



Material Safety Data Sheet

Product #'s: KX-491F

MSDS #: RTT-KX-004

Rev. # 2

Rev. Date: 4/01/2011

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name: BUFFING SOLUTION

Product Use: Aerosol cleaner

Manufacturer: KEX TIRE REPAIR 119 Rockland Avenue, Northvale, NJ 07647

24-Hour Emergency Phone Number: 1-800-424-9300 (CHEMTREC); 1-703-527-3887 (International) Collect calls accepted

2. PRODUCT INGREDIENTS

<u>CHEMICAL NAME:</u>	<u>CAS NUMBER:</u>	<u>% RANGE:</u>	<u>OSHA PEL:</u>
Heptane (n-)	142-82-5	80-85	500 ppm TWA; 2000 mg/m ³ TWA
Acetone	67-64-1	15-20	1000 ppm TWA; 2400 mg/m ³ TWA
Carbon dioxide	124-38-9	3-7	5000 ppm TWA (exposures < 10,000 ppm to be cited de minimus); 9000 mg/m ³ TWA

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Rubber solvent (Naphtha), Ketones, liquid, n.o.s., Carbon dioxide and ethylene oxide mixtures (8070-50-6).

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). This product is regulated under the Canadian Controlled Products Regulations.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

The product is a milky, opaque liquid with a light hydrocarbon odor. **EXTREMELY FLAMMABLE** liquid. This product is harmful by inhalation, when in contact with the skin, eyes and if it is swallowed. Keep this product from heat, sparks, or open flame.

EYE: This product may cause irritation to the eyes. Vapors may also produce eye irritation. Contact may cause stinging, watering, and redness.

SKIN: This product may cause irritation to the skin. Contact may cause redness, itching, burning, and skin damage. Prolonged or repeated contact with this product may dry and/or defat the skin. Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis. A single exposure is not likely to result in the product being absorbed through the skin in harmful amounts.

INGESTION: Ingestion can cause vomiting. If aspirated (liquid enters the lung), the product may be rapidly absorbed through the lungs and can result in chemical pneumonitis. (DO NOT INDUCE VOMITING.)



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INHALATION: This product may be harmful by inhalation. Vapors of this product may cause irritation of the nose, throat, and respiratory tract.

4. FIRST AID

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.

SKIN: For skin contact flush with large amounts of water while removing contaminated clothing. Wash contaminated clothing before reuse. If irritation persists, get medical attention. If frostbite or freezing occurs, flush with lukewarm water. Do not use hot water! Get immediate medical attention.

INGESTION: Aspiration hazard: If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Do not induce vomiting. Call a physician immediately.

INHALATION: If inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention.

NOTE TO PHYSICIAN: Provide general supportive measures and treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Flash Point: -4 °F (-20.2 °C)

Upper Flammable Limit (UFL): 13.2 (% Volume in Air)

Auto Ignition: 399.0 °F (203.8 °C)

Method Used: TCC

Lower Flammable Limit (LFL): 1.1 (% Volume in Air)

Flammability Classification: Class 1B

HAZARDOUS COMBUSTION PRODUCTS: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

EXTINGUISHING MEDIA: Dry chemical, foam, carbon dioxide.

FIRE FIGHTING INSTRUCTIONS: DANGER, EXTREMELY FLAMMABLE! Clear fire area of unprotected personnel and isolate. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back. Empty containers may retain product residue including Flammable or Explosive vapors. Do not cut, drill, grind, or weld near full, partially full, or empty product containers.

Pressurized Container: May explode when exposed to heat or flame.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.



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6. ACCIDENTAL RELEASE MEASURES

CONTAINMENT PROCEDURES: Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Handling equipment must be grounded to prevent sparking. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

CLEAN-UP PROCEDURES: Eliminate ignition sources including sources of electrical, static or frictional sparks. Ventilate the contaminated area. Absorb spill with inert material. Shovel material into properly labeled closed metal containers for disposal. Place in non-leaking containers for immediate disposal. Flush area with water to remove trace residue. Do not allow the spilled product to enter public drainage system or open watercourses.

EVACUATION PROCEDURES: Persons not wearing appropriate protective equipment should be excluded from area of spill until clean up has been completed.

