

Date Prepared: 01/26/98
 Date Printed: 09/17/99
 MSDS No: 999.0000589-007.005

MINERAL SPIRITS NONEXEMPT**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****Material Identity**

Product Name: MINERAL SPIRITS NONEXEMPT
 General or Generic ID: ALIPHATIC HYDROCARBON

Company

Ashland 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)
ALIPHATIC HYDROCARBONS (STODDARD TYPE)	8052-41-3	96.5-100.0
1,2,4-TRIMETHYLBENZENE	95-63-6	3.5

3. HAZARDS IDENTIFICATION**Potential Health Effects****Eye**

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. 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.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts 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 vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts 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: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), respiratory failure.

Continued on next page

3217

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 002
Date Prepared: 01/26/98
Date Printed: 09/17/99
MSDS No: 999.0000589-007.005

MINERAL SPIRITS NONEXEMPT

Target Organ Effects

This material (or a component) has been shown to lower activity of certain immune system cells in experimental animals. The significance of this effect with respect to human health is uncertain. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects.

Developmental Information

There are no data available for assessing risk to the fetus from maternal exposure to this material.

Cancer Information

Based on the available information, this material cannot be classified with regard to carcinogenicity. 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.

Other Health Effects

No data

Primary Route(s) of Entry

Inhalation, Skin contact, Eye contact.

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If 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.

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. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin lung (for example, asthma-like conditions), immune system.

3217

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 003
Date Prepared: 01/26/98
Date Printed: 09/17/99
MSDS No: 999.0000589-007.005

MINERAL SPIRITS NONEXEMPT

5. FIRE FIGHTING MEASURES

Flash Point

105.0 F (40.5 C)

Explosive Limit

(for product) Lower 1.0 Upper 6.0 %

Autoignition Temperature

535.0 F (279.4 C)

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames and 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, carbon dioxide, dry chemical.

Fire Fighting Instructions

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 - 0, Flammability - 2, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

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 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 occurred.

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. Hydrocarbon solvents are

Continued on next page

3217

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 004
Date Prepared: 01/26/98
Date Printed: 09/17/99
MSDS No: 999.0000589-007.005

MINERAL SPIRITS NONEXEMPT

basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

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 (see 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

ALIPHATIC HYDROCARBONS (STODDARD TYPE) (8052-41-3)
OSHA VPEL 100.000 ppm - TWA
ACGIH TLV 100.000 ppm - TWA

1,2,4-TRIMETHYLBENZENE (95-63-6)
No exposure limits established

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for product) 315.0 - 398.0 F (157.2 - 203.3 C) @ 760 mmHg

Continued on next page

3217

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 005
Date Prepared: 01/26/98
Date Printed: 09/17/99
MSDS No: 999.0000589-007.005

MINERAL SPIRITS NONEXEMPT

Vapor Pressure

(for product) 2.000 mmHg @ 68.00 F

Specific Vapor Density

4.900 @ AIR=1

Specific Gravity

.787 @ 60.00 F

Liquid Density

6.560 lbs/gal @ 60.00 F
.787 kg/l @ 16.00 C

Percent Volatiles

100.0 %

Volatile Organic Compounds (VOC)

100.000 %
787.000 g/l
6.560 lbs/gal

Evaporation Rate

.12 (BUTYL ACETATE)

Appearance

CLEAR LIQUID

State

LIQUID

Physical Form

HOMOGENEOUS SOLUTION

Color

CLEAR & COLORLESS

Odor

PETROLEUM NAPHTHA

pH

No data

Viscosity

1.0 cps @ 100.0 F

Freezing Point

1.0 F (-17.2 C)

Molecular Weight

140.0

Solubility in Water

NEGLIGIBLE

Bulk Density

.880 lbs/ft³

Continued on next page

3217

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 006
Date Prepared: 01/26/98
Date Printed: 09/17/99
MSDS No: 999.0000589-007.005

MINERAL SPIRITS NONEXEMPT

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: 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.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

PETROLEUM DISTILLATES, N.O.S., COMBUSTIBLE LIQUID, UN1268, III

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

NAPHTHA

RQ (Reportable Quantity) - 49 CFR 172.101

Not applicable

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

3217

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 007
Date Prepared: 01/26/98
Date Printed: 09/17/99
MSDS No: 999.0000589-007.005

MINERAL SPIRITS NONEXEMPT

CERCLA RQ - 40 CFR 302.4(a)
None listed

SARA 302 Components - 40 CFR 355 Appendix A
None

Section 311/312 Hazard Class - 40 CFR 370.2
Immediate() Delayed(X) Fire(X) Reactive() Sudden Release of Pressure()

SARA 313 Components - 40 CFR 372.65

Section 313 Component(s)	CAS Number	%
1,2,4-TRIMETHYLBENZENE	95-63-6	3.50

OSHA Process Safety Management 29 CFR 1910
None listed

EPA Accidental Release Prevention 40 CFR 68
None listed

International Regulations Inventory Status

DSL (CANADA) The intentional ingredients of this product are listed.
EINECS (EUROPE) The intentional ingredients of this product are listed.

State and Local Regulations California Proposition 65
None

New Jersey RTK Label Information

STODDARD SOLVENT	8052-41-3
PSEUDOCUMENE	95-63-6

Pennsylvania RTK Label Information

STODDARD SOLVENT	8052-41-3
PSEUDOCUMENE	95-63-6

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.