

Date Prepared: May 1, 2015

1. **Product and Company Identification**

RJ Stacey Ltd.  
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Product Name: RJS-Pump 99  
Product Type: PTFE Packing  
Product Description: Grayish Brown Putty-Like Compound  
General Use : Injectable Packing

2. **Hazards Identification**

**GHS Classification :**

Carcinogenicity, 1A  
Acute Toxicity, 3  
Aquatic Chronic , 1  
STOT RE2  
REPR, 1A  
Skin Irritation, 2  
Eye Irritation, 2

**GHS Label Elements :**

Signal Word : Warning



**Hazard Statements :**

H302 Harmful if swallowed  
H315 / 320 Causes Skin and Eye Irritation  
H332 Harmful if inhaled  
H350 May cause cancer  
H335 May cause respiratory irritation  
H371 May cause damage to organs through inhalation and ingestion. (see section 11)  
H410 Very toxic to aquatic life with long lasting affects

**Precautionary Statements :**

P261 Avoid breathing dust / heated vapors  
P262 Do not get in eyes, on skin, or on clothing  
P285 In case of inadequate ventilation wear respiratory protection  
P281 Use personal protective equipment as required  
P301/P310 If Swallowed: Immediately call a Poison Center or Physician  
P302/P352 If on skin: Wash with plenty of soap and water  
P333/P313 If skin irritation or rash develops: Get medical attention.  
P305/P351/P338 If in eyes : Rinse cautiously with water for several minutes.  
Remove contact lenses if easy to do. Continue Rinsing.  
P337/P313 If eye irritation persists: Get medical attention  
P233 Keep container tightly closed  
P501 Dispose of observing all Federal, State and Local regulations.

**NOTE:** THIS PRODUCT IN ITS PURCHASED FORM DOES NOT PRESENT AN INHALATION HAZARD FROM FIBERS OR DUST, AS IT IS A PUTTY-LIKE COMPOUND. FIBERS AND DUST ARE NOT AIRBORN UNDER NORMAL HANDLING.

**WARNING** : Wash hands before eating or smoking. See section 11. (Acute Health Hazards)

**WARNING** : Do not exceed 260 C. (500 F)

**NOTE** : Exposure to this product containing lead shot presents few hazards in itself, however, normal handling or processing of this material may result in exposure to product compounds and/or decomposition products, which may present a potential health hazard.

### 3. Composition / Information on Ingredients

Ingredients	CAS No.	% by weight
PTFE (Polytetrafluoroethylene)	9002-84-0	20-50
Lubricant Binder	Mixture	20-50
Silica , Amorphous (Silica Gel)	7631-86-9	<5
Lead	7439-92-1	20-50
Antimony	7440-36-0	.5 - 4.0
Arsenic	7440-38-2	.05 - 1.0

### 4. First Aid Measures

Ingestion: DO NOT INGEST. (Contains Lead) Oral toxicity of mixture not determined.  
Call a physician or get medical help immediately.

Inhalation: Not an inhalation risk in purchased form, unless overheated. Avoid heating above recommended temperature limit. Do not exceed 260 C. (500 F)

Skin Contact: Wash with soap and water, consult physician if irritation develops.

Eye Contact: Flush with water 15 minutes. If symptoms persist, seek medical attention.

### 5. Fire Fighting Measures

Recommended Extinguishing Agent:

Foam, Dry Chemical, Carbon Dioxide, Water Fog

Special Fire Fighting Procedures:

Self contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. (Professionally Trained Personnel).

Hazardous Products Formed by Fire or Thermal Decomposition:

CO, CO<sub>2</sub>, Hydrogen Fluoride, Carbonyl Fluoride, acid fluorides. Carbon Oxides, traces of incompletely burned carbon compounds, Silicon dioxide, Formaldehyde.

At temperatures above the melting point (328 C (lead) 630 C (antimony) 613 C (Arsenic Sublimes without melting) metal oxide fumes may be evolved. Under reducing conditions, such as any strong acid or base plus an active metal, or in the presence of nascent hydrogen, highly toxic stibine gas and arsine gas may be evolved.

