

Safety Data Sheet

according to (EU) 2015 / 830 and OSHA GHS

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Revision: August 1, 2019

1 Identification

- **Product identifier**
- **Trade name:** Motive-Power Crystal Synthetic Penetrating Oil (Aerosol) **Item No. 80-1151**
- **Article number:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:**
Penetrating oil
Lubricant
- **Restrictions on use:** See Sections 8 and 10 for further information.
- **Details of the supplier of the Safety Data Sheet**
- **Manufactured For:**
Kimball Midwest
4800 Roberts Rd
Columbus, OH 43228
Telephone: 800-233-1294
- **Emergency telephone number:**
CHEMTREC
1-800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 GHS04 Flame, Gas cylinder

Flam. Aerosol 1 H222 Extremely flammable aerosol.



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

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Additional information:**

There are no other hazards not otherwise classified that have been identified.
0 percent of the mixture consists of ingredient(s) of unknown toxicity.

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- **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:**

Distillates (petroleum), hydrotreated light heptane

- **Hazard statements**

H222 Extremely flammable aerosol.
 H280 Contains gas under pressure; may explode if heated.
 H315 Causes skin irritation.
 H336 May cause drowsiness or dizziness.
 H304 May be fatal if swallowed and enters airways.

- **Precautionary statements**

P210 Keep away from heat, sparks, open flames, and hot surfaces. - No smoking.
 P251 Pressurized container: Do not pierce or burn, even after use.
 P211 Do not spray on an open flame or other ignition source.
 P261 Avoid breathing mist/vapors/spray.
 P280 Wear protective gloves and eye protection.
 P264 Wash thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P301+P310 If swallowed: Immediately call a poison center/doctor.
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P331 Do NOT induce vomiting.
 P302+P352 If on skin: Wash with plenty of water.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 122 °F (50 °C).
 P403 Store in a well-ventilated place.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Hazard description:**

- **WHMIS-symbols:**

A - Compressed gas
 B5 - Flammable aerosol
 D2B - Toxic material causing other toxic effects



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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMS-ratings (scale 0 - 4)**



- **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:**

64742-47-8	Distillates (petroleum), hydrotreated light ⚠ Asp. Tox. 1, H304	50-100%
142-82-5	heptane ⚠ Flam. Liq. 2, H225 ⚠ Asp. Tox. 1, H304 ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	10-25%
124-38-9	carbon dioxide ⚠ Press. Gas, H280	2.5-10%

- **Additional information:**
For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Take affected persons out into the fresh air.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.

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Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:**

Unlikely route of exposure.

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

A person vomiting while lying on their back should be turned onto their side.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

Frostbite

Irritating to eyes and skin.

Coughing

Breathing difficulty

Dizziness

Nausea

- **Danger**

Danger of pulmonary edema.

Danger of pneumonia.

Danger of impaired breathing.

- **Indication of any immediate medical attention and special treatment needed**

If swallowed, gastric irrigation with added, activated carbon.

If swallowed or in case of vomiting, danger of entering the lungs.

Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary edema.

Treat frost-bitten areas appropriately.

5 Fire-fighting measures

- **Extinguishing media**

- **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:** Water stream.

- **Special hazards arising from the substance or mixture**

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

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

- **Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

- **Additional information**

Eliminate all ignition sources if safe to do so.

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Cool endangered receptacles with water fog.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.

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Particular danger of slipping on leaked/spilled product.
 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:**

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).
 Pick up mechanically.
 Dispose contaminated material as waste according to item 13.
 Do not flush with water or aqueous cleansing agents
 Send for recovery or disposal in suitable receptacles.

· **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

· **Handling:**

· **Precautions for safe handling**

Use only in well ventilated areas.
 Keep away from heat and direct sunlight.
 Avoid splashes or spray in enclosed areas.

· **Information about protection against explosions and fires:**

Protect against electrostatic charges.
 Emergency cooling must be available in case of nearby fire.
 Keep ignition sources away - Do not smoke.
 Do not spray on a naked flame or any incandescent material.
 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.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **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.
 Avoid storage near extreme heat, ignition sources or open flame.

· **Information about storage in one common storage facility:**

Store away from oxidizing agents.

· **Further information about storage conditions:**

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.

