

FORMULARIO-HOJA DE SEGURIDAD

SECCIÓN I

IDENTIFICACIÓN DEL PRODUCTO E INFORMACIÓN DEL FABRICANTE

NOMBRE COMERCIAL DE LA SUSTANCIA		Prestone Bug Wash Windshield Cleaner	
NOMBRE COMÚN O GENÉRICO		Limpiador de Parabrisas	
NOMBRE DE LA COMPAÑÍA FABRICANTE		Prestone Products Corporation	
DIRECCIÓN DEL FABRICANTE		39 Old Ridgebury Road, Danbury CT 06810-5109, USA	
Nº DE TELEFONO	(203) 830-7800	Nº DE FAX	
TELÉFONOS DE EMERGENCIA	1-800-424-9300		483-7161

SECCIÓN II

COMPOSICIÓN E INFORMACIÓN SOBRE LOS INGREDIENTES PELIGROSOS

NOMBRE COMÚN O GENÉRICO DEL COMPONENTE PELIGROSO (adjunte hojas, si es necesario)	% (especificar)	Nº DE CAS
Metanol	5-20	67-56-1
2 Butoxietanol	1-5	111-76-2

SECCIÓN III

IDENTIFICACIÓN DE LOS RIESGOS Y EFECTOS POR EXPOSICIÓN

EFECTO POR:	DETALLE
INHALACIÓN	Puede causar irritación de ojos, piel y sist. respiratorio, náusea, mareo, dolores y visión borrosa.
INGESTIÓN	Contiene metanol, que es altamente tóxico y causa ceguera, acidosis y muerte. Causa también náusea, vómito, mareo y otros efectos del SNC, afecta hígado y riñones.
CONTACTO CON LOS OJOS	Irritación, enrojecimiento, conjuntivitis.
CONTACTO CON LA PIEL	Irritación, quemaduras, se absorbe a través de la piel. Los efectos son como los de ingestión.
CARCINOGENICIDAD	Ninguno de los componentes está en listas de OSHA, IARC, NTP.
MUTAGENICIDAD	La MSDS del fabricante no emite información al respecto.
TERATOGENICIDAD	La MSDS del fabricante no emite información al respecto.
NEUROTOXICIDAD	Afecta el SNC.
SISTEMA REPRODUCTOR	La MSDS del fabricante no emite información al respecto.
OTROS	La MSDS del fabricante no emite información al respecto.
ÓRGANOS BLANCO	Tracto digestivo, piel, ojos, SNC, tracto respiratorio.

SECCIÓN IV

PRIMEROS AUXILIOS

CONTACTO OCULAR	Enjuagar con agua en abundancia durante 15 minutos. Consulte al médico si la irritación persiste.
CONTACTO DÉRMICO	Remueva la ropa contaminada. Enjuáguese durante 15 minutos el área afectada con agua y jabón.
INHALACIÓN	Remueva al paciente a un área ventilada. Consulte a un médico.
INGESTIÓN	No inducir el vómito. Llame al médico o al Centro Na. de Intoxicaciones 223-1028. Si el vómito ocurre espontáneamente, mantenga la cabeza levantada para evitar la broncoaspiración.
ANTÍDOTO RECOMENDADO	Etanol.

INFORMACIÓN PARA EL MÉDICO	La combinación de disturbios visuales y acidosis es evidencia de envenenamiento por metanol. El alcohol etílico (etanol) puede usarse como antídoto ya que puede bloquear la formación de los metabolitos tóxicos del metanol. Mantenga los niveles sanguíneos de etanol en 100 mg/dl. Podría requerirse hemodiálisis. El 4-metilpirazol es un inhibidor potente del alcohol deshidrogenasa y se ha usado terapéuticamente en casos de envenenamiento por metanol.
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SECCIÓN V

MEDIDAS CONTRA EL FUEGO

PUNTO DE INFLAMABILIDAD	50°C
LÍMITES DE INFLAMABILIDAD (SI EXISTEN)	1.1% LEL y 10.6%UEL
AGENTES EXTINTORES	Espuma, CO ₂ , químico seco.
EQUIPO DE PROTECCIÓN PARA COMBATIR FUEGO	Equipo completo de protección, Arak o SCBA
PRODUCTOS PELIGROSOS POR COMBUSTIÓN	Monóxido de Carbono, Dióxido de Carbono, óxidos de silicón.

