



SAFETY DATA SHEET



Prepared in accordance with
OSHA 2012 Hazard Communication Standard
29 CFR 1910.1200

SECTION 1: PRODUCT IDENTIFICATION

Manufacturer's Name: Environmental Specialists Inc.
1101 Andrews Avenue
Youngstown, OH 44505
www.esrecycling.com

Emergency Telephone Number
PERS (800) 633 – 8253
Information Telephone Number
(888) 331 – 3443

Product Number: ESI BW#5
Product Name: BRAKE WASH BW#5
Date of Preparation November 1, 2021

Use of substance/mixture: Brake Cleaning
Synonyms: None
Formula: Solvent Bland

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Eye Irritation
Flammable Liquids
Skin Irritation
Aspiration Hazard
STOT, Single Exposure
Hazardous to the aquatic environment, chronic toxicity

Category 2A
Category 2
Category 2
Category 1
Category 3
Category 1

GHS HAZARD PICTOGRAMS



GHS SIGNAL WORD: DANGER

HAZARD STATEMENTS:

Highly flammable liquid and vapor
Causes skin irritation
May be fatal if swallowed and enters airways

May cause drowsiness or dizziness
Very toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS:

Keep away from heat/sparks/open flames/hot surfaces – **NO Smoking**
Ground/bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling
Use only outdoors or in a well-ventilated area.
Wear protective gloves / protective clothing / eye protection / face protection.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.
IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
Take off contaminated clothing and wash before reuse.
In case of fire: Use dry chemical, carbon dioxide, or foam for extinction; Collect spillage.
Store in a well-ventilated place.
Keep container tightly closed.
Dispose of contents/container to approved disposal facility.
Avoid release to the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %
Heptanes	426260-76-6	40 – 45%
Acetone	67-64-1	55 – 60%

SECTION 4: FIRST AID MEASURES

- Eye Contact:** Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately.
- Skin Contact:** Remove clothing and shoes if contaminated. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissues appear damaged or if pain or irritation persists.
- Ingestion:** **DO NOT** induce vomiting. If spontaneous vomiting is about to occur, place victim's head below the knees to avoid breathing the product into the lungs. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.
- Inhalation:** Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, 100% humidified oxygen should be administered by a qualified individual. Seek medical attention immediately.
- Note to Physician:** Catecholamines and similar adrenergic drugs are generally contraindicated because of potential for increased sensitivity of the heart from hydrocarbon exposure and subsequent ventricular fibrillation. Catecholamines such as adrenaline, and other compounds having similar effects, should be reserved for emergencies, and then used only with special caution. Symptoms of poisoning may not appear for several hours.

SECTION 5: FIRE FIGHTING MEASURES

- Flammable Properties:** NFPA Class – 1A Flammable Liquid
- Flash Point:** Tag Closed Cup = 1° F (-17° C)
- Flammable Limits:** LEL – 2% Acetone UEL – 12.8% Acetone
- Hazardous Combustion Products:** Carbon dioxide, carbon monoxide, unidentified organic compounds. Decomposition and combustion materials may be toxic.
- Extinguishing Media:** SMALL FIRES: Use dry chemical, carbon dioxide, water fog, or inert gas to extinguish all fires.
- LARGE FIRES: Use foam water fog or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, autoignition or explosion. **DO NOT** use a solid stream of water directly on the fires as the water may spread the fire to a larger area.
- Unusual Fire & Explosion Hazards:** Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such a sewer. If container is not properly cooled it can rupture in the heat of the fire.
- Special Fire Fighting Procedures:** Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition product and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat: cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid enters sewers or waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all source of ignition in vicinity of spilled material. Do not touch or walk through, spilled product. Keep non-essential and unprotected personnel from entering the area. If spill occurs indoors, ventilate area, and avoid breathing vapors or mist. A vapor suppressing foam may be used to reduce vapors.

Spill Management: Contain spill with dikes of soil or nonflammable absorbent to minimize contaminated area. Avoid run-off into storm sewers and ditches leading to waterways. If required, notify state and local authorities. Place leaking containers in a well-ventilated area. Clean up small spills by using a nonflammable absorbent or flushing sparingly with water. Contain larger spills with nonflammable diking or absorbent. Clean up by vacuuming or sweeping.

