



Corporate Hazard Communication
MATERIAL APPROVAL NOTIFICATION AND SUMMARY OF HAZARDS
(Consult MSDS for complete product hazard information)

I. IDENTIFICATION

Trade Name: KENDALL SUPER THREE STAR GEAR LUBRICANT, SAE 80W-85W-140

Manufacturer: WITCO MFG - KENDALL REFINING DIV

MSDS Number: 1619-0/025-0/0490

Approved Application: MAINTENANCE CHEMICAL

Approved Location: MEMPHIS ROOFING

Approved Departments: 480

II. EPA HAZARD CATEGORY CLASSIFICATION *

Acute:X Chronic: Fire: Pressure: Reactive: Not Applicable:

III. ADDITIONAL INFORMATION/USE RESTRICTIONS

IV. COMPONENT INFORMATION

CAS Number Ingredients

8020-83-5 HYDROCARBON OILS (UNABLE TO DETERMINE BETTER CAS NUMBER DESCR

Signature: _____

Date: 04/10/91

“HAZARD CATEGORY” MEANS ANY OF THE FOLLOWING

ACUTE HEALTH HAZARD - *“Immediate (acute) health hazard”, including “highly toxic”, “toxic”, “irritant”, “sensitizer”, “corrosive” and other hazardous chemicals that cause an adverse effect to a target organ and which effect usually occurs rapidly as a result of short term exposure and is of short duration.*

Highly Toxic: A chemical falling within any of the following categories:

- (a) A chemical that has a median lethal dose (LD₅₀) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.
- (b) A chemical that has a median lethal dose (LD₅₀) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.
- (c) A chemical that has a median lethal concentration (LC₅₀) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

Toxic: a chemical falling within any of the following categories:

- (a) A chemical that has median lethal dose (LD₅₀) of more than 50 milligrams per kilogram but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.
- (b) A chemical that has a median lethal dose (LD₅₀) of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.
- (c) A chemical that has a median lethal concentration (LC₅₀) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more than two milligrams per liter but not more than 20 milligrams per liter of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

Irritant: A chemical, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact. A chemical is a skin irritant if, when tested on the intact skin of albino rabbits by the methods of 16 CFR 1500.41 for four hours exposure or by other appropriate techniques, it results in an empirical score of five or more. A chemical is an eye irritant if so determined under the procedure listed in 16 CFR 1500.42 or other appropriate techniques.

Sensitizer: A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

Corrosive: A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. For example, a chemical is considered to be corrosive if, when tested on the intact skin of albino rabbits by the method described by the U.S. Department of Transportation in Appendix A to 49 CFR Part 173, it destroys or changes irreversibly the structure of the tissue at the site of contact following an exposure period of four hours. This term shall not refer to action on inanimate surface.

CHRONIC HEALTH HAZARD - *“Delayed (chronic) health hazard”, including “carcinogens” and other hazardous chemicals that cause an adverse effect to a target organ and which effect generally occurs as a result of long term exposure and is of long duration.*

Carcinogen: A chemical is considered to be a carcinogen if:

- (a) It has been evaluated by the International Agency for Research on Cancer (IARC), and found to be a carcinogen or potential carcinogen; or
- (b) It is listed as a carcinogen or potential carcinogen in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition); or
- (c) It is regulated by OSHA as a carcinogen.

FIRE HAZARD - *Includes “flammable”, “combustible liquid”, “pyrophoric” and “oxidizer”.*

“Flammable means a chemical that falls into one of the following categories:

- (i) “Aerosol, Flammable” means an aerosol that, when tested by the method described in 16 CFR 1500.45, yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening;
- (ii) “Gas, Flammable” means:
 - (A) a gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen (13) percent by volume or less; or
 - (B) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than twelve (12) percent by volume, regardless of the lower limit;
- (iii) “Liquid, Flammable” means any liquid having a flashpoint below 100°F (37.8°C), except any mixture having components with flashpoints of 100° F (37.8°C) or higher, the total of which make up 99 percent or more of the total volume of the mixture.
- (iv) “Solid, Flammable” means a solid, other than a blasting agent or explosive as defined in Paragraph 1910.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. A chemical shall be considered to be a flammable solid if, when tested by the method described in 16 CFR 1500.44, it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

“Combustible Liquid” means any liquid having a flashpoint at or above 100°F (37.8°C), but below 200°F (93.3°C), except any mixture having components with flashpoints of 200°F (93.3°), or higher, the total volume of which make up 99 percent or more of the total volume of the mixture.

“Pyrophoric” means a chemical that will ignite spontaneously in air at a temperature of 130°F (54.4°C) or below.

“Oxidizer” means a chemical, other than a blasting agent or explosive as defined in 1910.109(a), that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

SUDDEN RELEASE OF PRESSURE HAZARD - *Includes “explosive” and “compressed gas”.*

“Explosive” means a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

“Compressed Gas” means:

- (i) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70°F (21.1°C); or
- (ii) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130°F (54.4°C) regardless of the pressure at 70°F (21.1°C); or
- (iii) A liquid having a pressure exceeding 40 psi at 100°F (37.8°C) as determined by ASTM D-323-72.