SECCIÓN VI

MEDIDAS EN CASO DE DERRAME O FUGA

ATENCIÓN DE DERRAMES	ATENCIÓN DE FUGAS
Elimine fuentes de ignición. Ventile y evacúe el área. Utilice equipo y ropa de protección adecuados. Recolecte con material absorbente e inerte (arena, diatomita) en un lugar apropiado y etiquete el envase como el desecho inflamable.	Elimine fuentes de ignición. Ventile y evacúe el área. Utilice equipo y ropa de protección adecuados. Recolecte con material absorbente e inerte (arena, diatomita) en un lugar apropiado y etiquete el envase como el desecho inflamable.

SECCIÓN VII

MANIPULACIÓN Y ALMACENAMIENTO

TEMPERATURA ALMACENAMIENTO	La MSDS no emite información al respecto.
CONDICIONES ALMACENAMIENTO	Se debe almacenar en bodega bien ventiladas y alejadas de fuentes de calor o ignición. NO FUME.
MANIPULACIÓN RECIPIENTES	Manéjelos con cuidado y manténgalos cerrados. No suelde, taladre o corte los recipientes aunque estén vacíos.
EFFECTOS DE LA EXPOSICIÓN A LA LUZ DEL SOL, CALOR, ATMÓSFERAS HÚMEDAS, ETC.	Las fuentes de ignición pueden provocar fuego o explosión.

SECCIÓN VIII

CONTROLES A LA EXPOSICIÓN Y EQUIPO DE PROTECCIÓN PERSONAL

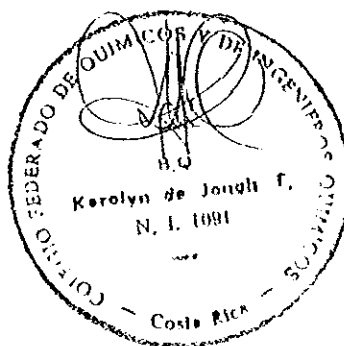
CONDICIONES DE VENTILACIÓN	Mantenga buena ventilación general forzada y extractores.
EQUIPO DE PROTECCIÓN RESPIRATORIA	Bajo condiciones normales de uso no se requiere. En lugar confinado utilice mascarilla para vapores orgánicos.
EQUIPO DE PROTECCIÓN OCULAR	Lentes de seguridad, careta.
EQUIPO DE PROTECCIÓN DÉRMICA	Guantes de hule. y ropa protectora.
DATOS DE CONTROL A LA EXPOSICIÓN (TLV, PEL, STEL)	No especificado.

SECCIÓN IX

PROPIEDADES FÍSICAS Y QUÍMICAS

OLOR Y APARIENCIA	Líquido verde con olor alcohol.
GRAVEDAD ESPECÍFICA	8.1-8.2 lbs/gal
SOLUBILIDAD EN AGUA Y OTROS DISOLVENTES	Soluble en agua.

