

SAFETY DATA SHEET

1. Identification

Product identifier OAK® 60-1
EVAPORATIVE LUBRICANT

Other means of identification

SDS number Not applicable

Recommended use EVAPORATIVE LUBRICANT

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name CIMCOOL® Industrial Products LLC
3000 Disney Street
Cincinnati, Ohio 45209

Telephone (General Information) 513-458-8199

Emergency telephone number 1-800-424-9300 (CHEMTREC)

Emergency telephone number (outside USA) 1-703-527-3887 (CHEMTREC)

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3

Health hazards Serious eye damage/eye irritation Category 2B
Aspiration hazard Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes eye irritation.

Precautionary statement

Prevention Prevent electrostatic charge build-up by using common bonding and grounding techniques. Vapors may travel considerable distance to a source of ignition and flash back. Wear protective gloves/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

Response IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a poison center/doctor if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. Wash contaminated clothing before reuse.

Storage Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place. Store away from incompatible materials. Store in accordance with local/regional/national/international regulation.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
C9-C11 ISOALKANES		68551-16-6	60 - 100
Other components below reportable levels			3 - 7

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If symptoms are experienced, remove source of contamination or move victim to fresh air. Call a POISON CENTER or doctor/physician if you feel unwell. Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth thoroughly. Do not induce vomiting. Do not give liquids. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Aspiration may cause pulmonary edema and pneumonitis. Defatting of the skin.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	Show this safety data sheet to the doctor in attendance. If exposed or concerned: Get medical advice/attention.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemicals. Dry chemical powder. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. Vapors may travel considerable distance to a source of ignition and flash back.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In case of fire and/or explosion do not breathe fumes.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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Methods and materials for containment and cleaning up

Extinguish all flames in the vicinity. Local authorities should be advised if significant spillages cannot be contained. The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Prevent entry into waterways, sewer, basements or confined areas. Clean up in accordance with all applicable regulations. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Do not flush spill to drain. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Electrostatic Accumulation Hazard: Use proper grounding or bonding procedures. Additional information regarding the safe handling of products with static accumulation potential can be ordered from the American Petroleum Institute (API) request API Recommended Practice 2003 or from the National Fire Protection Association (NFPA) request NFPA 77. Do not ingest. Do not get this material on clothing. Avoid breathing mist or vapor. Avoid contact with skin and eyes. Avoid prolonged and repeated contact. Use only in well-ventilated areas. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Wash contaminated clothing before reuse. Practice good housekeeping. Handle and open container with care. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Do not handle or store near an open flame, heat or other sources of ignition. To maintain product quality, do not store in heat or direct sunlight. Use care in handling/storage. Keep containers closed when not in use. Store in original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep away from food, drink and animal feedingstuffs. Room temperature - normal conditions. Do not allow material to freeze. If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

	Type	Value
C9-C11 ISOALKANES (CAS 68551-16-6)	PEL	500 ppm

U.S. - NIOSH

	Type	Value
C9-C11 ISOALKANES (CAS 68551-16-6)	TWA	350 mg/m3

ACGIH

	Type	Value
C9-C11 ISOALKANES (CAS 68551-16-6)	TWA	100 ppm

Appropriate engineering controls

Ensure compliance with applicable exposure limits. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Do not get in eyes. Eye wash fountain is recommended.

Skin protection

Hand protection

Use protective gloves made of: Nitrile.

Other

Wear suitable protective clothing and gloves.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	CLEAR
Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Chemical
Odor threshold	Not available.
pH	Not Applicable
Melting point/freezing point	< 32 °F (< 0 °C) estimated
Initial boiling point and boiling range	> 340 °F (> 171.11 °C)
Flash point	124 °F (51.1 °C) Tagliabue
Evaporation rate	Not Applicable
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	0.6 @ 77 F°
Explosive limit - upper (%)	7 @ 77 F°
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	689 °F (365 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Flash point class	Combustible II
Specific gravity	0.76
VOC ASTM D2369	95 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidizing agents. Avoid contact with acids and oxidizing substances.
Hazardous decomposition products	Smoke, fumes, and oxides of carbon

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact	Causes eye irritation.

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components	Species	Test Results
C9-C11 ISOALKANES (CAS 68551-16-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	15400 mg/kg
<i>Inhalation</i>		
LC50	Rat	12.4 mg/l, 4 hours
<i>Oral</i>		
LD50	Rat	34600 mg/kg
Chronic		
<i>Inhalation</i>		
NOEL	Rat	> 922 ppm, 6 hours

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Defatting, drying and cracking of skin.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not classified.

Skin sensitization Not classified.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged exposure may cause chronic effects.

Further information Symptoms may be delayed.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results	
C9-C11 ISOALKANES (CAS 68551-16-6)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia	1000 mg/l, 48 hours
Fish	LC50	Rainbow Trout	1000 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Consult authorities before disposal. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport information

DOT	
UN number	UN1268
UN proper shipping name	Petroleum products, n.o.s. (C9-C11 ISOALKANES)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	144, B1, IB3, T4, TP1, TP29
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242
Supplemental Information: This material may be transported as "non regulated" by DOT if all criteria referenced in 49 CFR are met and it is in "non-bulk" packages (119 gallons or less).	

IATA

UN number	UN1268
UN proper shipping name	Petroleum products, n.o.s. (C9-C11 ISOALKANES)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Environmental hazards	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN1268
UN proper shipping name	PETROLEUM PRODUCTS, N.O.S. (C9-C11 ISOALKANES)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not established.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. It may be reportable under the provisions of SARA Sections 311 and 312 if specific threshold criteria are met or exceeded.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations Product is a hazardous substance as defined under the OSHA Hazard Communication Standard and may be reportable under the provisions of SARA Sections 311 and 312.

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

California South Coast Air Quality Management District (SCAQMD) Rule 1144 (VOC Emissions) This product is subject to SCAQMD Rule 1144; it is not compliant and shall not be sold and used in the SCAQMD. The VOC content of the product is 723 g/L, measured by ASTM Method 1868-10. This product has a specified VOC limit of 75 g/L.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last revision

Issue date 02-17-2015

Version # 01

Further information Not available.

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information Product and Company Identification: Product and Company Identification
Hazards Identification: US Hazard Categories
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Transport Information: Proper Shipping Name/Packing Group
Regulatory Information: United States
HazReg Data: North America
GHS: Classification