SAFETY DATA SHEET

1. *Identification of the Substance/ Mixture and of the Company/ Undertaking*

Product Name: ATI PAO-4

Preparation Date: 03/30/2015
Revision Date: 08/18/2016

Recommended Use: Particle filter testing

Supplier: Air Techniques International
11403 Cronridge Drive
Owings Mills, MD 21117-2247

Telephone: (410) 363-9696
Emergency Telephone Number: Chemtrec (USA) 1-800-424-9300

2. *Hazard Identification*

GHS Classification: Aspiration Hazard: Category 1
H304 – May be fatal if swallowed and enters airways.

GHS Labeling:

Symbol:

Signal Word: Danger

Precautionary Statements: P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER OR doctor/physician
P331: Do NOT induce vomiting
P405: Store locked up
P501: Dispose of contents and container in accordance with local regulations

Other Hazards Not Classified: No significant hazards

US OSHA/HCS Status: Hazardous under OSHA Hazard Communication Standard Revised in 2012

3. ***Composition/Information on Ingredients***

Chemical Name	CAS Number	Concentration, Wt. %
1-Decene, homopolymer, hydrogenated or 1-Decene, tetramer mixed with 1-decene	68037-01-4 or 68649-12-7	100%

4. First Aid

Inhalation: If inhaled, move to fresh air. If victim has stopped breathing give artificial respiration, preferably, mouth to mouth. Contact a physician immediately.

Eyes: Flush with large amounts of cold water for at least 15 minutes. Do not let victim rub eyes. If irritation develops, contact a physician immediately.

Ingestion: Do not induce vomiting. If victim is conscious and able to swallow, promptly have victim drink water to dilute. Do not give sodium bicarbonate, fruit juices or vinegar. Never give anything by mouth if victim is unconscious or having convulsions. Contact a physician immediately.

Skin: Wash affected area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.

Most important symptoms and hazardous effects: Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after exposure.

Indication of immediate medical attention and special treatment needed: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

5. Fire-fighting Measures

Suitable extinguishing media: Carbon dioxide, Dry chemical, Foam, Water spray

Specific hazards: Smoke, fumes and incomplete combustion products.

Specific protective equipment and precautions for fire fighters: Use water spray, dry chemical, foam or carbon dioxide. Water may be ineffective but should be used to keep fire exposed containers cool. If a spill or a leak has not ignited, use water spray to disperse the vapors. Water spray may be used to flush spills away from fire.
Perform only those firefighting procedures for which you have been trained. Firefighters should wear self-contained breathing apparatus in the positive pressure mode with a full face piece where there is a possibility of exposure to smoke, fumes or hazardous decomposition products.
Flammability Properties:

Flash point: 222°C (432°F) (Cleveland Open Cup)

Auto-Ignition Temperature: 343°C (649°F)

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment. Ensure adequate ventilation.

Environmental Precautions: Do not allow spilled material to enter sewers or streams. If spills are likely to enter any drain, waterway or groundwater, contact the appropriate governmental agency.

Methods and materials for containment: Add dry material to absorb (if large spill, dike to contain). Using recommended protective equipment, pick up bulk of spill and containerize for recovery or disposal. Flush area with water to remove residues.

7. Handling and Storage

Precautions for safe handling: Read label for instructions in use of product. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source).

Conditions for safe storage: Store in closed containers in a cool, dry well ventilated area. Maintain closure of bungs. Store at temperatures between 5°C and 50°C. Do not reuse container. Avoid container damage while storing.
Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, bronze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition; they may explode and cause injury or death. Do not attempt to refill containers since residue is difficult to remove. Empty drums should be completely drained, properly bunged and returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner in accordance with governmental regulations.

8. Exposure Controls/Personal Protection

Control parameters: 1-decene, homopolymer, hydrogenated CAS # 68037-01-4; TWA 5 mg/m^3 ExxonMobil

For mist and aerosols: 5 mg/m^{3}ACGIH TLV; 10 mg/m^3 ACGIH STEL

Appropriate engineering controls: Proper protection and controls is dependent upon the potential exposure conditions. No special requirements are needed under ordinary conditions where adequate ventilation is available.

Individual protective measures:

Respiratory protection: Needed when airborne contaminant concentrations are at a level which cannot protect worker health. Then an approved respirator must be used. Selection of the respirator is dependent upon regulatory conditions.
For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode.

Eye protection: No eye protection is needed under conditions of normal use. If there is a possibility that the product can be splashed into the eyes, then safety glasses with side shields or chemical goggles are required. Contact lenses should also not be worn if the product could be splashed into the eyes.

Hand protection: No gloves are required for single, short duration exposures. For prolonged or repeated exposures, wear rubber gloves.

