

## 1 Identification

### Product identifier

Trade name: ENGINE PRIMING FUEL

### Recommended use and restriction on use

- Recommended use: Fuel
- Restrictions on use: Contact Manufacturer

### 24-Hour Emergency telephone number:

ChemTel Inc.  
(800)255-3924, +1 (813)248-0585

### Details of the supplier of the Safety Data Sheet

#### Manufacturer/Supplier:

KBi/Kold-Ban International, Ltd.  
8390 Pingree Road  
Lake In The Hills, IL 60156 USA  
Phone: (847) 658-8561

## 2 Hazard(s) Identification

### Classification of the substance or mixture

According to REACH regulation (EC 1907/2006, Art 31) and to OSHA regulation (29 CFR 1910.1200), KBi's engine priming fuel is an ARTICLE and is not covered by legal requirements to generate and supply an SDS or an MSDS. This Product Information Sheet is provided solely as an information document for the purpose of assisting our customers.



GHS02 Flame

Flam. Gas 1 H220 Extremely flammable gas.



GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.



GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.  
Skin Irrit. 2 H315 Causes skin irritation.  
STOT SE 3 H336 May cause drowsiness or dizziness.

### Label elements

#### · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

#### · Hazard pictograms



GHS02



GHS04



GHS07



GHS08

· Signal word Danger

· Hazard-determining components of labeling: diethyl ether, heptane

#### · Hazard statements

H220 Extremely flammable gas.  
H280 Contains gas under pressure; may explode if heated.  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H304 May be fatal if swallowed and enters airways.

#### · Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P331 Do NOT induce vomiting.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
P381 Eliminate all ignition sources if safe to do so.  
P403 Store in a well-ventilated place.  
P405 Store locked up.  
P410 Protect from sunlight.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2 Hazard(s) Identification, continued

Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2  
Fire = 4  
Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2  
Fire = 4  
Reactivity = 0

Other hazards

· Results of PBT and vPvB assessment: · PBT: Not applicable. · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
60-29-7	diethyl ether	Flam. Liq. 1, H224 Acute Tox. 4, H302; STOT SE 3, H336 60-100%
142-82-5	heptane	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315; STOT SE 3, H336 10-30%
124-38-9	carbon dioxide	Press. Gas, H280 10-15%

4 First-aid measures

· General information:

Take affected persons out into the fresh air.  
Do not leave affected persons unattended.

· After inhalation:

Supply fresh air; consult doctor in case of complaints.  
Provide oxygen treatment if affected person has difficulty breathing.  
In case of irregular breathing or respiratory arrest provide artificial respiration.

· After skin contact:

In cases of frost bites, rinse with plenty of water. Do not remove clothing. Seek immediate medical advice.

· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing: Do not induce vomiting; immediately call for medical help.

· Most important symptoms and effects, both acute and delayed

Irritant to skin and mucous membranes.  
Breathing difficulty  
Coughing  
Dizziness  
Disorientation  
Unconsciousness

· Danger

Danger of pulmonary edema. Danger of impaired breathing.

· Indication of any immediate medical attention and special treatment needed

Treat frost-bitten areas appropriately.  
Medical supervision for at least 48 hours.  
If necessary oxygen respiration treatment.

5 Fire-fighting measures

· Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· For safety reasons unsuitable extinguishing agents: None.

· Special hazards arising from the substance or mixture

Danger of receptacles bursting because of high vapor pressure if heated.

Formation of toxic gases is possible during heating or in case of fire.

· Advice for firefighters, Protective equipment:

Wear self-contained respiratory protective device. Wear fully protective suit.

· Additional information

Cool endangered receptacles with water spray.  
Use large quantities of foam as it is partially destroyed by the product.  
Eliminate all ignition sources if safe to do so.  
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
No further relevant information available.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**  
Use respiratory protective device against the effects of fumes/dust/ aerosol.  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Keep away from ignition sources.  
Protect from heat.
- **Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water.  
Inform respective authorities in case of seepage into water course or sewage system.

