SAFETY DATA SHEET

LO-4

Prepared on 05/18/15

1: Identification of the substance/mixture and of the company / undertaking	
1.1: Product identifier	
Substance Name	LO-4
CAS No.	See Section 3
Product Description	Oil Soluble – Color varies with micron size

1.2: Relevant identified uses of the substance or mixture and uses advised against	
Identified Uses	Industrial Slurry/Lubricant
Uses advised against	None Known

1.3: Details of the supplier of the safety data sheet	
Manufacturer	Plastic Process Equipment, Inc.
Address	8303 Corporate Park Dr. Macedonia, OH 44056
Phone	216-367-7000
Fax	216-367-7022
E-mail	sales@ppe.com

1.4 : Emergency telephone numbers		
United States Emergency No.	800-535-5053	
Emergency telephone **Available outside office hours (24 Hours)**	800-535-5053 ☒ Yes	☐ No

2: Hazards Identification	
2.1: Classification of the mixture	
Classification according to UN GHS:	Flammable Liquid 3 – H226 Aspiration Hazard 1 – H304 Skin Irritant 2 – H315 Eye Irritant 2B – H320
2.2: Label elements (according to EC 1272/2008)	
Hazard pictogram(s):	
Signal word:	**Danger**
Hazard Statement(s):	H226 – Flammable liquid and vapor H304 – May be fatal if swallowed and enters airways H315 – Causes mild skin irritation H320 – Causes eye irritation
Precautionary statement(s):	P202 - Do not handle until all safety precautions have been read and understood. P210 – Keep away from heat/spark/open flame/hot surfaces P264 – Wash hands thoroughly after handling. P280 – Wear appropriate personal protective equipment when handling product. Including face protection (safety glasses w/side shields) and impervious gloves

(nitrile).
P305+P351+P338 – If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P310 – If swallowed: Immediately call Poison Control or doctor/physician
P331 – Do not induce vomiting
P337+P313 – If eye irritation persists get medical attention/advice
P370+P378 – In case of fire: use sand, dry chemical or alcohol-resistant foam for extinction
P403+P235 – Store in a well-ventilated space; keep cool
P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

3: Composition / information on ingredients

3.1: Mixture

Identification Name	CAS Number	Weight % Content
Naptha (Petroleum), Hydrotreated heavy	64742-48-9	40-60%
Polypropylene Glycol Monobutyl Ether	9003-13-8	10-30%
Mineral Oil	8042-47-5	10-30%
Diamond	7782-40-3	<20%*
* The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret. All remaining components are considered to be non-hazardous per 1910.1200.		

4: First aid measures

4.1: Description of first aid measures

Eyes	Immediately flush eyes with plenty of water lifting lower and upper eyelids occasionally, until abrasive material is removed. Get medical attention if irritation persists. After initial flushing, remove any contact lenses if worn.
Inhalation	Remove to fresh air. Seek medical attention if required.
Ingestion	No ingestion hazard is expected under normal industrial use. Seek immediate medical attention. Do not induce vomiting.
Skin	Remove contaminated clothing. Immediately wash with soap and water and rinse thoroughly. Seek medical attention if required.

4.2: Most important symptoms and effects, both acute and delayed

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

5: Firefighting measures

5.1: Extinguishing media

Use water spray to cool surfaces exposed to fire to disperse vapors and to protect personnel attempting to stop any leakage. Extinguish the fire with foam, dry chemical or carbon dioxide.

5.2: Special hazards arising from the substance or mixture

Burning may produce smoke, carbon monoxide, carbon dioxide, and unburned hydrocarbons.

5.3: Advice for firefighters

Use a self-contained breathing apparatus and full protection gear. Dike and collect water used to fight fire if possible.

6: Accidental release measures

6.1: Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes, and formation and accumulation of dust. Use personal protective equipment as

specified in Section 8 of this SDS. Sweep or gather up material and place in proper container for disposal or recovery.

6.2: Environmental precautions

Avoid release into the environment.

6.3: Methods and material for containment and cleaning up

Containment: If material is spilled or released, cordon off area. Persons not wearing appropriate protective equipment should be excluded from spill area until clean-up has been completed.

Clean-Up: Wear appropriate personal protective equipment as specified in Section 8. Collect spilled material and clean up any residue material by vacuuming or wet sweeping to reduce dust generation and place into an appropriate container suitable for proper disposal in accordance with local, regional, national, and/or international regulations.

6.4: Reference to other sections

See sections 8 – Exposure Controls/Personal Protection and Section 13 – Disposal Considerations

7: Handling and storage

7.1: Precautions for safe handling

Wear appropriate protective gloves and safety glasses with side shields or chemical goggles. Avoid contacting or breathing of material. Use only in well-ventilated area and be sure to wash hands thoroughly after handling material.

7.2: Conditions for safe storage, including any incompatibilities

Store in a tightly closed container in a secure and well-ventilated area. Store under dry and cool conditions and away from ignition sources and direct sunlight.

