

#### **SECTION 1: PRODUCT AND COMPANY INFORMATION**

MANUFACTURER'S NAME: INNOVATIVE POLISHING SYSTEMS, INC. ADDRESS: 2810 SE MONROE STREET, UNIT B-, STUART, FLORIDA 34997-5902 PHONE: (772) 283-6668 FAX: (772) 283-6854 EMERGENCY: 1(877) 777-6858 Toll Free PRODUCT USE/CLASS: POLISHING ENHANCEMENT PRODUCT NAME: EXTREME POLISHING ENHANCER 410-411-L

#### **SECTION 2: INGREDIENTS**

CHEMICAL NAME:

WT PERCENT IS (TL' LESS THAN

(TLV-TWA,TLV-STEL,PEL-TWA,SKIN

DESIGNATION) EXETREME POLISHING ENHANCER:

100%

n/a

## SECTION 3: PHYSICAL / CHEMICAL CHARACTERISTICS / DATA

pН	7.0 - 8.0	DISPERSIBLE IN WATER	All proportions
DENSITY	0.9900 - 1.000g/ml	TOXICITY	Non-irritating to Skin
VISCOSITY	1000 - 2000 cps	NITRITES & NITRATES	None
FREEZING POINT	26° - 28° F	NITROSAMINE	None
BIODEGRADABILITY	Complete - Non Polluting	SHELF LIFE	Minimum 1 year

Odorless

ODOR: Odd BOILING POINT: 230°F DENSITY (G/ML): 0.99 SOLUBILITY IN WATER: Solu

0.9900 - 1.000 Soluble

## **DISPERSIVE ACTION**

Separates and evenly disperses all particles, enabling them to function to their true dimensions and optimizing conchoidal fracturing needed for effective stock removal and surface finishing.

**DISTINCT ADVANTAGES** 

- Prevents agglomerating and "packing"
- Resists settling
- Easily and quickly re-disperses to maximum efficiency even when left undisturbed for extended periods
- Slurry runs in a gently yielding mass
- Facilitates circulation

## ADHESIVE ACTION

Enables particles to cling to laps with greater tenacity and remain in contact with the workpiece for longer periods causing abrasive grains to break down into progressively finer particles.

**DISTINCT ADVANTAGES** 

- Greater stock removal per unit time
- Ultimately produces more refined surfaces

## LUBRICATIVE ACTION

Keeps the abrasive slurry homogeneous minimizing craters, fissures and micro cracks and requiring fewer fine operations and less polishing time. Frictional forces are minimized reducing lap wear, extending the life of true curves 20-40% on spherical laps and 30-100% on toric laps.

DISTINCT ADVANTAGES

- Prevents abrasives from balling-up
- Eliminates dry-spotting
- Allows faster polishing procedure
- Dramatically extends tool life

# ANTI-FOAM ACTIVITY & OTHER CHEMICAL PROPERTIES

Sheerforce Extreme Polishing Enhancer enhances the polishing action while suppressing the foam which can slow down the polishing cycle. It is bacteriostatic and nontoxic.

# DISTINCT ADVANTAGES

- Increased production
- No foul odors
- Will not irritate skin

A surfacing additive which accelerates and enhances the action of abrasives and polishing compounds, Sheerforce Extreme Polishing Enhancer yields surfacing qualities unattainable by conventional methods. It is safe, and nontoxic with suspension characteristics that are effective with slurries of all particle size ranges, from rough fining abrasives to sub-micron polishing compounds. With Sheerforce Extreme Polishing Enhancer particles resist settling even when left undisturbed for long periods of time, and slurries are easily re-dispersed to quickly achieve maximum efficiency. Sheerforce Extreme Polishing Enhancer's dispersive, adhesive, lubricative, and anti-foam properties consistently deliver added processing benefits and results.

