



Material Safety Data Sheet

Material Name: VACUUM GAS OIL

ID: 82701

*** Section 1 - Chemical Product and Company Identification ***

Product Code: Prefix 07

Product Use: Process intermediate for use as an industrial fuel or blend stock. If this product is used in combination with other products, refer to the Material Safety Data Sheet for those products.

Synonyms: Petroleum oil; Lube oil; Petroleum hydrocarbon; Lubricant.

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, Texas 75080

Phone: 1-800-669-5740

Emergency # 1-800-468-1760

www.safety-kleen.com

Issue Date

March 24, 2015

Supersedes Issue Date

December 12, 2013

Original Issue Date

October 16, 1996

PREPARED BY: Product MSDS Coordinator APPROVED BY: MSDS Task Force

*** Section 2 - Hazardous Identification ***

EMERGENCY OVERVIEW

Appearance

Amber liquid, petroleum odor.

Signal Word

WARNING!

Physical Hazards

Will burn at high temperatures.

Health Hazards

May be harmful if swallowed.

May irritate eyes and skin.

Suspect cancer hazard. Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.

POTENTIAL HEALTH EFFECTS

Inhalation (Breathing)

This product is not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

Eyes

May cause irritation.

Skin

May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

Ingestion (Swallowing)

May cause throat irritation, nausea, vomiting, and diarrhea. Aspiration hazard: breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

Material Safety Data Sheet

Material Name: VACUUM GAS OIL

ID: 82701

Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

Chronic

Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

Cancer Information

This product contains vacuum distillates which may cause cancer. Risk of cancer depends on duration and level of exposure. For more information, see **SECTION 11: MUTAGENICITY** and **CARCINOGENICITY**. Also see **SECTION 15: CALIFORNIA**.

Environmental Hazards

Harmful to aquatic life. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

* * * Section 3 - Composition / Information on Ingredients * * *

This product can be represented by either or both CAS numbers, and does not represent a mixture of two different components.

CAS #	Component	Percent
92045-41-5	Lubricating oils, used, vacuum distd. (A complex combination of hydrocarbons obtained by the vacuum distillation of used lubricating oil and boiling in the range of approximately 200.degree.C to 360.degree.C (392.degree.F to 680.degree.F).)	0-100
101316-73-8	Lubricating oils (petroleum), used, non-catalytically refined	0-100

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Oil mist, mineral (8012-95-1).

* * * Section 4 - First Aid Measures * * *

Inhalation (Breathing)

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

Eyes

If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

Skin

Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists. If product is injected under pressure into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, a physician should immediately evaluate the individual as a medical emergency. Wash contaminated clothing before reuse.

Ingestion (Swallowing)

Do NOT induce vomiting. Immediately get medical attention. Call 1-800-468-1760 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

Material Safety Data Sheet

Material Name: VACUUM GAS OIL

ID: 82701

Notes to Physicians

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

*** Section 5 - Fire Fighting Measures ***

Hazardous Combustion Products

Decomposition and combustion materials may be toxic., Burning may produce carbon monoxide and unidentified organic compounds.

Conditions of Flammability

Sparks, or flame., Product may burn, but does not ignite readily.

Extinguishing Media

Carbon dioxide, regular foam, dry chemical, water spray, or water fog. Water or foam may cause frothing.

Protective Equipment For Firefighting

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Fire Fighting Equipment/Instructions

Keep storage containers cool with water spray.

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

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

Fire and Explosion Hazards

Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact or static discharge.

*** Section 6 - Accidental Release Measures ***

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, spark proof tool into a sealable container for disposal.

Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

*** Section 7 - Handling and Storage ***

Handling Procedures

Keep away from sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. This product has a low vapor pressure and is not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.

Shipping and Storing

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

Material Safety Data Sheet

Material Name: VACUUM GAS OIL

ID: 82701

* * * Section 8 - Exposure Controls / Personal Protection * * *

Exposure Guidelines

Component Exposure Limits

Lubricating oils (petroleum), used, non-catalytically refined (101316-73-8)

ACGIH: 5 mg/m³ TWA (excluding metal working fluids, highly & severely refined, inhalable fraction, related to Oil mist, mineral)

OSHA Final: 5 mg/m³ TWA (related to Oil mist, mineral)

OSHA Vacated: 5 mg/m³ TWA (related to Oil mist, mineral)

NIOSH: 5 mg/m³ TWA (related to Oil mist, mineral)
10 mg/m³ STEL (related to Oil mist, mineral)

Lubricating oils, used, vacuum distd. (A complex combination of hydrocarbons obtained by the vacuum distillation of used lubricating oil and boiling in the range of approximately 200.degree.C to 360.degree.C (392.degree.F to 680.degree.F).) (92045-41-5)