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Assess the spill situation, as the spill may not evolve large amounts of hazardous airborne contaminants in many outdoor spill situations. It may be advisable in some cases to simply monitor the situation until spilled product is removed.

SECTION 7: HANDLING AND STORAGE

Handling: A spill or leak can cause an immediate fire or explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Do not contact with oxidizable materials. Do not breathe vapor. Use only with adequate ventilation and personal protection. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Prevent contact with food and tobacco products. Do not take internally.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons away from the area. Eliminate all potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide ventilation to maintain exposure potential below applicable exposure limits. Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.


Empty containers may contain material residues which can ignite with explosive force. Misuse of empty containers can be dangerous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues. Do not pressurize or expose empty containers to open flames, sparks, or heat. Keep container closed and drum bung in place. All label warnings and precautions must be observed. Return empty drums to a qualified reconditioner. Consult appropriate federal, state, and local authorities before reusing, reconditioning, reclaiming, recycling, or disposing of empty containers and/or waste residues of this material.


Storage: Store and transport in accordance with all applicable laws. Keep containers tightly closed when not in use. Store in a cool, dry well-ventilated area, plainly labeled, and out of closed vehicles. Keep away from all ignition sources. Ground all equipment containing this material. Containers should be able to withstand pressures expected from warming and cooling in storage. This flammable liquid should be stored in a separate safety cabinet or room. All electrical equipment in areas where this material is stored or handled should be installed in accordance with applicable regulatory requirements and the National Electrical Code.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Use in a well-ventilated area. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). All electrical equipment should comply with the National Electric Code. An eye wash station and safety shower readily available where contact can occur.

Personal Protective Equipment: Personal protective equipment (PPE) selections vary based on the potential exposure conditions such as handling practices, concentration, and ventilation. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional knowledgeable with OSHA regulations. At a minimum safety glasses and skin protection should be worn. Additional PPE may be required based on specific working conditions.

Eye Protection:  Safety glasses equipped with side shields are recommended for minimal protection. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. Suitable eye wash water should be readily available.

Hand Protection:  Avoid skin contact. Wash hands with plenty of soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. Use chemical resistant gloves such as nitrile, or equivalent protection.

Skin Protection:

Uniforms or coveralls should provide adequate protection under normal working conditions. If prolonged contact is unavoidable, wear protective clothing made of nitrile or equivalent. Remove contaminated clothing and launder before reuse. Heavily contaminated clothing and leather goods should be removed promptly discarded.

Respiratory Protection:

Based on workplace contaminant level and working limits of the respirator, use a respirator approved by NIOSH. The following is the minimum recommended equipment for an occupational exposure level. Respirator selection, use, and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

For concentrations > 1 and < 10 times the occupational exposure level: Use air-purifying respirator with full facepiece and organic vapor cartridge(s) or air-purifying full facepiece respirator with an organic vapor canister or a full facepiece powered air-purifying respirator fitted with organic vapor cartridge(s). The air purifying element must have an end of service life indicator, or a documented change out schedule must be established, otherwise, use supplied air.

For escape: Use self-contained breathing apparatus with full facepiece or any respirator specifically approved for escape.

Occupational Exposure Guidelines:**Applicable Workplace Exposure Levels**

Substance	ACGIH TWA	ACGIH STEL	OSHA TWA	OSHA STEL
Acetone	500 ppm	750 ppm	750 ppm	1000 ppm
Heptanes	400 ppm	500 ppm	500 ppm	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color:	Clear, colorless	Physical State:	Liquid	Partition Coefficient:	Not Determined
Odor:	Sweet Pungent	Vapor Pressure:	24.1 kPa at 68 °F acetone	Explosive Limits:	Not Determined
pH:	NA	Vapor Density:	>1 (where air = 1)	Freeze Point:	Not Determined
Density:	7.09 lb/gal	Total VOC:	7.09 lb/gal	Exempt VOC:	4.25 lb/gal
Flash Point:	1.0° F (-17° C)	Solubility:	Insoluble in water	Decomposition Temp:	Not Determined
Boiling Point:	132.9° (56.1° C)	Evaporation Rate:	Not Determined	Viscosity:	Not Determined

