

MATERIAL SAFETY DATA SHEET

Revision 1
Prepared 2007-06-01

Section 1 - Chemical Product and Company Information

Product Name ArmorChem 1500 Gray Universal Primer Product Code: 41X-361

TradeName/

Manufactured by:

IN CASE OF EMERGENCY:

Chemcoat Inc.
P.O. Box 188
2790 Canfield Lane
Motoursville, PA 17754

Chem-tel
800-255-3924

Chemcoat, Inc.
800-326-9471

Section 2 - Composition / Information on Ingredients

<u>Chemical Name / CAS No</u>	<u>OSHA Exposure Limits</u>	<u>ACGIH Exposure Limits</u>	<u>Other Exposure Limits</u>
Xylenes (o-,m-,p- isomers) 1330-20-7 16.62 percent	The OSHA PELTWA, NIOSH TWA, DFG MAK, HSE TWA, and the ACGIH TWA value is 100 ppm (435 mg/m3) for all isomers.	The OSHA PELTWA, NIOSH TWA, DFG MAK, HSE TWA, and the ACGIH TWA value is 100 ppm (435 mg/m3) for all isomers. The NIOSH, ACGIH, and HSE STEL value is 150 ppm (655 mg/m3).	The notation "skin" is added to indicate the possibility of cutaneous absorption. The NIOSH IDLH (all isomers) = 900 ppm.
Ethylbenzene 100-41-4 4.99 percent	The OSHA PEL is 100 ppm (435 mg/m3); there is no STEL.	The DFG MAK and the HSE TWA and the ACGIH TWA value is 100 ppm (435 mg/m3) and the STEL is 125 ppm (545 mg/m3).	The NIOSH IDLH level is 800 ppm . Several states have set guidelines or standards for ethylbenzene in ambient air ranging from 0.12 mg/m3 (Massachusetts) to 1.45 mg/m3 (New York) to 4.35 mg/m3 (Florida, South Carolina) to 4.35 – 5.45 mg/m3 (North Dakota) to 7.25 mg/m3 (Virginia) to 8.7 mg/m3 (Connecticut) to 10.357 mg/m3 (Nevada).
Stoddard Solvent (1) 8052-41-3 2.13 percent	The OSHA TWA is 500 ppm (2,900 mg/m3).	ACGIH recommends a TWA of 100 ppm (525 mg/m3).	NIOSH recommends a TWA 350 mg/m3 and a ceiling of 1,800 mg/m3) not to be exceeded during any 15 minute work period.

Carbon Black
1333-86-4
0.201 percent

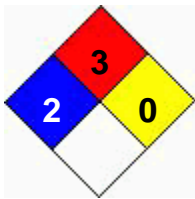
The OSHA legal limit and
ACGIH value is 3.5 mg/m³
TWA.

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NIOSH recommends that exposure to carbon black (as an occupational carcinogen) be limited to the lowest feasible concentrations. Also, NIOSH recommended airborne exposure limit is 0.1 mg (PHA)/m³. The NIOSH IDLH is 1,750 mg/m³. In addition, several states have set guidelines or standards for carbon black in ambient air ranging from 117 µg/m³ (New York) to 35 µg/m³ (North Dakota) to 50 µg/m³ (Virginia) to 70 µg/m³ (Connecticut) to 83 µg/m³ (Nevada).

(1) NIOSH recommends a TWA 350 mg/m³ and a ceiling of 1,800 mg/m³ not to be exceeded during any 15 minute work period. The NIOSH IDLH level is 20,000 mg/m³. Several states have set guidelines or standards for Stoddard solvent in ambient air ranging from 5.

Section 3 - Hazards Identification



HMIS Rating: 2 - 3 - 0

Routes of Entry:

Inhalation Skin Contact Eye Contact Ingestion

Exposure to this material may effect the following organs:

Blood Eyes Kidneys Liver Lungs Nervous System Skin

Effects of Overexposure, Ethylbenzene:

Short Term Exposure Ethyl benzene irritates the eyes, skin, and respiratory tract. Exposure to high concentrations can cause dizziness, lightheadedness and unconsciousness. Very high exposures (above the OEL) can cause difficult breathing, narcosis, coma, and even death. Swallowing the liquid may cause aspiration into the lungs, resulting in chemical pneumonitis. May affect the central nervous system. Concentration of 200 ppm can cause irritation.