Unusual Fire or Explosion Hazards: None

Compressed Gases: None

Pressure at Room Temperature: Does not apply

**6. Accidental Release Measures**

Steps to be taken in cases of spill or leak:

Minimize Exposure. Wear proper personal protective equipment. Return uncontaminated material to metal container and seal container tightly. Dispose of contaminated material or waste. If dust is present, clean up using dustless methods.(e.g. HEPA vacuum) Do not use compressed air. Keep out of waterways.

**7. Handling and Storage**

Storage: Cool, dry, storage. Store in closed containers

Handling: Avoid contact with skin and eyes. This product in its purchased form does not create an inhalation hazard from fibers or dust. If grinding or sanding or any other process is performed to this compound will cause airborne particles wear appropriate respirator to avoid breathing any dust or vapors. Wear appropriate safety gear as required in work area. Do not exceed 260 C. (500 F)

**8. Exposure Controls / Personal Protection**

Exposure Limits

Ingredients:

	Acceptable Exposure Limits*
Polytetrafluoroethylene	10 mg/m3 8 hr TWA (Total Dust) 5 mg/m3 8 hr. TWA (Respirable Dust)

\*AEL is the manufacturers Acceptable Exposure Limit, where governmentally imposed occupational exposure limits are lower than the AEL are in effect, such limits shall take precedence.

	ACGIH (TLV)	OSHA (PEL)	OTHER
Lubricant Binder	Not Established	Not Established	
Lead	.05mg/m3	.05mg/m3	
Antimony	.5mg/m3	.5mg/m3	
Arsenic	.01mg/m3	.01mg/m3	

Personal Protective Equipment (PPE)

Eyes: Safety Glasses  
Full face shield recommended. (during injection process)

Skin: Chemical resistant gloves.

Respiratory Protection: If necessary, NIOSH approved for organic vapors and dust. If Temp. exceed 250° C use respirator if ventilation is inadequate to maintain HF and Carbonyl Fluoride levels below permissible exposure limit, use a positive pressure air supplied respirator. Air purifying respirators may not provide adequate protection. Do not exceed 260 C. (500 F)

Other Protective Clothing or Equipment:

Work / Hygienic Practices:

Engineering Controls :

Coveralls or other protective clothing. Safety equipment as required in area..

Avoid contact with skin and clothing. Wash hands before eating or **smoking**.

Ventilation: Local exhaust if poorly ventilated area or in confined spaces.

**9. Chemical and Physical Properties**

Appearance: Grayish Brown Putty-Like Compound  
Odor: No Odor  
pH: Not Determined  
Solubility in Water: NIL  
Specific Gravity: 2.65 (compressed) (H<sub>2</sub>O =1)  
Evaporation Rate: Not Applicable  
Boiling Point: Not Applicable  
Melting Point: Not Applicable  
Vapor Pressure: Not Established  
Vapor Density: Not Established  
VOC Content: Less than 1% (under 260 C)  
Flash Point: Greater than 200 F. Method: Cleveland Open Cup

## Flammable Limits:

LEL: Not Established  
UEL: Not Established

**10. Stability and Reactivity**

Stability: Stable  
Hazardous Polymerization: Will not occur  
Hazardous Decomposition Or By-Products: CO, CO<sub>2</sub>, Hydrogen Fluoride, Carbonyl Fluoride, acid fluorides. Carbon Oxides, traces of incompletely burned carbon compounds, Silicon dioxide, Formaldehyde.  
At temperatures above the melting point (328 C (lead) 630 C (antimony) 613 C (Arsenic Sublimes without melting) metal oxide fumes may be evolved. Under reducing conditions, such as any strong acid or base plus an active metal, or in the presence of nascent hydrogen, highly toxic stibine gas and arsine gas may be evolved.