- **Methods and material for containment and cleaning up:**  
Allow to evaporate.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage**

- **Precautions for safe handling**  
Open and handle receptacle with care.  
Use only in well ventilated areas.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 120 °F / 49 °C, i.e. electric lights. Do not pierce or burn, even after use.  
Do not spray on a naked flame or any incandescent material.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.

- Observe official regulations on storing packagings with pressurized containers.  
Provide ventilation for receptacles.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.  
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- **Specific end use(s):** No further relevant information available.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.

**Control parameters**

- **Components with limit values that require monitoring at the workplace:**

60-29-7 diethyl ether	142-82-5 heptane	124-38-9 carbon dioxide
PEL Long-term value: 1200 mg/m <sup>3</sup> , 400 ppm	PEL Long-term value: 2000 mg/m <sup>3</sup> , 500 ppm	PEL Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
TLV Short-term value: 1520 mg/m <sup>3</sup> , 500 ppm Long-term value: 1210 mg/m <sup>3</sup> , 400 ppm	REL Short-term value: C 1800* mg/m <sup>3</sup> , C 440* ppm Long-term value: 350 mg/m <sup>3</sup> , 85 ppm *15-min	REL Short-term value: 54.000 mg/m <sup>3</sup> , 30.000 ppm Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
	TLV Short-term value: 2050 mg/m <sup>3</sup> , 500 ppm Long-term value: 1640 mg/m <sup>3</sup> , 400 ppm	TLV Short-term value: 54.000 mg/m <sup>3</sup> , 30.000 ppm Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls, Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.
- **Engineering controls:** No further relevant information available.
- **Breathing equipment:**  
Not required under normal conditions of use.  
Use suitable respiratory protective device when high concentrations are present.

- **Protection of hands:**
- **Protective gloves** - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**8 Exposure controls/personal protection, continued**

- **Eye protection:**  
Safety glasses
- **Body protection:**  
Not required under normal conditions of use. Protection may be required for spills.
- **Limitation and supervision of exposure into the environment**  
No further relevant information available.

**9 Physical and chemical properties**

- Information on basic physical and chemical properties
- **Appearance:**  
  - Form: ..... Compressed gas
  - Color: ..... Yellowish
- **Odor:** ..... Ether-like
- **Odor threshold:** ..... Not determined.
- **pH-value:** ..... Not determined.
- **Change in condition**  
  - Melting point/Melting range: ..... Undetermined.
  - Boiling point/Boiling range: ..... 34 °C (93 °F)
- **Flash point:** ..... -49 °C (-56 °F)
- **Flammability (solid, gaseous):** ..... Not applicable.
- **Auto-ignition temperature:** ..... 170 °C (338 °F)
- **Decomposition temperature:** ..... Not determined.
- **Auto igniting:** ..... Product is not self-igniting.
- **Danger of explosion:** ..... May form explosive peroxides.
- **Explosion limits:**  
  - Lower: ..... 1.8 Vol %
  - Upper: ..... 48.0 Vol %
- **Vapor pressure at 20 °C (68 °F):** ..... 587 hPa (440 mm Hg)
- **Density at 20 °C (68 °F):** ..... 0.7 g/cm<sup>3</sup> (5.842 lbs/gal)
- **Relative density:** ..... Not determined.
- **Vapour density:** ..... Not determined.
- **Evaporation rate** ..... Not applicable.
- **Solubility in / Miscibility with**  
  - Water: ..... Fully miscible.
- **Partition coefficient (n-octanol/water):** ..... Not determined.
- **Viscosity:**  
  - Dynamic: ..... Not determined.
  - Kinematic: ..... Not determined.
- **Other information** ..... No further relevant information available.

**10 Stability and reactivity**

- **Reactivity · Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.  
Danger of receptacles bursting because of high vapor pressure if heated.
- **Possibility of hazardous reactions**  
Can react violently with oxygen rich (oxidizing) material. Danger of Explosion. Immediately flammable in air.  
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized. Used empty containers may contain product gases which form explosive mixtures with air.
- **Conditions to avoid**  
Store away from oxidizing agents.  
Keep ignition sources away - Do not smoke.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide
- **Additional information:** Antioxidant has been added to product to retard formation of peroxides.

**11 Toxicological information**

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

<b>60-29-7 diethyl ether</b>		
Oral	LD50	1215 mg/kg (rat)
Inhalative	LC50/4 h	73000 mg/l (rat)
<b>142-82-5 heptane</b>		
Oral	LD50	> 5000 mg/kg (rat) (Estimate)
Inhalative	LC50/4 h	103 mg/l (rat)

- **Primary irritant effect:**  
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** Vapors have narcotic effect.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
  - Harmful
  - Irritant
 At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent. Inhalation of concentrated vapors as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.
- **Carcinogenic categories**
- **NTP (National Toxicology Program):** None of the ingredients is listed.
- **Repeated Dose Toxicity:** May cause damage to organs through prolonged or repeated exposure.

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** Toxic for aquatic organisms
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish

## 12 Ecological information, continued

· **Additional ecological information:**

· **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:** Contact manufacturer for recycling information.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA** . . . . . UN3161

· **UN proper shipping name**

- **DOT** Liquefied gas, flammable, n.o.s. (Diethyl ether)
- **ADR** 3161 LIQUEFIED GAS, FLAMMABLE, N.O.S. (DIETHYL ETHER), ENVIRONMENTALLY HAZARDOUS
- **IMDG** LIQUEFIED GAS, FLAMMABLE, N.O.S. (DIETHYL ETHER), MARINE POLLUTANT
- **IATA** LIQUEFIED GAS, FLAMMABLE, N.O.S. (DIETHYL ETHER)

· **Transport hazard class(es)**

· DOT



· Class 2 Gases.  
· Label 2.1

· ADR



· Class 2 2F Gases  
· Label 2.1

· IMDG



· Class 2.1  
· Label 2.1

· IATA



· Class 2.1  
· Label 2.1

· **Packing group**

· **DOT, ADR, IMDG, IATA** Not Regulated

· **Environmental hazards:**

· **Marine pollutant:** Yes, Symbol (fish and tree)

· **Special marking (ADR):** Symbol (fish and tree)

· **Special marking (IATA):** Cargo Aircraft Only.



· **Special precautions for user:** Warning: Gases

· **Danger code (Kemler):** 23

· **EMS Number:** F-D,S-U

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

· **UN "Model Regulation":** UN3161, Liquefied gas, flammable, n.o.s. (Diethyl ether (Ethyl Ether)), ENVIRONMENTALLY HAZARDOUS, 2.1

## 15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· **SARA**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

142-82-5 heptane D

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **State Right to Know Listings**

None of the ingredients is listed.

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

15 Regulatory information, continued

- **Canadian Ingredient Disclosure list (limit 0.1%)**  
None of the ingredients is listed.
- **Canadian Ingredient Disclosure list (limit 1%)**  
All ingredients are listed.

- **Other regulations, limitations and prohibitive regulations**  
This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
- **Chemical safety assessment:**  
A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 6/05/2015

· **Abbreviations and acronyms:**

ACGIH: American Conference of Governmental Industrial Hygienists  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
Asp. Tox. 1: Aspiration hazard, Hazard Category 1  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
DOT: US Department of Transportation  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Liq. 1: Flammable liquids, Hazard Category 1  
Flam. Liq. 2: Flammable liquids, Hazard Category 2  
HMIS: Hazardous Materials Identification System (USA)  
IATA: International Air Transport Association  
IMDG: International Maritime Code for Dangerous Goods  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
NFPA: National Fire Protection Association (USA)  
Press. Gas: Gases under pressure: Liquefied gas  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3  
WHMIS: Workplace Hazardous Materials Information System (Canada)

· **Sources**

These data are offered in good faith as typical values and not product specifications. The information in this data sheet is believed to be correct and reliable. However, the data is offered solely for consideration, evaluating and verification by the user. No guarantee, warranty, or representation of accuracy of completeness is expressed or implied. KBi/Kold-Ban International, Ltd. assumes no responsibility for any kind of loss or damage arising from use of this data.