

MINERAL SPIRITS NON EXEMPT
20078

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone number	1-800-ASHLAND (1-800-274-5263)

Product name	MINERAL SPIRITS NON EXEMPT
Product code	20078
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, colourless

CAUTION! COMBUSTIBLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN, CAUSE IRRITATION AND BURNS. MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE IRRITATION AND BURNS.

Potential Health Effects

Routes of Exposure

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye Contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. May cause mild eye irritation. Symptoms include stinging, tearing, and redness. Additional symptoms of eye exposure may include: blurred vision

Skin Contact

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Additional symptoms of skin contact may include: skin blistering

MINERAL SPIRITS NON EXEMPT
20078

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.

Ingestion

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 are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), kidney, immune system, auditory system. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the face and neck, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, effects on memory, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, respiratory failure, coma

Target Organs

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. Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, kidney damage, effects on hearing

MINERAL SPIRITS NON EXEMPT
20078

Carcinogenicity

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 (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive Hazard

This material (or a component) may be harmful to the human fetus based on positive test results with laboratory animals.

Other Information

No data

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
MINERAL SPIRITS REGULAR (BASE DATA)	8052-41-3	>=80-<90%
TRIMETHYLBENZENE 1,2,4-	95-63-6	>=5-<10%
TRIMETHYLBENZENE, 1,3,5-	108-67-8	>=5-<10%
XYLENE	1330-20-7	>=1.5-<5%
ETHYL BENZENE	100-41-4	>=0.5-<1%

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. 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.

Ingestion

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

MINERAL SPIRITS NON EXEMPT
20078

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. If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to Physician

Hazards: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

dry chemical, foam, carbon dioxide (CO₂)

Hazardous Combustion Products

May form: carbon dioxide and carbon monoxide, various hydrocarbons

Precautions for Fire-Fighting

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Flammability Class for Flammable Liquids

Combustible Liquid Class II Combustible Liquid Class II

6. ACCIDENTAL RELEASE MEASURES

MINERAL SPIRITS NON EXEMPT
20078

Personal Precautions

For personal protection see section 8. 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.

Environmental Precautions

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.

Methods for Cleaning Up

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

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. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage

Keep containers closed when not in use. Store in a cool, dry, ventilated area, away from incompatible substances. Do not store near extreme heat, open flame, or sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

MINERAL SPIRITS REGULAR (BASE 8052-41-3
DATA)

ACGIH time weighted average 100 ppm

ASHLAND

SAFETY DATA SHEET

Page: 6
 Revision Date: 06/21/2007
 Print Date: 6/23/2007
 MSDS Number: R0000589
 Version: 2.0

MINERAL SPIRITS NON EXEMPT
 20078

NIOSH	Recommended exposure limit (REL):	350 mg/m3
NIOSH	Ceiling Limit Value and Time Period (if specified):	1,800-mg/m3
OSHA Z1	Permissible exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	2,900 mg/m3
OSHA Z1A	time weighted average	100 ppm
OSHA Z1A	time weighted average	525 mg/m3
US CA OEL	Time Weighted Average (TWA)	100 ppm
	Permissible Exposure Limit (PEL):	
US CA OEL	Time Weighted Average (TWA)	525 mg/m3
	Permissible Exposure Limit (PEL):	

TRIMETHYLBENZENE 1,2,4- **95-63-6**

NIOSH	Recommended exposure limit (REL):	25 ppm
NIOSH	Recommended exposure limit (REL):	125 mg/m3
ACGIH	time weighted average	25 ppm
OSHA Z1A	time weighted average	25 ppm
OSHA Z1A	time weighted average	125 mg/m3
US CA OEL	Time Weighted Average (TWA)	25 ppm
	Permissible Exposure Limit (PEL):	
US CA OEL	Time Weighted Average (TWA)	125 mg/m3
	Permissible Exposure Limit (PEL):	

TRIMETHYLBENZENE, 1,3,5- **108-67-8**

NIOSH	Recommended exposure limit (REL):	25 ppm
NIOSH	Recommended exposure limit (REL):	125 mg/m3
ACGIH	time weighted average	25 ppm
OSHA Z1A	time weighted average	25 ppm
OSHA Z1A	time weighted average	125 mg/m3

XYLENE **1330-20-7**

ACGIH	time weighted average	100 ppm
ACGIH	Short term exposure limit	150 ppm
OSHA Z1	Permissible exposure limit	100 ppm
OSHA Z1	Permissible exposure limit	435 mg/m3
NIOSH	Recommended exposure limit (REL):	100 ppm
NIOSH	Recommended exposure limit (REL):	435 mg/m3
NIOSH	Short term exposure limit	150 ppm
NIOSH	Short term exposure limit	655 mg/m3
NIOSH	Recommended exposure limit (REL):	100 ppm
NIOSH	Recommended exposure limit (REL):	435 mg/m3
NIOSH	Short term exposure limit	150 ppm