PUNTO DE FUSIÓN	-12 a -5°C
PUNTO DE EBULLICIÓN	88-93°C
PH	No determinado.
ESTADO DE AGREGACIÓN A 25°C Y 1 ATM.	Líquido.
SECCIÓN X	
ESTABILIDAD Y REACTIVIDAD	
ESTABILIDAD	Estable,
INCOMPATIBILIDAD	Agentes oxidantes fuertes, calor y fuentes de ignición.
RIEGOS DE POLIMERIZACIÓN	No puede ocurrir.
PRODUCTOS DE LA DESCOMPOSICIÓN PELIGROSOS	Monóxido y Dióxido de Carbono.
SECCIÓN XI	
INFORMACIÓN SOBRE TOXICOLOGÍA	
DOSIS LETAL MEDIA ORAL o DÉRMICA (DL ₅₀)	La MSDS del fabricante no emite información al respecto.
DOSIS LETAL MEDIA POR INHALACIÓN (CL ₅₀)	La MSDS del fabricante no emite información al respecto.
SECCIÓN XII	
INFORMACIÓN DE LOS EFECTOS SOBRE LA ECOLOGÍA	
SECCIÓN XIII	
CONSIDERACIONES SOBRE LA DISPOSICIÓN FINAL DEL PRODUCTO	
La descarga, eliminación o tratamiento debe ser regulada por el decreto N°27001-MINAE.	
SECCIÓN XIV	
INFORMACIÓN SOBRE EL TRANSPORTE	
Clase de riesgo: 3.3	
SECCIÓN XV	
INFORMACIÓN REGULATORIA	
Líquido Inflamable. Tóxico.	
SECCIÓN XVI	
OTRA INFORMACIÓN	





14-02-90-20-90

PRESTONE BUG WASH WINDSHIELD CLEANER

MSDSP377

SECTION 1: IDENTIFICATION

MSDS ID: MSDSP0377

PRODUCT NAME: PRESTONE BUG WASH WINDSHIELD CLEANER
AS252, AS252/F
Formula: 2043-127, 2043-127B, 2075-106C, 2075-109,
2092-99A, 2092-99B, 2128-6A, 2128-6B,

MANUFACTURER: Prestone Products Corporation
39 Old Ridgebury Road
Danbury, CT 06810-5109

INFORMATION PHONE NUMBER: (203) 830-7800

EMERGENCY PHONE NUMBER: CHEMTREC 1-800-424-9300
483-7161 in the District of Columbia

MSDS DATE OF PREPARATION/REVISION: 01/27/99

SECTION 2: PRODUCT COMPONENTS

HAZARDOUS COMPONENTS	CAS#	PERCENT	EXPOSURE LIMITS
Methyl Alcohol (Methanol)	67-56-1	5-20	200 ppm TWA OSHA PEL 200 ppm TWA ACGIH TLV skin 250 ppm STEL ACGIH TLV
2-Butoxyethanol	111-76-2	1-5	50 ppm TWA skin OSHA PEL 25 ppm TWA skin ACGIH TLV

NON-HAZARDOUS INGREDIENTS >1%
Water 7732-18-5 80-100%

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Combustible Liquid! Eye irritant. Inhalation may cause headache, dizziness, drowsiness, nausea, visual impairment, acidosis, hypotension, and unconsciousness. Methyl alcohol and 2-butoxyethanol may be absorbed through the skin in harmful amounts. Poisonous if swallowed.

POTENTIAL HEALTH EFFECTS:

ACUTE HAZARDS:

INHALATION: May cause irritation of the nose and throat with headache, particularly from mists. High vapor concentrations may produce nausea, headache, dizziness, drowsiness, tingling, numbness and shooting pains in the hands and forearms, and visual disturbances.

SKIN CONTACT: Prolonged contact with the skin may cause redness and defatting of the skin and absorption of harmful amounts of methanol and 2-butoxyethanol.

EYE CONTACT: Liquid, vapors or mist may cause discomfort in the eye with persistent conjunctivitis, seen as slight excess redness or conjunctiva.

INGESTION: Contains methanol and 2-butoxyethanol. Methanol is highly toxic and may produce severe acidosis, blindness and death. May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, headache, visual disturbance, kidney and liver effects and central nervous system effects, including convulsions and coma. Visual effects from methanol include blurred vision, double vision, changes in color perception, restriction of visual fields and complete blindness.