ACGIH: 5 mg/m³ TWA (excluding metal working fluids, highly & severely refined, inhalable fraction, related to Oil mist, mineral)

OSHA Final: 5 mg/m³ TWA (related to Oil mist, mineral)

OSHA Vacated: 5 mg/m³ TWA (related to Oil mist, mineral)

NIOSH: 5 mg/m³ TWA (related to Oil mist, mineral)
10 mg/m³ STEL (related to Oil mist, mineral)

Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

Personal Protective Equipment: Respiratory

Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

Personal Protective Equipment: Eyes/Face

Where eye contact is likely, wear safety glasses; contact lens use is not recommended.

Personal Protective Equipment: Skin

Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended.

When product is heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant face shield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

Personal Protective Equipment: Personal Hygiene

Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard leather articles, such as shoes, saturated with this product.

Other Personal Protective Equipment

Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

Material Safety Data Sheet

Material Name: VACUUM GAS OIL

ID: 82701

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Amber liquid, petroleum odor.	pH: Not applicable
Boiling Point: 420°F (220°C) (minimum)	Melting Point: Not available [pour point 21°F (-6°C) (maximum)]
Solubility (H2O): Insoluble	Specific Gravity: 0.88 (water=1) (approximately)
Density: 7.3 LB/US gal (880 g/l) (approximately)	Octanol/H2O Coeff.: Not available
Evaporation Rate: Not available	Molecular Weight: Not applicable
Odor Threshold: Not available	Auto Ignition Temperature: Not available
LFL: Not Available	Flash Point: 302°F (150°C)
UFL: Not Available	Vapor Pressure: <0.1 mm Hg at 68°F (20°C)
Vapor Density: Not available	Freezing Point: Not available [pour point 21°F (-6°C) (maximum)]

*** Section 10 - Chemical Stability & Reactivity Information ***

Stability

Stable under normal temperatures and pressures.

Incompatibility

Avoid oxidizing agents.

Reactivity

Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.

Hazardous Decomposition Products

None under normal temperatures and pressures., See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.**

Conditions To Avoid

Avoid heat, sparks, or flame.

*** Section 11 - Toxicological Information ***

Toxicity Data

Component Analysis - LD50/LC50

Lubricating oils (petroleum), used, non-catalytically refined (101316-73-8)

Oral LD50 Rat >2000 mg/kg; Dermal LD50 Rabbit >4480 mg/kg

Lubricating oils, used, vacuum distd. (A complex combination of hydrocarbons obtained by the vacuum distillation of used lubricating oil and boiling in the range of approximately 200°C to 360°C (392°F to 680°F) (92045-41-5)

Dermal LD50 Rabbit >4480 mg/kg; Oral LD50 Rat >2000 mg/kg

Acute Effects

This product is not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs). May cause eye irritation. Irritation symptoms may include burning sensation, tearing, redness and swelling, This product may cause irritation, redness, and/ or swelling., This product is not likely to be absorbed through the skin in harmful amounts., May cause throat irritation, nausea, vomiting, and diarrhea. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

Material Safety Data Sheet

Material Name: VACUUM GAS OIL

ID: 82701

Repeated Dose Effects

Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

Component Carcinogenicity

Lubricating oils (petroleum), used, non-catalytically refined (101316-73-8)

ACGIH: A4 - Not Classifiable as a Human Carcinogen (highly and severely refined); A2 - Suspected Human Carcinogen (poorly and mildly refined, related to Oil mist, mineral)

Lubricating oils, used, vacuum distd. (A complex combination of hydrocarbons obtained by the vacuum distillation of used lubricating oil and boiling in the range of approximately 200°C to 360°C (392°F to 680°F). (92045-41-5)

ACGIH: A4 - Not Classifiable as a Human Carcinogen (highly and severely refined); A2 - Suspected Human Carcinogen (poorly and mildly refined, related to Oil mist, mineral)

Target Organ Effects

Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation.

Sensitization

Based on best current information, there is no known human sensitization associated with this product.

Mutagenicity

Vacuum distillates have demonstrated experimental effects of mutagenicity.

Reproductive Toxicity

Based on best current information, there is no known reproductive toxicity associated with this product.