Long Term Exposure Repeated or prolonged exposure to the skin may cause drying, scaling and blistering. May cause kidney disease, liver disease, chronic respiratory disease, skin disease, as follows: EB is not nephrotoxic. Concern is expressed because the kidney is the primary route of excretion of EB and its metabolites. EB is not hepatotoxic. Since EB is metabolized by the liver, concern is expressed for these tissues. Exacerbation of pulmonary pathology might occur following exposure to EB. Individuals with impaired pulmonary function might be at risk. EB is a defating agent and may cause dermatitis following prolonged exposure. Individuals with preexisting skin problems may be more sensitive to EB. There is limited evidence that EB may damage the developing fetus, and may cause

Effects of Overexposure, Ethylbenzene:
mutations.

Effects of Overexposure, Xylenes (o-,m-,p- isomers):

Short Term Exposure Inhalation: Exposure to vapor can be irritation to the nose and throat. Inhalation of vapor at concentrations above 200 ppm or 3 — 5 minutes can lead to xylene intoxication. Symptoms include headache, dizziness, nausea and vomiting. If exposure should continue, central nervous system depression characterized by shallow breathing and weak pulse can occur. Levels of 230 ppm for 15 minutes may cause lightheadedness without loss of equilibrium. Reversible liver and kidney damage in man has followed exposure to sudden high concentrations of vapor. Such high levels may also give rise to lung congestion. Exposure to extremely high concentrations (10,000 ppm or more) of xylene vapors can lead to a strong narcotic effect with symptoms of slurred speech, stupor fatigue, confusion, unconsciousness, coma, and possible death.

Long Term Exposure Inhalation of xylene vapor and skin contact with liquid are the two most probable routes of long term exposure. Symptoms of inhalation are dizziness, headache and nausea. Long term exposure has been associated with liver and kidney damage, intestinal tract disturbances and central nervous system depression. Prolonged contact with skin can lead to irritation, dryness and cracking. Repeated exposure can cause poor memory, difficulty in concentration, and other brain effects. It can also cause damage to the eye surface.

Effects of Overexposure, Carbon Black:

Short Term Exposure Inhalation may cause irritation to respiratory tract. Skin contact may cause irritation. Eye contact may cause irritation.

Long Term Exposure Exposure to levels well above 3.5 mg/m³ for several months may result in damage to the skin and nails, temporary or permanent damage to the lungs and breathing passages, and adversely affect the heart. Carbon Black containing PAH greater than 0.1% should be considered a suspect carcinogen. Lungs may be affected by repeated or prolonged exposure at very high concentrations: Some Carbon blacks may contain compounds which are carcinogenic and as organic extracts of these have been classified as possibly carcinogenic to humans, special care should be taken to avoid exposure to such extracts. Lung effects remain controversial and may be due to contaminants. It is probable that minor effects reported are non-specific effects associated with exposure to nuisance dusts in general. Polyaromatic hydrocarbons (PAH) are reportedly present in some carbon blacks. Depending on the process of manufacture, there are variations in their chemical compositions.

Effects of Overexposure, Stoddard Solvent:

Short Term Exposure Inhalation: Causes irritation of the eyes and respiratory tract. Exposure to levels above 2,400 mg/m³ may cause headache, dizziness and nose and throat irritation. More severe exposures may cause nausea and vomiting, a feeling of intoxication, weakness, muscle twitches and in extreme cases convulsions, unconsciousness and death.

Long Term Exposure Prolonged or repeated contact with liquid may cause defatting of the skin with drying, irritation, and skin ulcers. Exposure to vapor may cause eye, nose and throat irritation, fatigue, headaches, anemia, jaundice, and damage to the liver

Effects of Overexposure, Stoddard Solvent:

and bone marrow. In animals: kidney damage. Repeated exposure may cause a rare reaction in some people that destroys blood cells (aplastic anemia). This can be fatal. Many petroleum-based solvents have been shown to cause brain and/or nerve damage. Effects may include reduced memory and concentration, personality changes, fatigue, sleep disturbances, reduced coordination, effects on the autonomic nerves and/or nerves to the limbs.

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA, or ACGIH.

Carbon Black: (ACGIH)

Section 4 - First Aid Measures

INHALATION - Move person to fresh air. If breathing has stopped, administer artificial respiration. Seek medical attention!

EYE CONTACT - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. Have a physician examine the eyes.

SKIN CONTACT - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water.