Incompatibility: Strong Oxidizers like Fluorine and related compounds.  
Can react with finely divided aluminum and metal powders.  
Strong oxidizers, hydrogen peroxide, potassium nitrate, or permanganates, halogen gases, halides, halogenates, active metals – sodium, potassium. Powdered lead fused with ammonium nitrate may cause a violent reaction. Strong acids, bases, nascent hydrogen, reducing agents, chlorine, fluorine, and bromine. Never mix molten metal with water – it will explode. Never put product, by-products, dust or product waste into galvanized or aluminum containers.

**11. Toxicology Information**

Primary Routes of Entry: Inhalation and contact.  
Signs and Symptoms of Overexposure: **Inhalation:** Dust can cause respiratory irritation.  
**Eyes:** Redness and discomfort  
**Skin:** Dryness, irritation, redness and itching.

Existing Conditions Aggravated by Exposure: None Known

Carcinogenicity  
NTP: Arsenic, Known Carcinogen  
IARC: Arsenic, Group 1, Lead, 2B  
OSHA: Arsenic

Toxicity: Contains toxic constituents, lead, antimony and arsenic.

Acute Health Hazards: Skin: Defatting of the skin, Dryness and Irritation  
Inhalation: None expected when used within prescribed recommended temperature range. The thermal decomposition vapors of fluorinated polymers (PTFE above 330 C) may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco. Do not exceed 260 C. (500 F)

**11. Toxicology Information continued.....**

Lead, Antimony and Arsenic: Overexposure to Lead may lead to central nervous system disorders, characterized by drowsiness, seizures, coma & death. It should be recognized that exposures of this magnitude in an industrial environment are very unlikely. Acute exposure to Antimony may cause upper respiratory tract irritation and systemic antimony poisoning with symptoms including abdominal cramps, nausea, dizziness dry throat and various nervous complaints, such as sleeplessness irritability and muscular pains. Repeated skin contact with Antimony may result in dermatitis and eye contact may cause severe eye irritation. Acute overexposure to Arsenic may cause severe irritation of the lungs and upper respiratory tract with symptoms including a perforated nasal septum and central nervous system disorders characterized by seizures, coma and death. Repeated skin contact with Arsenic may cause skin irritation, dermatitis or contact dermatitis. And eye contact may cause severe eye irritation

Chronic Health Hazards: Overexposure to Lead can result in systemic Lead poisoning with symptoms of metallic taste, anemia, insomnia, weakness, constipation, abdominal pain, gastrointestinal disorders, joint and muscle pains, and muscular weakness, and may cause damage to the blood-forming, nervous, kidney & reproductive systems. Damage may include reduced fertility in both men and women, damage to the fetus of exposed pregnant women, anemia, muscular weakness & kidney dysfunction. Chronic overexposure to Antimony can lead to liver and kidney damage and central nervous system disorders. Antimony can cause eye and skin irritation, and dermatitis. Chronic overexposure to Arsenic can result in systemic arsenic poisoning with symptoms of weight loss, nausea, vomiting, diarrhea, weakness, loss of appetite and skin lesions and can cause damage to the liver, kidney and nervous systems. Exposure to Arsenic may also present a skin, respiratory tract, lymphocytic system and liver cancer risk, and can cause eye and skin irritation and dermatitis.

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**12. Ecological Information**

PTFE is essentially inert to the environment. PTFE does not decompose in landfills and therefore does not release toxic degradation materials into the ecosystems. PTFE is not toxic to aquatic life.

Lead, Antimony, Arsenic : Aquatic Chronic Effects, keep out of waterways.

**13. Disposal Considerations**

RCRA 40 CFR 261 Classification : This product as purchased does not fall under current US EPA RCRA definitions of Hazardous Waste.

It is recommended that if this product in its purchased form is going to become a waste, that it be disposed of by a licensed waste disposal company, observing all Federal, State and Local regulations. Due to the inherent thermal resistance of PTFE and its components it is usually not incinerated. Recycle or landfills are preferred options. Incinerate only if incinerator is capable of scrubbing out Hydrogen Fluoride and other acid combustion products. Additionally, certain state regulations could affect whether a material is considered a hazardous waste upon disposal. It must also be noted that a material can become a hazardous waste if it is mixed with or comes in contact with a hazardous substance during use. Under RCRA it is the responsibility of user of a product to determine at the time of disposal, whether a material should be classified as a hazardous waste.