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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:**

64742-47-8 Distillates (petroleum), hydrotreated light

EL (Canada)	Long-term value: 200 mg/m ³ Skin
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142-82-5 heptane

PEL (USA)	Long-term value: 2000 mg/m ³ , 500 ppm
REL (USA)	Long-term value: 350 mg/m ³ , 85 ppm Ceiling limit value: 1800* mg/m ³ , 440* ppm *15-min
TLV (USA)	Short-term value: 2050 mg/m ³ , 500 ppm Long-term value: 1640 mg/m ³ , 400 ppm
EL (Canada)	Short-term value: 500 ppm Long-term value: 400 ppm
EV (Canada)	Short-term value: 2.045 mg/m ³ , 500 ppm Long-term value: 1.635 mg/m ³ , 400 ppm
LMPE (Mexico)	Short-term value: 500 ppm Long-term value: 400 ppm

124-38-9 carbon dioxide

PEL (USA)	Long-term value: 9000 mg/m ³ , 5000 ppm
REL (USA)	Short-term value: 54.000 mg/m ³ , 30.000 ppm Long-term value: 9000 mg/m ³ , 5000 ppm
TLV (USA)	Short-term value: 54.000 mg/m ³ , 30.000 ppm Long-term value: 9000 mg/m ³ , 5000 ppm
EL (Canada)	Short-term value: 15000 ppm Long-term value: 5000 ppm
EV (Canada)	Short-term value: 54.000 mg/m ³ , 30.000 ppm Long-term value: 9.000 mg/m ³ , 5.000 ppm
LMPE (Mexico)	Short-term value: 30000 ppm Long-term value: 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.
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.

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- **Breathing equipment:**

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when high concentrations are present.

For spills, respiratory protection may be advisable.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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.

- **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing

- **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**

- **General Information**

- **Appearance:**

Form: Aerosol

Color: Translucent

- **Odor:** Solvent-like

- **Odor threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range: Not applicable, as aerosol.

Boiling point/Boiling range: Not applicable, as aerosol.

- **Flash point:** Extremely flammable aerosol.

- **Flammability (solid, gaseous):** Extremely flammable aerosol.

- **Auto-ignition temperature:** 210 °C (410 °F)

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- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Not determined.
- **Explosion limits:**
 - Lower: 1.1 Vol %
 - Upper: 7 Vol %
- **Vapor pressure:** Not determined.
- **Density:** Not determined.
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not applicable.
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic: Not determined.
 - Kinematic: Not determined.
- **Solvent content:**
 - VOC (California) < 25%
- **Other information** Exempt VOCs are excluded from this value
No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
Danger of receptacles bursting because of high vapor pressure if heated.
- **Possibility of hazardous reactions**
Develops readily flammable gases / fumes.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Extremely flammable aerosol.
Used empty containers may contain product gases which form explosive mixtures with air.
Reacts with strong oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid**
Keep ignition sources away - Do not smoke.
Keep away from heat and direct sunlight.
Store away from oxidizing agents.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

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11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

- LD/LC50 values that are relevant for classification:

64742-47-8 Distillates (petroleum), hydrotreated light

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

142-82-5 heptane

Oral	LD50	> 5000 mg/kg (rat) (Estimate)
Inhalative	LC50/4h	103 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
Irritant
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.

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

None of the ingredients is listed.

- **Probable Routes of Exposure**

Inhalation.
Eye contact.
Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):**

Vapors have narcotic effect.
Irritating to skin.
May be fatal if swallowed and enters airways.

- **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.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish

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- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **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 waste processors for recycling information.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1950
- **UN proper shipping name**
-  Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).
- **DOT** Aerosols, flammable
- **ADR** 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
- **IMDG** AEROSOLS (HEPTANES), MARINE POLLUTANT
- **IATA** AEROSOLS, flammable
- **Transport hazard class(es)**
- **DOT**
-  2.1
- **Class**

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· Label 2.1

· ADR



· Class 2 5F 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: Product contains environmentally hazardous substances: heptane

· Marine pollutant: Yes

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

· Special precautions for user: Symbol (fish and tree)

· Danger code (Kemler): Warning: Gases

· EMS Number: -

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code F-D,S-U

· Transport/Additional information: Not applicable.

· DOT

· Quantity limitations

On passenger aircraft/rail: 75 kg

On cargo aircraft only: 150 kg

· ADR

· Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

· IMDG

· Limited quantities (LQ) 1L

· Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

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· UN "Model Regulation":

UN1950, Aerosols, ENVIRONMENTALLY HAZARDOUS,
2.1

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15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California)

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are 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.

· State Right to Know Listings

None of the ingredients is listed.

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

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· **Canadian Ingredient Disclosure list (limit 1%)**

142-82-5	heptane
124-38-9	carbon dioxide

· **Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS 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** 03/11/2015 / 06/18/2015

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas: Gases under pressure: Compressed gas

Press. Gas: Gases under pressure: Liquefied gas

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

· **Sources**

SDS Prepared by:

Environmental Protection Department