Body protection: If product use involves single, short duration exposures, then no additional protective wear for covering the skin is required. For prolonged or repeated exposures to the skin, wear impervious, protective clothing including rubber safety shoes to avoid skin contact.

National Fire Protection Association (NFPA): Health 1 Flammability 1 Reactivity 0
Other n/a

9. Physical and Chemical Properties

Appearance: Colorless liquid
Odor: Odorless
Odor Threshold: N/A
pH : N/A
Melting point/freezing point: < -20^{o}C
Initial boiling point and boiling range: > 316^{o}C
Flash Point (Method): 222^{o}C (Cleveland Open Cup)
Evaporation Rate: N/A
Flammability (Solid, Gas): N/A
Upper/lower flammability or explosive limits: UEL: No data available; LEL: No data available
Vapor pressure: <0.013 kPa (0.1 mm Hg) at 20^{o}C
Vapor density: N/A
Relative density: 0.82 @ 15.5^{o}C
Partition coefficient n-octanol/water: N/A
Autoignition Temperature: 343^{o}C
Decomposition Temperature: N/A
Viscosity: 18 cSt at 40^{o}C/ 4 cSt at 100^{o}C
Water Solubility: Insoluble

10. Stability and Reactivity

Chemical stability: Stable at normal conditions
Possibility of hazardous reactions: Not expected and hazardous polymerization will not occur
Conditions to avoid: Excessive Heat. High energy sources of ignition.
Incompatible Materials: Strong acids, bases and oxidizing agents.
Hazardous decomposition products: Carbon dioxide and carbon monoxide

11. Toxicological Information

Inhalation Toxicity: Practically non-irritating. LC50 > 5 mg/l Based on testing of similar products
Oral Toxicity (Rabbits): LD 50 > 15 g/kg Practically non-irritating
Skin Irritation (Rabbits): Practically non-irritating. Primary irritation score 1.3 (Scale 0-8)
Dermal Toxicity (Rabbits): LD50 > 5 g/kg. Practically non-irritating
Eye Irritation (Rabbits): Practically non-irritating. Eye irritation score: 2.0 at 1 hour, 2.0 at 24 hours (Scale 0-110)

Aspiration Toxicity: May be fatal if swallowed and enters airways. Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.

Skin Sensitization: None

Chronic Exposure Target Organ Effects: No data is available to indicate product present at greater than 1% is a chronic health hazard.

Carcinogenicity: This product present at a level of 0.1% or higher is not considered to be carcinogenic under IARC.

12. Ecological Information

Aquatic/terrestrial ecological toxicity:
Toxicity to fish: LC 50 > 1,000 mg/liter (96 hours)
Species Rainbow Trout

Toxicity to daphnia: EC 50: 190 mg/liter (48 hours)
Species Daphnia

Toxicity to algae: NOELR: 1,000 mg/liter (72 hours)
Scenedesmus cparicornuturn (freshwater algae)
Static test method: OECD Test Guideline 201

Mobility: Not established

Persistence and degradability: Biodegradability of this material is greater than or equal to 20%. This material is inherently biodegradable.

13. Disposal Considerations

Disposal methods: Product can be disposed of by burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited by the controlling authority. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at any licensed waste disposal site.

Precaution for disposal: All recovered material should be packaged, labeled, transported and disposed or reclaimed in conformance with Good Engineering Practices. Comply with all applicable governmental regulations. Avoid land filling of liquids. Reclaim where possible.

14. Transport Information

USA DOT: Not designated as a hazardous material by the USA DOT
RID/ADR: Not regulated by RID/ADR
IMO: Not regulated by IMO
IATA: Not regulated by IATA

15. Regulatory Information

US TSCA: In compliance with the inventory

Hazardous under OSHA Hazard Communications Standard: yes

SARA (Superfund Amendment and Reauthorization Act)

Section 311: Hazardous Chemical - yes
Immediate - yes
Delayed - no
Fire – no
Sudden Release – no
Reactive – no

Section 313: Toxic Chemical – no

California Proposition 65

This product contains no listed substances known to the State of California to cause cancer, birth defects, or other reproductive harm, at levels which would require a warning under the statute.

16. Other Information

References and Sources: Information contained in this safety data sheet is based on Air Techniques International owned data and public sources deemed valid or acceptable. The absence of data elements required by ANSI or 2001/58/EC indicates that no data meeting these requirements is available.

Disclaimer: This document has been prepared in good faith and from information provided to us by our suppliers and other sources considered to be reliable. No warranty, express or implied is given. The buyer is responsible to evaluate all available information when using this product for any particular use. The buyer is also responsible for complying with all Federal, State, Provincial, and Local Laws and regulations when using this product.