SPECIAL PROCEDURES: Follow all Local, State, Federal and Provincial regulations for disposal. Notify the proper authorities if entry to the environment occurs.

7. HANDLING & STORAGE

HANDLING: Keep liquid and vapor away from heat, sparks and flames. Surfaces that are sufficiently hot may ignite liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone. Vapors may accumulate and travel to ignition sources distant from the handling site; flash fire can result. Keep containers closed when not in use. Use with adequate ventilation.

SUPPLIER WARNING: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "auto ignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

Containers, even those that have been emptied, can contain explosive vapors. DO NOT cut, drill, grind, weld or perform similar operations on or near containers. DO NOT pressurize drum containers to empty them.

Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment.

Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Air-dry contaminated clothing in a well ventilated area before laundering.

STORAGE: Keep packaged in original, labeled containers until use. Store in a cool, dry, well-ventilated area. Store this product in airtight containers away from sources of heat and light. Ground all equipment to prevent accumulation of static charge. Store away from incompatible materials. Do not remove or deface label. Do not reuse container without recycling or reconditioning in accordance with any Federal, Provincial, State or local laws. Do not use cutting or welding torches, open flames, or electric arcs on empty or full containers.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Wear safety glasses. Chemical goggles and/ or face shields should be worn, when splashing is a possibility. Contact lenses should not be exposed. If vapor exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: If this product is used in accordance with instructions on the container, the risk of skin contact is minimal. If skin contact is likely, wear chemically resistant gloves.

RESPIRATORY PROTECTION: If recommended exposure limits are exceeded, a NIOSH-approved, continuous flow supplied air-respirator, hood or helmet is acceptable.

EXPOSURE GUIDELINE(s):

Component Exposure Limits

Kex Tire Repair recommends that its customers minimize employee exposure. Kex Tire therefore suggests that its customers consider adopting the lower of the current OSHA PEL or the ACGIH TLV's for the purpose of evaluating employee exposures. The TLV's recommended by the ACGIH have been updated on a continuing basis.

Heptane (n-) (142-82-5)

ACGIH: 400 ppm TWA
500 ppm STEL
OSHA: 500 ppm TWA; 2000 mg/m³ TWA
NIOSH: 85 ppm TWA; 350 mg/m³ TWA
440 ppm Ceiling (15 min); 1800 mg/m³ Ceiling (15 min)

Acetone (67-64-1)

ACGIH: 500 ppm TWA
750 ppm STEL
OSHA: 1000 ppm TWA; 2400 mg/m³ TWA
NIOSH: 250 ppm TWA; 590 mg/m³ TWA

Carbon dioxide (124-38-9)

ACGIH: 5000 ppm TWA
30000 ppm STEL
OSHA: 5000 ppm TWA (exposures < 10,000 ppm to be cited de minimus); 9000 mg/m³ TWA
NIOSH: 5000 ppm TWA; 9000 mg/m³ TWA
30000 ppm STEL; 54000 mg/m³ STEL



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Component Exposure Limits - Canada

The following Provincial Exposure Limits apply for this product's components.

Heptane (n-) (142-82-5)

Alberta:	400 ppm TWA; 1640 mg/m ³ TWA 500 ppm STEL; 2050 mg/m ³ STEL
British Columbia:	400 ppm TWA 500 ppm STEL
Manitoba:	400 ppm TWA; 1600 mg/m ³ TWA 500 ppm STEL; 2000 mg/m ³ STEL
New Brunswick:	400 ppm TWA; 1640 mg/m ³ TWA 500 ppm STEL; 2050 mg/m ³ STEL
NW Territories:	400 ppm TWA; 1640 mg/m ³ TWA 500 ppm STEL; 2049 mg/m ³ STEL
Nova Scotia:	400 ppm TWA 500 ppm STEL
Nunavut:	400 ppm TWA; 1640 mg/m ³ TWA 500 ppm STEL; 2049 mg/m ³ STEL
Ontario:	400 ppm TWAEV; 1635 mg/m ³ TWAEV 500 ppm STEV; 2045 mg/m ³ STEV
Quebec:	400 ppm TWAEV; 1640 mg/m ³ TWAEV 500 ppm STEV; 2050 mg/m ³ STEV
Saskatchewan:	1640 mg/m ³ TWA; 400 ppm TWA 2050 mg/m ³ STEL; 500 ppm STEL
Yukon:	400 ppm TWA; 1600 mg/m ³ TWA 500 ppm STEL; 2000 mg/m ³ STEL

Acetone (67-64-1)

Alberta:	750 ppm TWA; 1800 mg/m ³ TWA 1000 ppm STEL; 2400 mg/m ³ STEL
British Columbia:	250 ppm TWA 500 ppm STEL
Manitoba:	750 ppm TWA; 1780 mg/m ³ TWA 1000 ppm STEL; 2375 mg/m ³ STEL
New Brunswick:	500 ppm TWA; 1188 mg/m ³ TWA 750 ppm STEL; 1782 mg/m ³ STEL
NW Territories:	1000 ppm TWA; 2370 mg/m ³ TWA 1250 ppm STEL; 2970 mg/m ³ STEL
Nova Scotia:	500 ppm TWA 750 ppm STEL
Nunavut:	1000 ppm TWA; 2370 mg/m ³ TWA 1250 ppm STEL; 2970 mg/m ³ STEL
Ontario:	500 ppm TWAEV 750 ppm STEV
Quebec:	750 ppm TWAEV; 1780 mg/m ³ TWAEV 1000 ppm STEV; 2380 mg/m ³ STEV
Saskatchewan:	1780 mg/m ³ TWA; 750 ppm TWA 2380 mg/m ³ STEL; 1000 ppm STEL
Yukon:	1000 ppm TWA; 2400 mg/m ³ TWA 1250 ppm STEL; 3000 mg/m ³ STEL



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Carbon dioxide (124-38-9)

Alberta:

5000 ppm TWA; 9000 mg/m³ TWA
30000 ppm STEL; 54000 mg/m³ STEL

British Columbia:

5000 ppm TWA

15000 ppm STEL

Manitoba:

5000 ppm TWA; 9000 mg/m³ TWA

30000 ppm STEL; 54000 mg/m³ STEL

New Brunswick:

5000 ppm TWA; 9000 mg/m³ TWA

30000 ppm STEL; 54000 mg/m³ STEL

NW Territories:

5000 ppm TWA; 9000 mg/m³ TWA

15000 ppm STEL; 27000 mg/m³ STEL

Nova Scotia:

5000 ppm TWA

30,000 ppm STEL

Nunavut:

5000 ppm TWA; 9000 mg/m³ TWA

15000 ppm STEL; 27000 mg/m³ STEL

Ontario:

5000 ppm TWAEV; 9000 mg/m³ TWAEV

30000 ppm STEV; 54000 mg/m³ STEV

Quebec:

5000 ppm TWAEV; 9000 mg/m³ TWAEV

30000 ppm STEV; 54000 mg/m³ STEV

Saskatchewan:

9000 mg/m³ TWA; 5000 ppm TWA

54000 mg/m³ STEL; 30000 ppm STEL

Yukon:

5000 ppm TWA; 9000 mg/m³ TWA

15000 ppm STEL; 27000 mg/m³ STEL

9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: Milky, opaque liquid

ODOR: Light Hydrocarbon

ODOR THRESHOLD: Not Available

BOILING POINT: 133-200 °F (56.6-93.3 °C) @ 760 mmHg (Concentrate only)

SOLUBILITY IN WATER: <25%

SPECIFIC GRAVITY: 0.673 @ 77 °F (Concentrate only)

VAPOR PRESSURE: 186 mmHg @ 68.00 °F (for product)

% VOLATILE: >90%

10. STABILITY & REACTIVITY

INCOMPATIBILITY WITH OTHER MATERIALS: This product may react with strong oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur.



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DECOMPOSITION PRODUCTS: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Through inhalation, ingestion or passage of the material through the skin the following symptoms may occur: stomach or intestinal upset (nausea, vomiting, diarrhea); irritation (nose, throat, airway); central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness); temporary changes in mood and behavior; loss of appetite; loss of coordination; irregular heartbeat; narcosis (dazed or sluggish feeling).

CHRONIC TOXICITY

Prolonged or repeated liquid contact can result in defatting and drying of the skin, which may result in skin irritation and dermatitis.