Teratogenicity

Based on best current information, there is no known teratogenicity associated with this product.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

Harmful to aquatic life.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Lubricating oils (petroleum), used, non-catalytically refined (101316-73-8)

Duration/Test/Species	Concentration/Conditions	Notes
48 Hr EC50 Daphnia magna	2.3 - 2.5 mg/L	

Lubricating oils, used, vacuum distd. (A complex combination of hydrocarbons obtained by the vacuum distillation of used lubricating oil and boiling in the range of approximately 200.degree.C to 360.degree.C (392.degree.F to 680.degree.F).) (92045-41-5)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Brachydanio rerio	79.6 mg/L [semi-static]	
96 Hr LC50 Pimephales promelas	3.2 mg/L [semi-static]	

Persistence/Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Mobility in Environmental Media

No information available.

Other Adverse Effects

No additional information available.

Material Safety Data Sheet

Material Name: VACUUM GAS OIL

ID: 82701

*** Section 13 - Disposal Considerations ***

Disposal Instructions

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

US EPA Waste Number & Descriptions

This product, if discarded, is not expected to be a characteristic or listed hazardous waste. If recycled in the USA, it must be managed in accordance with 40 CFR Part 279. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

*** Section 14 - Transportation Information ***

Emergency Response Guide Number

Not applicable.

Reference *.North American Emergency Response Guidebook*

DOT Shipping Name: Not regulated.

TDG Shipping Name: Not regulated.

IATA Information

No Classification Assigned.

IMDG Information

No Classification Assigned.

*** Section 15 - Regulatory Information ***

SARA Sections 311/312

These products pose the following health hazard(s) as defined in 40 CFR Part 370 and are subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA Section 313

Component Analysis

This product does not contain any "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

TSCA

Some components of this product are listed on, or are exempted from the requirement to be listed on, the TSCA Inventory. Some components are not listed on the TSCA Inventory.

Material Safety Data Sheet

Material Name: VACUUM GAS OIL

ID: 82701

Component Analysis

Component	CAS #	TSCA
Lubricating oils (petroleum), used, non-catalytically refined	101316-73-8	Yes
Lubricating oils, used, vacuum distd. (A complex combination of hydrocarbons obtained by the vacuum distillation of used lubricating oil and boiling in the range of approximately 200.degree.C to 360.degree.C (392.degree.F to 680.degree.F).)	92045-41-5	No

State Regulations

This product contains soots, tars, and mineral oils (untreated and mildly treated oils and used engine oils). This product may contain detectable amounts of benzo(a)anthracene CAS 56-55-3, benzo(k)fluoranthene CAS 207-08-9, benzo(a)pyrene CAS 50-32-8, benzo(b)fluoranthene CAS 205-99-2, chrysene CAS 218-01-9, dibenz(a,h)anthracene CAS 53-70-3, indeno(1,2,3-cd)pyrene CAS 193-39-5, WARNING: This chemical is known to the State of California to cause cancer. Our testing of this product indicates that these chemicals are not always detectable.

This product does not contain detectable amounts of any chemical known to the State of California to cause birth defects or other reproductive harm.

U.S. State Regulations

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

Component	CAS	MA	MN	NJ	PA	CA
Lubricating oils (petroleum), used, non-catalytically refined (related to: Oil mist, mineral)	101316-73-8	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹
Lubricating oils, used, vacuum distd. (A complex combination of hydrocarbons obtained by the vacuum distillation of used lubricating oil and boiling in the range of approximately 200.degree.C to 360.degree.C (392.degree.F to 680.degree.F).) (related to: Oil mist, mineral)	92045-41-5	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹

No component(s) are listed under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Lubricating oils (petroleum), used, non-catalytically refined	101316-73-8	NSL
Lubricating oils, used, vacuum distd. (A complex combination of hydrocarbons obtained by the vacuum distillation of used lubricating oil and boiling in the range of approximately 200.degree.C to 360.degree.C (392.degree.F to 680.degree.F).)	92045-41-5	DSL

Canadian WHMIS Information

Class D2A - Contains component that may cause cancer. Class D2B - Irritating to eyes and skin.

Material Safety Data Sheet

Material Name: VACUUM GAS OIL

ID: 82701

Component Analysis - WHMIS IDL

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

Lubricating oils (petroleum), used, non-catalytically refined (101316-73-8)

1 % (related to Oil mist, mineral)

Lubricating oils, used, vacuum distd. (A complex combination of hydrocarbons obtained by the vacuum distillation of used lubricating oil and boiling in the range of approximately 200.degree.C to 360.degree.C (392.degree.F to 680.degree.F).) (92045-41-5)

1 % (related to Oil mist, mineral)

Canadian Environmental Protection Act (CEPA)

All the components of this product are listed on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).

* * * **Section 16 - Other Information** * * *

Label/Other Information

Not available.

Revision Information

Update to product name.

Disclaimer

User assumes all risks incident to the use of this (these) product(s). To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the product(s) as supplied to the user.

End of Sheet 82701