SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**PERMATEX® #771 Nickel Anti-Seize (Maximum Temperature) - 1 lb. brush top bottle**
Product Code:	77164
Stock No.:	77164
Manufacturer Name:	Permatex, Inc.
Address:	10 Columbus Blvd. Hartford, CT 06106 USA
General Phone Number:	1-87-Permatex, (877) 376-2839
Emergency Phone Number:	800-255-3924
CHEMTREC:	For emergencies in the US, call CHEMTREC: 800-424-9300
MSDS Creation Date:	September 05, 2010
MSDS Revision Date:	December 30, 2012
(M)SDS Format:	

HMIS

Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	X

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Oxygenated aliphatic hydrocarbon	Mixture	5 - 15 by weight
Petroleum distillates, hydrotreated heavy naphthenic	64742-52-5	>60 by weight
Nickel	7440-02-0	10 - 20 by weight
Aluminum powder	7429-90-5	<2 by weight
Graphite	7782-42-5	5 - 15 by weight

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview:	CAUTION! Harmful. Irritant.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	
Eye:	Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury.
Skin:	Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling.
Inhalation:	Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.
Ingestion:	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.
Chronic Health Effects:	Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.
Signs/Symptoms:	Overexposure can cause headaches, dizziness, nausea, and vomiting.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 4 : FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point Method:	Tag closed cup (TCC)
Lower Flammable/Explosive Limit:	30% aluminum metal; 1% oil
Upper Flammable/Explosive Limit:	Not determined.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Unusual Fire Hazards:	May ignite when sufficient heat is applied.
Hazardous Combustion Byproducts:	Oxides of carbon and other unknown organic compounds. Irritating fumes and gases may be released upon thermal processing or during combustion.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Spill Cleanup Measures:	Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.
Methods for containment:	Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.
Methods for cleanup:	Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.
Other Precautions:	Pump or shovel to storage/salvage vessels. Add inhibitor to prevent polymerization.

SECTION 7 : HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.
Special Handling Procedures:	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.
Hygiene Practices:	Wash thoroughly after handling.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

Guideline Type:	
Guideline Info:	ACGIH TLV: 5 mg/m3 mist ; OSHA PEL: 5 mg/m3 mist ;

Nickel :

Guideline Type:	
Guideline ACGIH:	1.5 mg/m3 TLV-TWA: 0.1 mg/m3 Inhalable fraction (I) TLV-TWA: 0.2 mg/m3 Inhalable fraction (I) TLV-TWA: 1.5 mg/m3 Inhalable fraction (I)
Guideline OSHA:	1 mg/m3 PEL-TWA: 1 mg/m3

Aluminum powder :

Guideline Type:	
Guideline Info:	ACGIH TLV: 10 mg/m3 TWA (metal dust) ACGIH ; OSHA PEL: 15 mg/m3 TWA (total dust), 5 mg/m3 TWA (respirable) ;
Guideline ACGIH:	10 mg/m3 TLV-TWA: 1 mg/m3 Respirable fraction (R) TLV-TWA: 10 mg/m3 TLV-TWA: 2 mg/m3 TLV-TWA: 5 mg/m3
Guideline OSHA:	15 mg/m3 PEL-TWA: 15 mg/m3 Total particulate/dust (T) PEL-TWA: 5 mg/m3 Respirable fraction (R)

Graphite :

Guideline ACGIH:	2 mg/m3 TLV-TWA: 2 mg/m3 Respirable fraction (R)
Guideline OSHA:	15 mppcf PEL-TWA: 15 mppcf

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Paste.
Color:	Silver
Odor:	Petroleum distillates.
Boiling Point:	Not determined.
Melting Point:	Not determined.
Specific Gravity:	1.17
Vapor Density:	Not determined.
Vapor Pressure:	<5 mmHg @68°F
Evaporation Rate:	Not determined.
Evaporation Point:	Not determined.
pH:	Does not apply
Flash Point:	>200°F (93.3°C)
Flash Point Method:	Tag closed cup (TCC)
VOC Content:	None

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Polymerization may occur under certain conditions.
Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.
Incompatible Materials:	Oxidizing agents (eg peroxides, nitrates), reducing agents, acids, bases, azo-compounds, catalytic metals (eg copper, iron), halogens. Free radical initiators. Oxygen scavengers.

SECTION 11 : TOXICOLOGICAL INFORMATION

Petroleum distillates, hydrotreated heavy naphthenic :

RTECS Number:	PY8035000
Skin:	Administration onto the skin - Rabbit : >5 gm/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : >2000 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : 500 mg Administration onto the skin - Mouse : 480 gm/kg/80W (Intermittent) [Tumorigenic - neoplastic by RTECS criteria Skin and Appendages - Tumors Tumorigenic - Tumors at site of application] Administration onto the skin - Mouse : 402 gm/kg/78W (Intermittent) [Tumorigenic - equivocal Tumorigenic agent by RTECS criteria Skin and Appendages - Tumors Tumorigenic - Tumors at site of application] Administration onto the skin - Mouse : 398 gm/kg/22W (Intermittent) [Tumorigenic - equivocal Tumorigenic agent by RTECS criteria Skin and Appendages - Tumors Tumorigenic - Tumors at site of application]

Nickel :

Carcinogenicity:	IARC: Group 2B: Possibly carcinogenic to humans. NTP: Reasonably anticipated to be a human carcinogen.

Aluminum powder :

RTECS Number:	BD0330000

Graphite :

RTECS Number:	MD9659600

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.
RCRA Number:	Not determined.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Non regulated.
DOT UN Number:	Not applicable.
DOT Hazard Class:	Not applicable.
DOT Packing Group:	Not applicable.
IATA Shipping Name:	Non regulated.
IATA UN Number:	Not applicable.

SECTION 15 : REGULATORY INFORMATION

Petroleum distillates, hydrotreated heavy naphthenic :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Nickel :

TSCA Inventory Status:	Listed
SARA:	EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
California PROP 65:	Listed: cancer
New Jersey:	Listed: NJ Hazardous List; Substance Number: 1341
Massachusetts:	Listed: Massachusetts Oil and Hazardous List
Pennsylvania:	Listed
Canada DSL:	Listed

Aluminum powder :

TSCA Inventory Status:	Listed
New Jersey:	Listed: NJ Hazardous List; Substance Number: 0054
Massachusetts:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed

Graphite :

TSCA Inventory Status:	Listed
Massachusetts:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed
Canadian Regulations.	WHMIS Hazard Class(es): D2B All components of this product are on the Canadian Domestic Substances List.

SECTION 16 : ADDITIONAL INFORMATION

MSDS Creation Date:	September 05, 2010
MSDS Revision Date:	December 30, 2012
MSDS Author:	Actio Corporation
Disclaimer:	This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment.