Material Safety Data Sheet
PREMIUM ACRYLIC LIQUID

SECTION 1. PRODUCT AND COMPANY INFORMATION

MANUFACTURER: PACE Technologies
3601 E. 34th St.
Tucson, AZ 85713

INFORMATION PHONE: 520-882-6598

EMERGENCY PHONE: CHEMTREC 800-424-9300 (US) Day or night
International call collect CHEMTREC 202-483-7616

TRADE NAME: PREMIUM ACRYLIC LIQUID

CHEMICAL FAMILY: Isobutyl Methacrylate: CAS Number – 97-86-9

HMIS RATING: HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 2

HAZARD RATING:

LEAST: 0 SLIGHT: 1 MODERATE: 2 HIGH: 3 EXTREME: 4

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO.	%
ISO-BUTYL METHACRYLATE	97-86-9	<90

Ingredients are listed on the TSCA Inventory of Chemical Substances. Those not identified are non-hazardous.

SECTION 3. HAZARDS IDENTIFICATION

Combustible. Hazardous polymerization may occur.

Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact and burning sensation of the mouth, throat and respiratory tract and abdominal pain if swallowed. High concentrations irritant to the respiratory tract and may lead to dizziness, headache and anesthetic effects.

Unlikely to present carcinogenic hazard and no known chronic (cancer) information. No reproductive information available but no adverse effects expected. Some evidence of potential developmental toxicity but inadequate information is available to assess teratogenic hazard. No adverse effects expected.

SECTION 4. FIRST AID MEASURES

INHALATION: If affected by inhalation of vapor or spray mist, remove to fresh air. If having breathing difficulty, administer oxygen. I not breathing, give artificial respiration. If breathing difficulty persists, or occurs later, consult a physician..

SKIN OR EYE CONTACT: In case of contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash with soap and water. If irritation occurs, contact a physician.

INGESTION: DO NOT INDUCE VOMITING. Immediately give two glasses of water, or activated charcoal slurry. Never give anything by mouth to an unconscious person. Call a physician.

SECTION 5. FIRE AND EXPLOSION HAZARD DATA

FLAMMABLE PROPERTIES: Flammable liquid. Vapors or gases may travel considerable distance to ignition source and flash back.

FLASH POINT: 42.5-45.5°C
METHOD: Closed cup

FLAMMABLE LIMITS Lower 1-2%
Upper 7.4-8

FIRE AND EXPLOSION HAZARDS: Fine mist or sprays may be flammable at temperature below the flash point. Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors are heavier than air and may travel to ignition source.

EXTINGUISHING MEDIA: Dry chemical, Foam, Water fog (by trained personnel), CO_2

FIRE FIGHTING INSTRUCTIONS: Full protective equipment, including self-contained breathing apparatus, is recommended. Cool containers with water spray to prevent pressure build-up. Fight fires from a safe distance or protected areas. Heat may rupture containers.

PACE Technologies · 3601 E. 34th St · Tucson, AZ 85713 USA
Telephone 520-882-6598 · FAX 520-882-6599 · pace@metallographic.com
Emergency phone number (CHEMTREC 800-424-9300)

SECTION 6. ACCIDENTAL RELEASE MEASURES

SAFEGUARDS (PERSONNEL)`:

NOTE: Review FIRE FIGHTING MEASURES AND HANDLING (PERSONNEL) sections before proceeding with clean up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.

Evacuate personnel, thoroughly ventilate area, and use self-contained breathing apparatus.

INITIAL CONTAINMENT:

Remove source of heat, sparks, flame, impact, friction or electricity. Dike spill. Prevent material from entering sewers, waterways, or low areas.

SPILL CLEAN UP:

Soak up with sand, oil dry or other absorbent, non-combustible material. Cleaned up material is a RCRA Hazardous Waste.

SECTION 7. HANDLING AND STORAGE

HANDLING (PERSONNEL):

Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

HANDLING (PHYSICAL ASPECTS):

Close container after each use. Ground container when pouring. Keep away from heat, sparks and flames.

STORAGE:

Vapors are uninhibited and may form polymers in vents or flame arresters, resulting in blockage of vents.

Keep container in a cool place. DO NOT expose to direct sunlight. Store in a well ventilated place. Keep container tightly closed. Store in accordance with National fire Protection Association recommendations.

Maintain air space inside storage containers. Inhibitor requires air (oxygen) contact to function.

ENIGINEERING CONTROLS:

Keep container tightly closed.

Observe label precautions.

Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits.

PACE Technologies · 3601 E. 34th St · Tucson, AZ 85713 USA
Telephone 520-882-6598 · FAX 520-882-6599 · pace@metallographic.com
Emergency phone number (CHEMTREC 800-424-9300)

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

EYE/FACE PROTECTION: Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying material.

RESPIRATORS: A NIOSH/MSHA approved air-purifying respirator with an organic vapor cartridge canister may be permissible under certain limited 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.