Large amounts of 2-butoxyethanol may cause pulmonary edema, acidosis, hypotension and kidney injury.

With massive overdoses of methanol, liver, kidney and heart muscle injury have been described. There may be a delay of several hours between swallowing methanol and the onset of signs and symptoms. Toxicity is related to the degree of acidosis produced in the time interval between exposure and treatment. The range of toxicity of methanol is extremely variable. Ingestion of as little as 4 ml of absolute methanol has caused blindness.

CHRONIC EFFECTS: Prolonged or repeated inhalation exposure may produce signs of central nervous system involvement, including nausea, vomiting, headache, dizziness, and visual disturbances. Prolonged overexposure at levels of 800-1000 ppm may result and in severe eye damage.

Prolonged overexposure to 2-butoxyethanol may cause blood, liver and kidney damage.

Prolonged or repeated skin contact may cause skin sensitization and an associated dermatitis in some individuals. See section 11 for additional information.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Due to its defatting properties, the product may aggravate an existing skin condition, e.g., eczema. Due to its liver and kidney injuring potential, the product may exacerbate existing liver and/or kidney diseases.

CARCINOGEN: None of the components of these products is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

SECTION 4: FIRST AID MEASURES

INHALATION: Remove the victim to fresh air. If breathing has stopped administer artificial respiration. If breathing is difficult, have medical personnel administer oxygen. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Immediately wash contacted area thoroughly with soap and water. If irritation or redness persists, get medical attention.

EYE CONTACT: Immediately flush eyes with large amounts of water for 15 minutes. Get immediate medical attention if irritation, pain, swelling or tearing develop.

INGESTION: Seek immediate medical attention. Immediately call local poison control center or go to an emergency department. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

NOTES TO PHYSICIAN: The combination of visual disturbances, metabolic acidosis and an osmol gap is evidence of methanol poisoning. Ethanol

is antidotal and its early administration may block the formation of toxic metabolites of methanol. Ethanol blood levels should be checked frequently and maintained at 100 mg/dl. Hemodialysis may be required. 4-Methylpyrazole, a potent inhibitor of alcohol dehydrogenase, has been used therapeutically to decrease the metabolic consequences of methanol poisoning. Leucovorin and folic acid have been used to enhance the metabolism of formic acid, a methanol metabolite.

SECTION 5: FIRE AND EXPLOSION DATA

FLASH POINT: 122 F PMCC

AUTOIGNITION TEMPERATURE: Not Determined

FLAMMABILITY LIMITS:

LEL: 1.1 (2-butoxyethanol) UEL: 10.6 (2-butoxyethanol)

EXTINGUISHING MEDIA: Use carbon dioxide, alcohol foam or dry chemical. Cool fire exposed containers with water.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

UNUSUAL FIRE HAZARDS: Combustible liquid. Methanol-water mixtures will burn unless very dilute. Flame is invisible in daylight. Vapors are heavier than air and may flow along surfaces to distant ignition sources and flash back.

HAZARDOUS COMBUSTION PRODUCTS: Burning may produce carbon monoxide, carbon dioxide, silicone oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Eliminate all ignition sources. Ventilate area. Wear appropriate protective clothing and equipment (See Section 8). Collect with absorbent material and place in appropriate, labeled container for disposal. Do not allow liquid to enter sewers, waterways or low areas.

SECTION 7: HANDLING AND STORAGE

DANGER: Harmful or Fatal if Swallowed

Do not swallow.

Avoid eye and skin contact.

Avoid breathing vapors or mists.

Use only with adequate ventilation.

Wash exposed skin thoroughly with soap and water after use.

Combustible Liquid!

Keep container away from heat, sparks, open flames and all other sources of ignition.

Do not smoke during use.

Store in a cool, well ventilated area.

Do not reuse empty containers unless properly cleaned.

Empty containers retain product residues and may be hazardous.