## **SECTION 4: REACTIVITY DATA**

HAZARDOUS DECOMPISITION PRODUCTS: INCOMPATABILITY: HAZARDOUS POLYMERIZATION:

CONDITIONS TO AVOID: STABILITY:

NONE KNOWN STRONG OXIDIZING AGENTS WILL NOT OCCUR UNDER NORMAL CONDITIONS NONE KNOWN THIS PRODUCT IS STABLE UNDER NORMAL STORAGE CONDITIONS None

MATERIALS TO AVOID:

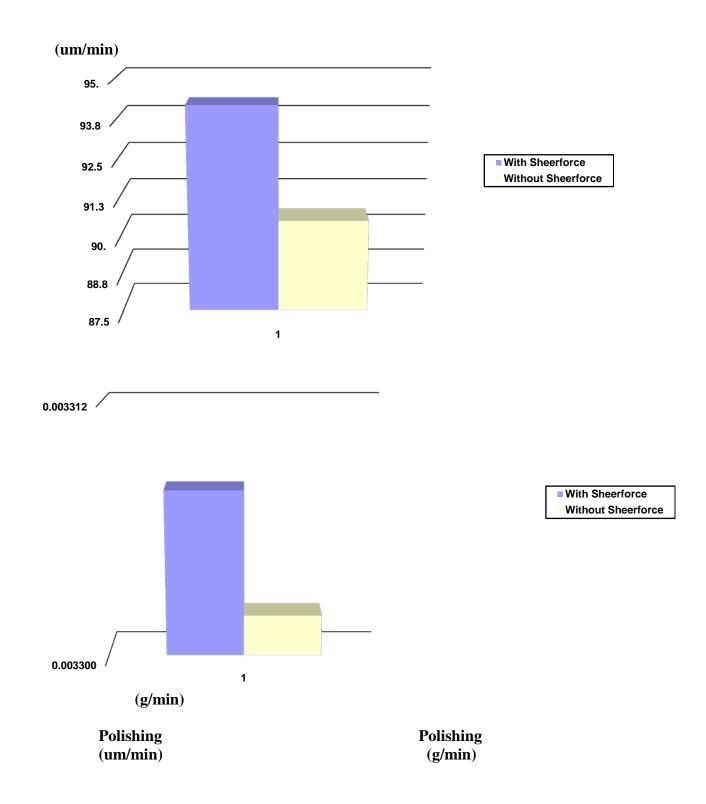
### **SECTION 5: HEALTH HAZARD DATA**

(EFFECTS OF O	VEREXPOSURE)
EYE CONTACT:	IRRITATION AND TEARING MAY OCCUR
SKIN CONTACT:	MAY IRRITATE SENSITIVE SKIN
INHALATION:	NONE KNOWN
INGESTION:	MAY CAUSE MILD DIARRHEA
CHRONIC HAZARDS:	NONE KNOWN
( FIRST	AID)
EYE CONTACT:	FLUSH WITH WATER 15 MINUTES
SKIN CONTACT:	FLUSH WITH WATER, WASH WELL
INHALATION:	NONE KNOWN
INGESTION:	DRINK LOTS OF WATER IF A LARGE AMOUNT IS INGESTED
	CALL EMERGENCY NUMBER
PRIMARY ROUTE(S) OF	
ENTRY:	INHALATION, INGESTION, EYE CONTACT
TOXICITY:	NONE
IRRITATION:	NONE

This product contains no hazardous components as defined in the OSHA Hazard Communication Standard (29 CFR 1910-1200).

**SECTION 6: PRECAUTIONS FOR SAFE HANDLING AND USE** Surface Removal Productivity

Lapping



In all cases it is recommended to mix the appropriate amount of Sheerforce Extreme Polishing Enhancer with roughly 10 to 20 times that volume of warm water (i.e. Add 3 x 12.5ml Sheerforce Extreme Polishing Enhancer to 8 oz. water). This will speed the migration of the Sheerforce Extreme Polishing Enhancer to all particles in the compound. When creating new slurry, mix the Sheerforce Extreme Polishing Enhancer as above, and then add the polishing/fining powder to the Sheerforce Extreme Polishing Enhancer mixture and gently agitate, creating "super-saturated" slurry. Add this concentrated slurry to the appropriate volume of water to arrive at the finished slurry. Summary: As shown in the previous charts, Sheerforce Extreme Polishing Enhancer will enhance the surface removal productivity for both lapping and polishing. The removal rate increased by as much as 4 um with the addition of Sheerforce Extreme Polishing Enhancer to a traditional polishing slurry. *Adding Sheerforce Extreme Polishing Enhancer to a polishing slurry has also proven to reduce scratches*.

WASTE DISPOSAL METHOD: Dilute with water- can be flushed into general drainage system.