**14. Transport Information**

DOT (49 CFR 172): Not Regulated

IATA : Not Regulated

Liquid / Solid (per ASTM D 4359-90) : Material is a solid

**15. REGULATORY INFORMATION**

CERCLA HAZARDOUS SUBSTANCES (40 CFR Part 302.4): RQ is 10 lb., Arsenic RQ is 1 lb., Antimony RQ is 5000 lb.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product does not contain any SARA 302 Extremely Hazardous Substances.

SARA TITLE III SECTION 311/312 HAZARDOUS CATEGORIZATION (40 CFR Part 370): Certain ingredients of this product are regulated under Sara Title III Section 311/312, see section 3 of this MSDS.

SARA TITLE III SECTION 313 (40 CFR Part 372): Lead, Arsenic, Antimony

U.S. INVENTORY (TSCA): Any chemical substances (as defined in 40 CFR Part 710.2), that are contained in, or used in the manufacture of this product, are reported in the EPA TSCA Inventory. (As required per 40 CFR 710.3)

CALIFORNIA PROPOSITION 65: Tetrafluoroethylene, Arsenic, Lead

CANADA WHMIS: Ingredient Disclosure List: Lead, Antimony and Arsenic appear on the Canadian HPA WHMIS Chemical List  
WHMIS Classification : Lead D2A

EUROPEAN UNION : Polytetrafluoroethylene: CLP Eye Irrit. , Lead : CLP Acute Tox 4, Repr 1A, STOT RE2,  
Aquatic acute 1, Aquatic Chronic 1, Antimony: CLP Acute Tox 4, Aquatic Chronic 2  
Arsenic: CLP Acute Tox 3, Aquatic Acute 1, Aquatic Chronic 1,  
Silica, Amorphous: CLP STOT SE3, RCF: CLP 1B Carc

OZONE DEPLETERS: \* This product is not manufactured with or contains any Class I or Class II Ozone Depleting Chemicals. (ODC's)

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**16. OTHER INFORMATION**

The information contained in this MSDS sheet is based upon data supplied by our suppliers and data determined by us in our facilities at the time these products were formulated. We have reviewed any information that we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety data in this sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. If after reviewing this MSDS you have determined that this product poses unusual risks to you, your plant, or your plant personnel, or if you cannot comply fully with all safety recommendations, do not use this product. This product is intended for a temporary repair. The responsibility for whether or not the product is suitable for use rest solely with the purchaser. We recommend that the product be tested prior to use. Your use of this information is beyond our control, therefore, the information is provided without warranty expressed or implied. We accept no liability beyond the purchase price of the material.

Estimated HMIS® Code:

Health Hazard:	*1	* See section 11 for chronic effects.
Flammability Hazard:	1	
Physical Hazard:	0	
Personal Protection:	NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual conditions under which chemicals in the facility are used.	

Procedural Warning:

Attn: Technician

(For industrial use by professionally trained personnel only) When the compound is curing, vapors and gasses are given off and should be vented. If being injected, steps should be taken to insure that the injection pressure in conjunction with pressure that may occur from gassing off does not exceed the pressure limitations of the piping system. Also, be aware it is quite common that the application temperature will exceed the compound flash point. Be aware of the possibility of a flash and take necessary precautions. Avoid contact with skin and eyes. See section 8 of SDS for personal protective equipment. Ventilation may be needed during heating/curing stage to exhaust organic vapors resulting from vaporization of certain organic agents. Always avoid direct contact with smoke and vapors being emitted from the compound during the heating/curing process. These vapors may be irritating to the skin, eyes and respiratory system. Read product technical data and safety information before use.

Contains PTFE do not exceed 260 C. (500 F)

Note : This product contains lead, antimony and arsenic.

**PREPARATION INFORMATION**

Prepared By:	Safety Department
Company:	RJ Stacey Ltd.
Revision Date:	05-01-15 Revision: D