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Keep away from extreme heat, sparks, and open flames.
Incompatibility with Other Materials:	Keep away from peroxides and other polymerization initiators, oxidizing agents such as nitric acid, perchloric acid, chromium trioxide, chlorosulfonic acid, silica gel, alumina, strong acids, or amines.
Hazardous Decomposition Products:	Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids, and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.
Hazardous Polymerization:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Symptoms of Exposure:

Substance	Inhalation LC ₅₀	Oral LD ₅₀	Skin Absorption LD ₅₀
Acetone	16,000 ppm – Rats – 4 Hr	7.4 g/kg – Rat	20 mg/kg – Rabbit
Toluene in Heptanes < 4%	8000 ppm – Rats – 4 Hr	2.5 – 7.9 g/kg – Rat	>14 g/kg – Rabbit
Heptane, Branched, Cyclic, and Linear	103 g/m ³ – Rats – 4 Hr	>5.0 g/kg (Based on Naphtha)	No Information
n-Heptane	18,295 ppm – Mouse – 2 Hr	>15.0 g/kg – Mouse	No data available

Target Organs: Epidemiology studies suggest that chronic occupational overexposure to toluene may damage color vision. Subchronic and chronic inhalation studies with toluene produced kidney and liver damage, hearing loss and central nervous system (brain) damage in laboratory animals. Intentional misuse by deliberate inhalation of high concentrations of toluene has been shown to cause liver, kidney, and central nervous system damage, including hearing loss and visual disturbances.

Developmental: Exposure to toluene during pregnancy has demonstrated limited evidence of developmental toxicity in laboratory animals. The effects seen include decreased fetal body weight and increased skeletal variations in both inhalation and oral studies.

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity - Acetone

Non-toxic to aquatic life

Trout – 5,540 mg/L – 96 Hr Goldfish – 5,000 mg/L – 24 Hr

Bluegill – 8,300 mg/L – 96 Hr Shrimp – 2,100 mg/L – 24 Hr

Daphnia – 10 mg/L – 48 Hr

Biodegradation – Readily Biodegradable

SECTION 13: DISPOSAL CONSIDERATIONS

Material Disposal: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Container Disposal: Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard if heated above the flash point. Do not puncture, cut, or weld uncleaned drums. Send to drum recycler or metal reclaimer.

Local Legislation: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14: TRANSPORTATION INFORMATION

US DOT Status: **Shipping Name:** Flammable Liquids, N.O.S. (Acetone, Heptanes)
UN/NA #: UN1993
Hazard Class: 3, Flammable Liquid
Packing Group: II
North American Emergency Response Guide #: 128



SECTION 15: REGULATORY INFORMATION

TSCA Inventory

Components of this material are on the Toxic Substances Control Act Inventory.

SARA 302/304 Emergency Planning and Notification

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355.

There are no components in this product on the SARA 302 list.

SARA 311/312 Hazard Identification

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 311 and 312 to submit aggregate information on chemical by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:

Immediate (Acute) Health Effects:	Yes
Delayed (Chronic) Health Effects:	No
Fire Hazard:	Yes
Sudden Release of Pressure Hazard:	No
Reactivity Hazard:	No

SARA 313 Toxic Chemical Notification and Release Reporting

This product contains constituents listed in 40 CFR 372 and therefore are subject to the requirements of Section 313 of SARA.

Toluene – CAS# 108-88-3 – 0 – 2%

CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQs) including petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4.

Chemical substances that are present in this product are subject to CERCLA.

SECTION 16: OTHER INFORMATION

NFPA Ratings:

Health: 1
Flammability: 3
Reactivity: 0



HMIS Ratings:

Health: 1
Flammability: 3
Reactivity: 0

HEALTH	1
FLAMMABILITY	3
REACTIVITY	0
SPECIAL PROTECTION	<input type="checkbox"/>

0 – Least, 1 – Slight, 2 – Moderate, 3 – High, 4 – Extreme

These values are obtained using the guidelines or published evaluations by the National Fire Protection Association (NFPA) of the National Paint and Coating Association (for HMIS ratings).

LABEL RECOMMENDATION: BW#5 – Brake Wash

NOTICE: The information herein is based on data considered to be accurate at date of preparation. No warranty is made as to the accuracy or completeness of the foregoing data and safety information. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.