---

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity
Product Name: DEGREASING COMPOUND
General or Generic ID: AUTOMOTIVE CHEMICAL

Company
Ashland
Ashland Distribution Co. &
Ashland Specialty Chemical Co.
P. O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:
1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

---

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
KEROSENE	8008-20-6	53.0- 63.0
DODECYLBENZENESULFONIC ACID, ISOPROPYLAMINE	26264-05-1	13.0- 23.0
AROMATIC PETROLEUM DISTILLATES	64742-94-5	10.0- 20.0
ALIPHATIC PETROLEUM DISTILLATES	64741-44-2	4.0- 14.0
NAPHTHALENE	91-20-3	1.5- 1.5

---

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause severe eye irritation and injure eye tissue.

Skin

Can cause skin irritation. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects), Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Continued on next page

Swallowing

Swallowing this material may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of dust, vapor, and/or fume is possible. Breathing this material may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: sweating, fever, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), lung irritation, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), pain in the abdomen, frequent or painful urination, confusion, blood abnormalities (breakage of red blood cells), kidney damage, lung damage.

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate preexisting disorders of these organs in humans: mild, reversible liver effects, cataracts, anemia, nasal damage, eye damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans, and may aggravate preexisting disorders of these organs: cataracts, eye damage.

Developmental Information

This material (or a component) causes harm to the fetus.

Cancer Information

This material (or a component) has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration. In a National Toxicology Program (NTP) study, lifetime inhalation exposure to naphthalene resulted in increases in tumors of the nose in rats. In a previous NTP study, lifetime exposure to naphthalene caused lung tumors in female mice. Male mice with the same exposure did not develop tumors. The relevance

Continued on next page

---

of this finding to humans is uncertain. Naphthalene is listed as carcinogenic by IARC (International Agency for Research on Cancer). This product (or a component) is a petroleum-derived material. Similar materials and certain compounds occurring naturally in petroleum oils have been shown to cause skin cancer in laboratory animals following repeated exposure without washing or removal.

Other Health Effects

Infants are more sensitive than adults to the toxic effects of naphthalene. Diapers or cloths stored with mothballs and used directly on infants have caused skin rashes and illness. Naphthalene vapors from clothing or blankets that had been stored in or near the infant's room have caused illness and death.

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

---

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Continued on next page

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. Inhalation or ingestion of high levels of this material (or a component) may cause a hemolytic reaction. Complications of acute intravascular hemolysis include anemia, leukocytosis, fever, hemoglobinuria, jaundice, renal insufficiency, and sometimes disturbances in liver function. Fats, for example, baby oil on the skin or ingested oil, facilitate absorption of naphthalene. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract skin, lung (for example, asthma-like conditions), kidneys, eye, Exposure to this material may aggravate any pre-existing condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Individuals with erythrocyte glucose-6-phosphate dehydrogenase deficiency are particularly susceptible to hemolytic agents and rapidly develop hemolytic anemia from ingestion or inhalation of this material (or a component).

---

5. FIRE FIGHTING MEASURES

Flash Point

140.0 - 160.0 F (60.0 - 71.1 C) TCC

Explosive Limit

(for component) Lower 1.0 Upper 7.0 %

Autoignition Temperature

No data

Continued on next page

Hazardous Products of Combustion

May form: ammonia, carbon dioxide and carbon monoxide, hydrogen sulfide, nitrogen oxides, sodium oxide, sulfur oxides.

Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

regular foam, dry chemical.

Fire Fighting Instructions

Water or foam may cause frothing which can be violent and possibly endanger the life of the firefighter. Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Health - 2, Flammability - 2, Reactivity - 0

---

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood. Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Persons not wearing proper personal protective equipment should be excluded from area of spill.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated

Continued on next page

absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occured. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five gallon pails and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred. Emergency eyewash fountains and safety showers should be available in the immediate vicinity of potential exposure. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

Storage

Do not store near extreme heat, open flame, or sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

Continued on next page

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (See Exposure Guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (consult your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines
Component

KEROSENE (8008-20-6)
ACGIH TLV 200.000 mg/m3 - TWA ((Skin))

DODECYLBENZENESULFONIC ACID, ISOPROPYLAMINE SALT (1:1) (26264-05-1)
No exposure limits established

AROMATIC PETROLEUM DISTILLATES (64742-94-5)
No exposure limits established

ALIPHATIC PETROLEUM DISTILLATES (64741-44-2)
ACGIH TLV 400.000 ppm - TWA

NAPHTHALENE (91-20-3)
OSHA VPEL 10.000 ppm - TWA
OSHA VPEL 15.000 ppm - STEL
ACGIH TLV 10.000 ppm - TWA
ACGIH TLV 15.000 ppm - STEL

Continued on next page

---

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point
(for component) > 300.0 F (148.8 C) @ 760.00 mmHg

Vapor Pressure
(for component) 5.000 mmHg @ 77.00 F

Specific Vapor Density
> 1.000 @ AIR=1

Specific Gravity
.820 - .860 @ 77.00 F

Liquid Density
7.220 lbs/gal @ 77.00 F
.840 kg/l @ 25.00 C

Percent Volatiles (Including Water)
No data

Evaporation Rate
SLOWER THAN ETHYL ETHER

Appearance
CLEAR

State
LIQUID

Physical Form
No data

Color
YELLOW

Odor
No data

Continued on next page

---

pH

No data

---

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: ammonia, carbon dioxide and carbon monoxide, hydrogen sulfide, nitrogen oxides, sulfur oxides.

Chemical Stability

Stable.

Incompatibility

heat, oxidizable sustances, strong alkalies, strong bases, strong oxidizing agents.

---

11. TOXICOLOGICAL INFORMATION

No data

---

12. ECOLOGICAL INFORMATION

No data

---

13. DISPOSAL CONSIDERATION

Waste Management Information

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

Continued on next page

---

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

Not Regulated

Container/Mode:

CASES/SURFACE - NO EXCEPTIONS

NOS Component:

KEROSENE

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs)	Component
6667	NAPHTHALENE

---

15. REGULATORY INFORMATION

US Federal Regulations

CERCLA RQ - 40 CFR 302.4

Component	Component
NAPHTHALENE	100

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate(X) Delayed(X) Fire(X) Reactive( ) Sudden Release of Pressure( )

SARA 313 Components - 40 CFR 372.65

Section 313 Component(s)	CAS Number
NAPHTHALENE	91-20-3

Continued on next page

International Regulations

Inventory Status

Not determined

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.

NAPHTHALENE

New Jersey RTK Label Information

KEROSENE	8008-20-6
GAS OIL	64741-44-2
NAPHTHALENE	91-20-3

Pennsylvania RTK Label Information

KEROSINE (PETROLEUM)	8008-20-6
NAPHTHALENE	91-20-3

---

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.