Do not flame cut, drill, weld, etc. on or near empty containers, even empty.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Use general ventilation or local exhaust as required to maintain exposures below the occupational exposure limits.

RESPIRATORY PROTECTION: For operations where the TLV is exceeded a NIOSH approved supplied air respirator or positive pressure self-contained breathing apparatus is recommended. Organic vapor cartridge respirators are not recommended for methanol vapor exposures. Equipment selection depends on contaminant type and concentration. Select and use in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

GLOVES: Chemical resistant gloves such as butyl rubber or Saranex where contact is possible.

EYE PROTECTION: Splash-proof goggles.

OTHER PROTECTIVE EQUIPMENT/CLOTHING: Appropriate protective clothing as needed to minimize skin contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear green liquid with a slight alcohol odor. The reported mean odor threshold for methanol is 160 - 690 ppm.

pH: Not determined

BOILING POINT-TYPICAL (F): 190-200 F

FREEZING POINT-TYPICAL (F): 10-23 F

SOLUBILITY IN WATER: >95%

PERCENT VOLATILE: >95%

SPECIFIC GRAVITY: 8.1 - 8.2 lbs/gal

VAPOR PRESSURE: Not determined

VAPOR DENSITY: >1

EVAPORATION RATE: >1 (Butyl Acetate=1)

VISCOSITY: Not determined

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Heat, sparks, flames and all other sources of ignition.

INCOMPATIBILITY: Strong bases, strong acids, strong oxidizing agents, alkali metals, aldehydes, alkyl chlorides.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, silicone oxides.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

Methanol: LD50 Oral Rat: 9100 mg/kg
LD50 Skin Rabbit: 15,940 mg/kg
LC50 Inhalation Rat: 145,000 ppm/1hr

2-Butoxyethanol: LD50 Oral Rat: 470 mg/kg
LC50 Inhalation Rat: 700 ppm/7 hour
LD50 Skin Rabbit: 220 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Methanol: TLM 96: >1000 ppm

SECTION 13: DISPOSAL INFORMATION

Dispose of product as hazardous waste (ignitable) in accordance with all local, state/provincial and federal regulations.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT HAZARD CLASSIFICATION

PROPER SHIPPING NAME: NOT REGULATED
TECHNICAL NAME: NONE
UN→ NUMBER: NONE
HAZARD CLASS/PACKING GROUP: NONE
LABELS REQUIRED: NONE

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION

DESCRIPTION: FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOL), 3.3, UN1992, PG III, (6.1), FP 50 C

ID NUMBER: UN1993
HAZARD CLASS: 3.3 (6.1)
PACKING GROUP: III
LABELS REQUIRED: Flammable Liquid/Toxic
PLACARDS REQUIRED: Flammable Liquid/Toxic

SECTION 15: REGULATORY INFORMATION

EPA SARA 311/312 HAZARD CLASSIFICATION: Acute health, chronic health, fire hazard

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title 111, Section 313 (40 CFR 372):

Methanol	67-56-1	5-20%
2-Butoxyethanol	111-76-2	1-5%

PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Methanol (20% maximum) of 5,000 lbs, is 25,000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

CALIFORNIA PROPOSITION 65 - This product does not contain chemicals regulated under California Proposition 65.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CANADIAN WHMIS CLASSIFICATION: Class D - Division 2 - Subdivision B - (A toxic material causing other chronic effects), Class B - Division 3 (Combustible liquid)

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS) All of the ingredients are listed on the EINECS inventory.

SECTION 16: OTHER INFORMATION

NFPA RATING (NFPA 704) - FIRE: 2
HEALTH: 2



PRESTONE BUG WASH WINDSHIELD CLEANER

MSDSP377

REACTIVITY: 0

This MSDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.

While Prestone Products Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of tests conducted, the data are not to be taken as a warranty or representation for which Prestone Products Corporation assumes legal responsibility. They are offered for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

If more information is needed, please contact:
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