#### PRECAUTIONS

RESPIRATORY PROTECTION: VENTILATION: SKIN PROTECTION: EYE PROTECTION: OTHER PROTECTIVE EQUIPMENT: HYGENIC PRACTICES: NONE/ NO INFO NONE / NO INFO SAFTEY GLOVES SAFTEY GLASSES OR GOGGLES NONE / NO INFO WASH AFTER EACH USE

STORAGE & HANDLING: Store at ambient temperatures. Do Not Boil, Do Not Freeze. Keep out of direct sunlight if possible. Only dilute into slurry as needed. Keep containers closed, as ingredients may evaporate after extended contact with moving air. Avoid contamination of material.

#### **SECTION 7: SPILL OR LEAKAGE PROCEDURE**

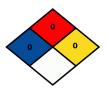
IN CASE OF SPILL OR RELEASED MATERIALS:	DIKE FOR RECOVERY OR DISPOSAL, SMALL AMOUNTS,
WASTE DISPOSAL METHOD:	FLUSH TO SEWER DISPOSE IN ACCORDANCE WITH APPROPRIATE FEDERAL, STATE AND LOCAL REGULATIONS.
LEAKS AND SPILLS:	Mop up or flush
PERSONAL PROTECTION:	Not needed

# SECTION 8: FIRE AND EXPLOSION DATA FLASH POINT: NONE / NO INFO LOWER EXPLOSIVE LIMIT: NONE / NO INFO

UPPER EXPLOSIVE LIMIT: NONE / NO INFO EXTINGUISHING MEDIA: CO2- DRY CHEMICAL - WATER FOG UNUSUAL FIRE HAZARDS: NONE/ NO INFO SPECIAL FIRE FIGHTING PROCEDURES: NONE/ NO INFO

#### **SECTION 9: HMIS RATINGS AND OTHER REGULATIONS**

HEALTH:	0
FLAMMABILITY:	0
REACTIVITY:	0



Sheerforce Extreme Polishing Enhancer is a unique concentrated liquid additive that accelerates and enhances the action of abrasive and polishing compounds. Performance and suspension characteristics are greatly enhanced by adding Sheerforce Extreme Polishing Enhancer to all types of slurries, yielding improved surface finishes and efficiency.

Originally designed to work with LP materials, Sheerforce Extreme Polishing Enhancer is also used as a pad pre-conditioner prior to charging, the polishing interface with IPS Compound. It keeps the initial friction down and acts like a magnet for the polish to the pad surface when the compound slurry charges the polishing interface. Noticeable reaction in this process is a bubble-free coating of the pad surface. It is recommended that this process should always be used on pads especially for glass polishing.

Sheerforce Extreme Polishing Enhancer is effective in slurries made with particles of all size ranges, from rough fining abrasives to sub-micron polishing compounds. Once in suspension, particles resist settling even when left undisturbed for long periods of time, and slurries are easily re-dispensed to quickly achieve maximum efficiency.

Sheerforce Extreme Polishing Enhancer will also create affinity to pad and tooling surfaces, enabling the slurry to remain in contact with the work surface and provide optimum surfacing performance. Sheerforce Extreme Polishing Enhancer coats all the metallic parts in the system, like car wax, preventing compound from clinging to parts. This reduces maintenance and aids cleanup. Typically, reductions in fining and polishing cycle times, as well as increased surface quality, are a direct result of Sheerforce Extreme Polishing Enhancer usage. Sheerforce Extreme Polishing Enhancer enhanced slurries are also easier to clean from the substrate surfaces.

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All substances used in all compounds of IPS<sup>TM</sup> used in Glass and Polycarbonate polishing are listed in the following: See below.

REGULATORY INFORMATION: U.S. TSCA – This product and components are manufactured in compliance with all provisions of the Toxic Substances Control Act 15 U.S.C.

CANADA DSL – Components of this product are in accordance with the subsection 25 of the Canadian Environmental Protection Act and are included on the Domestic Substance List.

EEC-EINECS – All components of this product are included on the European inventory of existing chemical substances (EINECS) in compliance with Council Directive 67/548/EEC Amended 79/831/EEC.

#### WARNING STATEMENTS:

Based on currently available data, these products DO NOT meet the OSHA definition of a hazardous substance. However, good industrial hygiene practices should be used in handling them.

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