CARCINOGENICITY

No carcinogenicity data available for this product.

Component Carcinogenicity

Acetone (67-64-1)

ACGIH:

A4 - Not Classifiable as a Human Carcinogen

12. ECOLOGICAL INFORMATION

This product is toxic to aquatic organisms. This product may cause long-term adverse effects in the aquatic environment.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Heptane (n-) (142-82-5)

Test & Species

24 Hr LC50 goldfish	4.0 mg/L	
24 Hr LC50 mosquito fish	4900 mg/L	
96 Hr LC50 cichlid fish	375.0 mg/L	

Conditions

Acetone (67-64-1)

Test & Species

96 Hr LC50 rainbow trout	5540 mg/L	
96 Hr LC50 fathead minnow	6210 mg/L	
96 Hr LC50 bluegill	8300 mg/L	
48 Hr LC50 water flea	0.0039 mg/L	
48 Hr EC50 water flea	12700 mg/L	

Conditions

static
flow-through
static
Static



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13. DISPOSAL CONSIDERATIONS

DISPOSAL: Waste must be handled in accordance with all federal, state, provincial, and local regulations.

Do not puncture or incinerate cans, even when empty.

UNUSED & UNCONTAMINATED PRODUCT:

Component Waste Numbers

Acetone (67-64-1)

RCRA:

waste number U002 (Ignitable waste)

D001 (ignitable)

This is a characteristic waste 1D.

14. TRANSPORT INFORMATION

US DOT Information

Shipping Name: Aerosols (Contains: Heptane (n-))

UN/NA #: UN1950 **Hazard Class:** 2.1

Required Label(s): Flammable Gas

Additional Info.: PLACARD (WHEN REQUIRED): FLAMMABLE GAS, 2.1

EXCEPTIONS: DOT Paragraphs 173.306

TDG Information

Shipping Name: Aerosols (Contains: Heptane (n-))

UN/NA #: UN1950 **Hazard Class:** 2.1

Required Label(s): Flammable Gas

IMDG Information

Additional Info.: F-D, S-U

Exceptions: For package and container size when shipped as Limited Quantity under packaging instruction P001, Provision PP1 and Chapter 3.4 (Limited Quantity).

IATA Information

Additional Info.: 2.1



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15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

SARA 313 INFORMATION:

Component Analysis

None of this products components are listed under SARA Section 313 (40 CFR 372.65).

SARA HAZARD CATEGORY:

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: No Reactive: No

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA):

Component Analysis

This material contains one or more of the following chemicals required to be identified under CERCLA (40 CFR 302.4).

Acetone (67-64-1)

CERCLA:

5000 lb final RQ; 2270 kg final RQ

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components are on the U.S. EPA TSCA Inventory List.

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Heptane (n-)	142-82-5	Yes	DSL	EINECS
Acetone	67-64-1	Yes	DSL	EINECS
Carbon dioxide	124-38-9	Yes	DSL	EINECS

STATE RIGHT-TO-KNOW:

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Heptane (n-)	142-82-5	Yes	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes	Yes
Carbon dioxide	124-38-9	Yes	Yes	Yes	Yes	Yes	Yes

CANADIAN REGULATIONS

WHMIS INFORMATION:

WHMIS Classification: B2, D2B



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Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Heptane (n-)	142-82-5	1 %
Acetone	67-64-1	1 %
Carbon dioxide	124-38-9	1 %

EUROPE:

Component Analysis

Component (CAS#)	EC #
Heptane (n-) (142-82-5)	205-563-8
Acetone (67-64-1)	200-662-2
Carbon dioxide (124-38-9)	204-696-9

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material does not contain any chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

16. OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

NFPA Ratings: Health: 1 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

MEDICAL EMERGENCIES:

Call CHEMTREC 24 hours a
Day for emergency information
800-424-9300

FOR ANY OTHER INFORMATION:

KEX TIRE REPAIR
119 Rockland Avenue
Northvale, NJ 07647
201-768-8100

NOTICE: Kex Tire Repair, believes that the information contained on this material safety data sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily all-inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulations, rules or insurance requirements.

NO WARRANTY IS MADE, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.