PROTECTIVE CLOTHING: Wear impervious clothing to prevent ANY contact with this product, such as gloves, apron, boots, or whole body suit. Nitrile rubber is better then PVC.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 155 deg. C at 760 mm/Hg

VAPOR PRESSURE: 2.4-4 mm/Hg at 20 deg. C

VAPOR DENSITY: 4.9 at 15.5 deg. C

% VOLATILES: 100% by weight and volume

SOLUBILITY IN WATER: <0.05% at 20 deg C
SOLUBILITY OTHERS: Miscible with most organic solvents

ODOR: TYPICAL "METHACRYLATE"

FORM: Liquid

SPECIFIC GRAVITY: 0.896 grams/cc at 15,5 deg. C

FREEZING POINT: -34 deg. C

VAPOR DENSITY: 4.9 (air=1)

PARTITION COEFFICIENT: 2.66

PACE Technologies · 3601 E. 34th St · Tucson, AZ 85713 USA
Telephone 520-882-6598 · FAX 520-882-6599 · pace@metallographic.com
Emergency phone number (CHEMTREC 800-424-9300)

SECTION 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable
CONDITIONS TOAVOID:	Avoid heat, ignition sources and contamination.
IMCOMPATIBILITY WITH OTHER MATERIALS:	Incompatible with reducing and oxidizing agents. Material has strong solvent properties and can soften paint or rubber.
DECOMPOSITON:	Hazardous Decomposition Products: CO, CO2, smoke.
POYMERIZATION:	Polymerization can occur.
CONDITIONS TO AVOID FOR HAZARDOUS POLYMERIZATION:	Excessive heat, storage in absence of inhibitor; inadvertent addition of catalyst.

SECTION 11. TOXICOLOGICAL INFORMATION

ANIMALS:	Oral LD50 > 9,950 mg/kg in rats Isobutyl methacrylate is irritating to the skin and eyes and is a skin sensitizer in animals.
INHALATION:	Unlikely to be hazardous by inhalation. High concentrations of dust may be irritant to the upper respiratory tract. High concentrations of vapor from hot operations may be harmful, cause irritation of the respiratory tract, and slight narcotic effects.
OTHER POTENTIAL HAZARDS:	Inhalation and feeding studies on laboratory animals at high does have shown nonspecific effects such as irritation and moderate blood changes. Very high airborne levels may cause lung damage.
SKIN CONTACT:	May cause sensitization by skin contact. Irritating to skin. Repeated and/or prolonged contact may cause dermatitis
EYE CONTACT:	Irritating to eyes.
INGESTION:	Low oral toxicity but ingestion may cause irritation of the gastrointestinal tract.

PACE Technologies · 3601 E. 34th St · Tucson, AZ 85713 USA
Telephone 520-882-6598 · FAX 520-882-6599 · pace@metallographic.com
Emergency phone number (CHEMTREC 800-424-9300)

LONG TERM EXPOSURE: This material has been used for many years with no evidence of adverse effects. There is no evidence of mutagenic potential. Inadequate information available to assess carcinogenic hazard. Some evidence of potential for developmental toxicity but inadequate information is available to assess the tetratogenic hazard. By analogy with other methacrylates it is unlikely that iso-butyl methacrylate represents a tetratogenic hazard to man. None of these effects are likely to occur in humans provided exposure is maintained at or below the occupational exposure limit.

SECTION 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND DISTRIBUTION: High tonnage material produced in wholly contained systems. Liquid with moderate volatility. Sparingly soluble in water. Moderate potential for bioaccumulation. Predicted to have moderate mobility in soil.

PERSISTENCE AND DEGRADATION: Readily biodegradable. 74% in 28 days.

TOXICITY: Very toxic to aquatic organisms. The LC50 (rainbow trout) (96 hr) (flow through) 20 mg/L. EC50(Daphnia magna) (48 hr) >29 mg/L.

EFFECT ON EFFLUENT TREATMENT: The product is substantially removed in biological treatment processes.

SECTION 13. DISPOSAL CONSIDERATIONS

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface or sanitary sewer system. Incinerate in a facility, which complies with Federal, State and local requirements. Do not incinerate in closed containers.

SECTION 14. TRANSPORTATION INFORMATION

SHIPPING INFORMATION

DOT/UN SHIPPING NAME: Isobutyl methacrylate, stabilized

NA/UN NUMBER: UN2283

PACKING GROUP: 3

PACE Technologies · 3601 E. 34th St · Tucson, AZ 85713 USA
Telephone 520-882-6598 · FAX 520-882-6599 · pace@metallographic.com
Emergency phone number (CHEMTREC 800-424-9300)

LABEL:	Flammable liquid
IDMG CLASS:	3
GROUND TRANSPORT:	Not regulated – Domestic containers of less than 450L capacity are not regulated by DOT

SECTION 15. REGULATORY INFORMATION

EC REGULATIONS-
EINECS:all chemical listed

EEC Classification: FLAMMABLE AND IRRITANT

Symbol: Indication of Danger

 F- Highly Flammable

 Xi - Irritant

Risk Phrases:
R10. Flammable
R36/37/38. Irritating to eyes, respiratory system and skin.
R43. May cause sensitization by skin contact.
R50. Very toxic to aquatic organisms.

Safety Phrases:
S24. Avoid contact with skin.
S37. Wear suitable gloves.
S61. Avoid release to the environment. Refer to special instructions/Safety Data Sheet.

CANADIAN REGULATIONS-
DSL: Included
WHIMS:
B3. Combustible Liquid
D2B. Toxic Material Skin or eye irritant
F. Dangerously reactive material

TSCA Inventory Status: Reported/Included

PACE Technologies · 3601 E. 34th St · Tucson, AZ 85713 USA
Telephone 520-882-6598 · FAX 520-882-6599 · pace@metallographic.com
Emergency phone number (CHEMTREC 800-424-9300)

SECTION 16. OTHER INFORMATION

Additional Information

NA = NOT APPLICABLE

NE = NOT ESTABLISHED

PACE Technologies, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. PACE TECHNOLOGIES, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, PACE TECHNOLOGIES, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

DATE PREPARED: 8/22/2009

PACE Technologies · 3601 E. 34th St · Tucson, AZ 85713 USA
Telephone 520-882-6598 · FAX 520-882-6599 · pace@metallographic.com
Emergency phone number (CHEMTREC 800-424-9300)