 2 for details.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed on the AICS.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPAN INDUSTRIAL SAFETY AND HEALTH LAW: This product has been classified per the Japan Industrial Safety and Health Law. See Section 2 for the GHS Classification.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac:	All ingredients Listed or Exempt
Australian Inventory of Chemical Substances (AICS):	All ingredients Listed or Exempt
Korean Existing Chemicals List (ECL):	All ingredients Listed or Exempt
Japanese Existing National Inventory of Chemical Substances (ENCS):	All ingredients Listed or Exempt
Philippines Inventory of Chemicals and Chemical Substances (PICCS):	All ingredients Listed or Exempt
Swiss Giftlist List of Toxic Substances:	All ingredients Listed or Exempt
U.S. TSCA:	All ingredients Listed or Exempt

**SECTION 16 - OTHER INFORMATION**

PREPARED BY: Mark Derr - SAS Industries Inc.

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