INGESTION - Do not induce vomiting. This may cause chemical pneumonitis and pulmonary edema. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. Seek immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: 27 C (80 F)

LEL: 0.6 %

UEL: 8.0 %

Extinguishing Media: Use carbon dioxide (CO₂), foam, dry chemical, or water spray/water fog extinguishing system.

Unusual Fire and Explosion Hazards: Vapors may travel considerable distance by air and become ignited by ignition sources.

Hazardous Combustion Products: Oxides of carbon

Fire Fighting Instructions: Full protective equipment including self contained breathing apparatus should be used.

Fire Equipment: Water spray may not be effective, use fog nozzles

Section 6 - Accidental Release Measures

Spill and Leak Procedure: Eliminate all ignition sources. Ventilate the area. Use appropriate respirator and protective clothing.

Small Spills: Contain spill areas with dikes. Recover spilled material into containers. Absorb remainder with absorbent material.

Large Spills: If small spill measures do not contain the spill, notify local authorities and/or the fire department.

Section 7 - Handling and Storage

Handling: Avoid prolonged breathing or contact with product. Keep containers closed when not in use. Do not cut, drill, grind, or weld near containers even when empty. Use non-sparking tools when working around this material.

Storage Requirements: Keep containers closed when not in use. Keep away from excessive heat, open flames, or sparks.

Regulatory Requirements: Consult national, state and local environmental laws.

Section 8 - Exposure Controls / Personal Protection

Ventilation: Exhaust as required to keep exposure below Threshold Limit Values

Protective Gear: If ventilation equipment cannot control exposures below the TLV's, wear a properly fitted organic/particulate NIOSH/MSHA approved respirator. Wear rubber or neoprene protective gloves for repeated or prolonged skin contact. Wear safety glasses or face shield for eye protection.

Section 9 - Physical and Chemical Properties

Appearance	Liquid
Odor	
Physical State	Liquid
Vapor Density	Heavier than air
Vapor Pressure	9 mm Hg @ 14C
Evaporation Rate	Faster than ether
Boiling Range	136 to 202 C
% Volume Volatile	43.41
Specific Gravity (SG)	1.515
Lbs VOC/Gallon Solids	5.5
Lbs/Gal VOC Less Exempt Less water	3.12

Section 10 - Stability and Reactivity

Stability:

Stable

Incompatibility: heat or flames, strong acids or bases.

Strong oxidizing agents
Strong oxidizers

Hazardous Decomposition: Oxides of carbon and nitrogen.

Oxides of carbon

Section 11 - Toxicological Information

Xylenes (o-.m-.p- isomers)

LC 50: Inhalation- 26800 ppm

LD 50: Skin- 2000 mg/kg : Ingestion- 50 g/kg

Ethylbenzene

LC 50: IHL-GPG LCLO 10000 ppm

LD 50: ORL-RAT LD50 3500 mg kg-1 : SKN-RBT LD50 17800 mg kg-1

Stoddard Solvent

LC 50: No information found

LD 50: No information found

Carbon Black

LD 50: oral: >8000 mg/kg

Section 12 - Ecological Information

Ecotoxicity: Protect environment from spills and releases.

Section 13 - Disposal Considerations

Disposal: As the US EPA, state, local or other regulatory agency may have jurisdiction over the disposal of your facility's waste, it is incumbent on you, to learn and satisfy all the regulations which effect you. Dispose of in accordance to government regulations.

Section 14 - Transport Information

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>HazardClass</u>
DOT	Paint *- Flammable Liquid	UN-1263	III	Flamm Liq*

Section 15 - Regulatory Information

Additional regulatory listings where applicable

SARA Section 313 Emission Reporting

1330-20-7 Xylenes (o-,m-,p- isomers) 16.62 percent
100-41-4 Ethylbenzene 4.99 percent
67-56-1 Methyl Alcohol 0.06 percent
95-63-6 1,2,4-Trimethylbenzene 0.05 percent

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

Section 16 - Other Information

Every effort has been made to ensure that the safety information on this sheet is accurate, but because Chemcoat, Inc. has no control over the condition under which the product will be used, liability is limited exclusively to replacement or refund of the purchased price of this product. Except as stated herein, there are NO EXPRESS OR IMPLIED WARRANTIES INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Chemcoat, Inc. assumes no liability for injury or incidental or consequential damages arising out of the storage and handling or use of this product.