MINERAL SPIRITS NON EXEMPT
20078

NIOSH	Short term exposure limit	655 mg/m ³
NIOSH	Recommended exposure limit (REL):	100 ppm
NIOSH	Recommended exposure limit (REL):	435 mg/m ³
NIOSH	Short term exposure limit	150 ppm
NIOSH	Short term exposure limit	655 mg/m ³

General Advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure Controls

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

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 and Body Protection

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

Respiratory Protection

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	Liquid, liquid,
Colour	colourless
Odour	hydrocarbon-like

MINERAL SPIRITS NON EXEMPT
20078

Boiling point/range	315.00 °F / 157.22 °C
Melting point/range	-94 °F / -70 °C
pH	No data
Flash point	104.99 °F / 40.55 °C Tag closed cup
Evaporation rate	0.11 (N-Butyl Acetate)
Explosion limits	1.0 %(V) 6.0 %(V)
Vapour pressure	2 mmHg @ 68.00 °F / 20.00 °C
Vapour density	4.9
Density	0.7720 g/cm ³ @ 60.00 °F / 15.56 °C 6.65 lb/gal @ 61 °F / 16 °C
Solubility	negligible in water
Partition coefficient (n-octanol/water)	No data
Autoignition temperature	450 °F / 232 °C

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to Avoid

Avoid contact with:

Incompatible Products

Avoid contact with: strong oxidizing agents

Hazardous Decomposition Products

May form: carbon dioxide and carbon monoxide, various hydrocarbons

Hazardous Reactions

Product will not undergo hazardous polymerization.

Thermal Decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity

MINERAL SPIRITS NON EXEMPT
20078

MINERAL SPIRITS REGULAR (BASE DATA)	LD 50 Rat: 5 g/kg
TRIMETHYLBENZENE 1,2,4-	LD 50 Rat: 6 g/kg
TRIMETHYLBENZENE, 1,3,5-	LD 50 Rat: 5,000 mg/kg
XYLENE	LD 50 Rat: 4,300 mg/kg
ETHYL BENZENE	LD 50 Rat: 3,500 mg/kg

Acute Inhalation Toxicity

TRIMETHYLBENZENE 1,2,4-	LC 50 Rat: 18 g/m ³ , 4 h
ETHYL BENZENE	LC Lo Rat: 4000 ppm, 4 h

Acute Dermal Toxicity

MINERAL SPIRITS REGULAR (BASE DATA)	LD 50 Rabbit: 3 g/kg
XYLENE	LD 50 Rabbit: 2,000 mg/kg
ETHYL BENZENE	LD 50 Rabbit: 15,433 mg/kg

12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental Fate and Pathways

No data

MINERAL SPIRITS NON EXEMPT
20078

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

IMDG:

UN1268, PETROLEUM DISTILLATES, N.O.S. 3, III

IATA_P:

UN1268, Petroleum distillates, n.o.s. 3, III

IATA_C:

UN1268, Petroleum distillates, n.o.s. 3, III

CFR_ROAD:

UN1268, Petroleum distillates, n.o.s. (Aliphatic Petroleum Distillates,) 3, III

CFR_RAIL:

UN1268, Petroleum distillates, n.o.s. (Aliphatic Petroleum Distillates,) 3, III

CFR_INWTR:

UN1268, Petroleum distillates, n.o.s. (Aliphatic Petroleum Distillates,) 3, III

IMDG_INWTR:

UN1268, PETROLEUM DISTILLATES, N.O.S. 3, III

IMDG_ROAD:

UN1268, PETROLEUM DISTILLATES, N.O.S. 3, III

IMDG_RAIL:

UN1268, PETROLEUM DISTILLATES, N.O.S. 3, III

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer.

ASHLAND

SAFETY DATA SHEET

Page: 11
Revision Date: 06/21/2007
Print Date: 6/23/2007
MSDS Number: R0000589
Version: 2.0

MINERAL SPIRITS NON EXEMPT
20078

BENZENE
ETHYL BENZENE

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

BENZENE
TOLUENE

Additional Regulations

US. OSHA Hazard Communication Standard: On One of the Floor Lists of the OSHA HCS (29 CFR 1910.1200).

US. High Production Volume Chemicals

US. TSCA IUR 2006, Partially Exempt Petroleum Process Streams (40 CFR 710.46(b)(1))

OECD. Program to investigate the potential hazards of high production volume further work.

SARA Hazard Classification Fire Hazard
 Acute Health Hazard
 Chronic Health Hazard

SARA 313 Component(s)

TRIMETHYLBENZENE	95-63-6	6%
1,2,4-		
XYLENE	1330-20-7	2.31%
ETHYL BENZENE	100-41-4	0.66%

OSHA Hazards

Combustible Liquid
Mild skin
Mild eye

	Health	Flammability	Reactivity	Other
HMIS	1	2	0	
NFPA	0	2	0	

16. OTHER INFORMATION

ASHLAND
SAFETY DATA SHEET

Page: 12
Revision Date: 06/21/2007
Print Date: 6/23/2007
MSDS Number: R0000589
Version: 2.0

MINERAL SPIRITS NON EXEMPT
20078

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. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).