REACTIVE HAZARD - *Includes “unstable reactive”, “organic peroxide” and “water reactive”.*

“Unstable reactive” means a chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks pressure or temperature.

“Organic Peroxide” means an organic compound that contains the bivalent-O-O-structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

“Water Reactive” means a chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

W I T C O M A T E R I A L S A F E T Y D A T A S H E E T

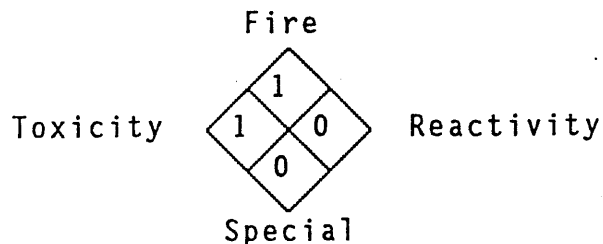
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NFPA HAZARD RATING

4 - Extreme
3 - High
2 - Moderate
1 - Slight
0 - Insignificant



DIVISION AND LOCATION---SECTION I

Division: KENDALL REFINING COMPANYLocation: BRADFORD, PENNSYLVANIA

77 N. KENDALL AVE., BRADFORD, PA, 16701

Emergency Telephone Number: (814) 368-6111Transportation Emergency: CHEMTREC 1-(800) 424-9300 (U.S. and Canada)

CHEMICAL AND PHYSICAL PROPERTIES---SECTION II

Chemical Name:

petroleum hydrocarbon

Formula: not applicableHazardous Decomposition Products:

carbon monoxide and carbon dioxide from burning.

oxides of phosphorous from burning

oxides of sulfur

Incompatibility (Keep away from):

strong oxidizers such as hydrogen peroxide, bromine, and chromic acid.

Toxic and Hazardous Ingredients:

none

Form: liquidOdor: pungent, sulfur typeAppearance: viscous liquidColor: dark greenSpecific Gravity (water=1): .89Boiling Point: greater than 330°C (625°F)Melting Point: not applicableSolubility in Water (by weight %): 0 at 20°CVolatile (by weight %): 0Evaporation Rate: 0Vapor Pressure (mm Hg at 20°C): 0Vapor Density (air=1): not volatilepH (as is): not applicableStability: Product is stable under normal conditionsViscosity SUS at 100°F: Greater than or = to 100

RECEIVED

OCT 15 1990

OWENS-CORNING FIBERGLAS
RPOD Memphis Plant

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FIRE AND EXPLOSION DATA---SECTION III

Special Fire Fighting Procedures:

Do not use water except as fog.

Unusual Fire and Explosion Hazards:

none

Flashpoint: (Method Used) Cleveland open cup greater than 200°C (390°F)

Flammable limits %: not applicable

Extinguishing agents:

Drychemical or Waterfog or CO₂ or Foam

Closed containers exposed to fire may be cooled with water.

HEALTH HAZARD DATA---SECTION IV

Permissible concentrations (air):

see COMMENTS section

Chronic effects of overexposure:

no data available

Acute toxicological properties:

no data available

Emergency First Aid Procedures:

Eyes: Immediately flush with large quantities of water for at least 15 minutes and call a physician.

Skin Contact: Remove excess with cloth or paper. Wash thoroughly with soap and water.

Inhalation: Remove victim to fresh air. Call a physician.

If Swallowed: Contact a physician immediately.

SPECIAL PROTECTION INFORMATION---SECTION V

Ventilation Type Required (Local, mechanical, special):

see COMMENTS section

Respiratory Protection (Specify type):

Use NIOSH/MSHA certified respirator with organic vapor cartridge if vapor concentration exceeds permissible exposure limit

Protective Gloves:

neoprene type

Eye Protection:

chemical safety goggles

Other Protective Equipment:

none

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HANDLING OF SPILLS OR LEAKS---SECTION VI

Procedures for Clean-Up:

Transfer bulk of mixture into another container. Absorb residue with an inert material such as earth, sand, or vermiculite. Sweep up and dispose as solid waste in accordance with local, state, and federal regulations.

Waste Disposal:

Dispose of in accordance with all applicable federal, state and local regulations.

SPECIAL PRECAUTIONS---SECTION VII

Precautions to be taken in handling and storage:

Do not handle or store at temperatures over
Maximum Storage Temperature: 38°C (100°F)

TRANSPORTATION DATA---SECTION VIII

D.O.T.: Not Regulated

Reportable Quantity: not applicable

Freight Classification: Petroleum Lubricating Oil

Special Transportation Notes:

none

COMMENTS

If used in applications where a mist may be generated, observe a TWA/PEL of 5 mg/m3 for mineral oil mist (OSHA and ACGIH).

*

STATE REGULATORY INFORMATION:

Pennsylvania Worker And Community Right To Know Act: This product contains the following ingredient(s).

Hydrocarbon oils CAS NO. 8020-83-5

The additive mixtures in this product have been declared a trade secret by the additive manufacturers.

Prepared by: Robert Kellam

Title: Group Supervisor, Lubricants Testing, Maintenance, and Safety

Original Date: 05/26/81 Sent to: _____

Revision Date: 04-05-90 _____

Supersedes : 08-11-89 _____

Date Sent : _____

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