7.3: Specific end use(s)

Industrial Slurry/Lubricant Oil-soluble

8: Exposure Controls / Personal Protection

8.1 : Control parameters

Component Name	OSHA PEL	ACGIH TLV
Naptha (Petroleum), Hydrotreated heavy	500 ppm	200 mg/m^3 (as Total Hydrocarbons)
Polypropylene glycol monobutyl ether	None Established	None Established
Mineral Oil	5 mg/m^3	5 mg/m^3
Diamond	5 mg/m^3*; 15 mg/m^3**	3 mg/m^3*; 10 mg/m^3**

* Respirable fraction; ** Total Particulate (Nuisance Dust)

8.2: Exposure controls

Appropriate engineering controls:

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls (wet grinding) to maintain airborne levels below identified exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures:

Pictograms 

Eye/face protection	Safety glasses with side shields or safety goggles should be worn when working with this material.
Skin protection	Wear appropriate clothing or PPE to prevent repeated or prolonged contact with exposed shin.
Respiratory protection	If ventilation is not sufficient to control exposures below the applicable exposure limits, an appropriate NIOSH approved air-purifying respirator equipped with organic vapor cartridges with dust/mist pre-filter is

	recommended. Select and use in accordance with 29 CFR 1910.134 and good industrial hygiene practice.
Hands	Wear protective gloves: nitrile, neoprene, butyl, polyethylene, or PVC. Always consult with your glove manufacturer or supplier for specific recommendations.
General Industrial Hygiene Considerations	Handle in accordance with good Industrial Hygiene and Safety practices.

9: Physical and chemical properties

9.1: Information on basic physical and chemical properties

Appearance	Opaque liquid of varying colors due to diamond size
Odor	Mild odor
pH	Not applicable
Melting point/freezing point	Not applicable
Initial boiling point/boiling range	≥ 212°F
Flash point	>120°F (will not sustain combustion)
Evaporation rate	Not applicable
Upper/lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	Not applicable given
Relative density	1 {*Ref Std:WATER=1}*
Solubility in water	Insoluble - dispersible
Partition coefficient (n-octanol/water)	No data available
Decomposition temperature	No data available
Viscosity	No data available

9.2: Other information

No additional physical and chemical parameters noted

10: Stability and reactivity

10.1: Reactivity

Not reactive under recommended or normal conditions of handling, storage, processing, and use.

10.2: Chemical stability

Stable under normal use conditions and storage

10.3: Possibility of hazardous reactions

Not reactive at normal temperatures and pressures

10.4: Conditions to avoid

Heat, sparks, flames, and other ignition sources

10.5: Incompatible materials

Strong oxidizers

10.6: Hazardous decomposition products

None with proper storage and handling

11: Toxicological information

Toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, and ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1: Information on toxicological effects

Acute oral toxicity	No Data Available
Acute inhalation toxicity	No Data Available
Acute dermal toxicity	No Data Available
Skin corrosion /irritation	Mechanical skin irritation. Signs/symptoms may include abrasion, redness, pain, and itching.
Eye damage/ irritation	Mechanical eye irritation. Signs/symptoms may include pain, redness, tearing and corneal abrasion
Respiratory/skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	None of the components of these products is listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA
Reproductive toxicity	No Data Available
STOT single exposure	No Data Available
STOT repeated exposure	No Data Available
Aspiration hazard	May be fatal if swallowed and enters airways

12: Ecological information

12.1: Toxicity

No data available

12.2: Persistence and degradability

No data available on mixture

12.3: Bioaccumulative potential

No data available

12.4: Mobility in soil

No data available

12.5: Other adverse effects

No data available

13: Disposal considerations

13.1: Waste treatment methods

FACILITY LEVEL ENVIRONMENTAL EMISSIONS/MITIGATION

Waste Management Controls

Dispose in accordance with local/regional/national/international regulations. Two options are recommended:

1. Re-use
2. Recycling or other recovery

Wastewater should be processed through a sewage treatment plant (STP) either on-site or off-site.

14: Transport information

14.1: UN-No. (DOT/IATA/IMDG):	Not Applicable
14.2: UN proper shipping name:	Not Applicable
14.3: Transport hazard class(es):	Not Applicable
14.4: Packing group:	Not Applicable
14.5: Environmental hazard(s):	Not Applicable
14.6: Special precaution(s) for user:	Not Applicable
14.7: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Not Applicable

15: Regulatory information

15.1: Safety, health and environmental regulations/legislation specific for the substance or mixture

Occupational Safety and Health Act (OSHA):

Federal OSHA Hazard Communication Standard 29 CFR 1910.1200

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

n/a

TOXIC SUBSTANCES CONTROL ACT (TSCA): This product is in compliance with all rules and orders of TSCA.

15.2: Chemical safety assessment

Not Applicable

16: Other information

Revision(s):	SDS Prepared: 05/18/15 This SDS replaces LBO415, LBO455

This SDS provides information consistent with recommended applications of these products and anticipated activities involving the product. It is the user's responsibility to identify and protect against health and safety hazards presented by modification of this material and products after manufacture. Individuals handling this material should be informed of all relevant hazards and recommended safety precautions, and should have access to the information contained in this SDS.

End of Safety Data Sheet