MATERIAL SAFETY DATA SHEET

ZOLATONE 20, APOLLO GRAY

PRODUCT NAME: ZOLATONE 20, APOLLO GRAY
PRODUCT CODE: ZT-20-11
HMIS CODES: H F R P 2* 3 0 G

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED BY: ZOLATONE AIM
DIVISION OF ADVANCED REFINISH TECHNOLOGIES
ADDRESS: 850 LADD ROAD, BLDG. E
WALLED LAKE, MICHIGAN 48390
EMERGENCY PHONE: (800) 424-9300 DATE PRINTED: 11/5/2010
INFORMATION PHONE: (800) 810-2785 PREPARER NAME: MSDS COORDINATOR

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

1 ALIPHATIC PETROLEUM DISTILLATE
CAS# 64742-89-8
ALIPHATIC PETROLEUM DISTILLATES
PCT BY WT: 6.0000
LEL .90
EXPOSURE LIMIT:
ACGIH TLV-TWA 300 ppm
ACGIH TLV-STEL NO INFO
LD50(ORAL) 5840 mg/kg
LD50(DERMAL) 2920 mg/kg
LC50 10000 mg/m3
OTHER LIMITS: EINECS 265-192-2

2 2-BUTOXYETHYL ACETATE
CAS# 112-07-2
2-BUTOXYETHYL ACETATE
PCT BY WT: 4.0000
LEL .90
EXPOSURE LIMIT:
ACGIH TLV-TWA NO INFO
ACGIH TLV-STEL NO INFO
OTHER LIMITS: EINECS 203-07-2

3 N-BUTYL ACETATE
CAS# 123-86-4
N-BUTYL ACETATE
PCT BY WT: 5.0000
LEL 1.40
EXPOSURE LIMIT:
ACGIH TLV-TWA 150 ppm
ACGIH TLV-STEL 200 ppm
OSHA PEL-TWA 150 ppm
COMPANY N.E.
OTHER LIMITS: EINECS 204-658-1

4 ISOBUTYL ISOBUTYRATE
CAS# 97-85-8
2-Methylpropyl isobutyrate
PCT BY WT: 17.0000
LEL 1.00
EXPOSURE LIMIT:
ACGIH TLV-TWA  NOT EST.
ACGIH TLV-STEL  NOT EST.
OTHER LIMITS:  

EINECS 202-612-5

---

5 METHYL ISOBUTYL CARBINOL
CAS#  108-11-2
Methyl Amyl Alcohol
PCT BY WT:  3.0000  
LEL  1.00
EXPOSURE LIMIT:
ACGIH TLV-TWA  25 ppm
ACGIH TLV-STEL  40 ppm
OSHA PEL-TWA  25 ppm
COMPANY  N.E.
OTHER LIMITS:  

EINECS 203-551-7

---

6 NITROCELLULOSE
CAS#  9004-70-0
NITROCELLULOSE
PCT BY WT:  5.0000  
LEL  100.00
EXPOSURE LIMIT:
ACGIH TLV-TWA  NOT EST.
ACGIH TLV-STEL  NOT EST.

---

7 TALC
CAS#  14807-96-6
TALC
PCT BY WT:  3.0000
EXPOSURE LIMIT:
ACGIH TLV-TWA  2 MG/M3
ACGIH TLV-STEL  NO INFO
OSHA PEL-TWA  2 MG/M3
COMPANY  N.E.
OTHER LIMITS:  

EINECS 238-877-9

---

8 TITANIUM DIOXIDE
CAS#  13463-67-7
TITANIUM DIOXIDE
PCT BY WT:  6.0000
EXPOSURE LIMIT:
ACGIH TLV-TWA  10 mg/m3
ACGIH TLV-STEL  NO INFO
OSHA PEL-TWA  10 mg/m3
COMPANY  N.E.
LD50(ORAL)  > 24000 mg/kg (rat)
LC50  > 6820 mg/m3 (rat)
OTHER LIMITS:  

EINECS 236-675-5

---

9 WATER
CAS#  7732-18-5
WATER
PCT BY WT:  30.0000
EXPOSURE LIMIT:
ACGIH TLV-TWA  ** NOT HAZARDOUS **
OTHER LIMITS:  

EINECS 231-791-2

---

10 N-BUTYL ALCOHOL
CAS#  71-36-3
N-BUTYL ALCOHOL
PCT BY WT:  5.0000  VAPOR PRESSURE:  4.390 MMHG @ 68F  LEL  1.70
EXPOSURE LIMIT:
ACGIH TLV-TWA 50 ppm
ACGIH TLV-STE L NO INFO
OSHA PEL-TWA 50 ppm
COMPANY N.E.
OTHER LIMITS: EINECS 200-751-6

11 TOLUENE
CAS# 108-88-3
TOLUENE
PCT BY WT: 8.0000 VAPOR PRESSURE: 38.000 MMHG @ 68F LEL 1.40
EXPOSURE LIMIT:
ACGIH TLV-TWA 20 ppm
ACGIH TLV-STE L NO INFO
OSHA PEL-TWA 50 ppm
COMPANY N.E.
LD50(ORAL) 636 mg/kg (rat)
LD50(DERMAL) 14124 mg/kg (rabbit)
LC50 7523 mg/m3 (mouse)
OTHER LIMITS: Prop 65-Developmental-01/01/91 EINECS 203-625-9

This substance is classified as a hazardous air pollutant.
This product contains no reported carcinogens or suspected carcinogens.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
Harmful if swallowed.
Vapors irritating to eyes and respiratory tract.
Harmful if inhaled.
Harmful if absorbed through skin.
Causes eye irritation.
Causes skin irritation.
May cause allergic respiratory reaction.
Flammable liquid and vapor.
Vapors may cause flash fire or explosion.

EYE:
May cause severe eye irritation.

SKIN:
May cause skin irritation.
Prolonged contact with the skin can cause chemical burns.
Harmful if absorbed through the skin.
Skin contact may aggravate an existing dermatitis.

INHALATION:
High vapor concentrations may cause drowsiness.
Exposure to high concentrations of vapors may cause dizziness, breathing difficulty, headaches or respiratory irritation.
Extremely high concentrations may cause drowsiness, staggering, confusion, unconsciousness, coma or death.
Excessive inhalation of vapors can cause nasal and respiratory irritation.
Breathing high concentrations of vapors may cause anesthetic effects.
Liquid or vapor may be irritating to skin, eyes, throat or lungs.
Breathing of mist can cause irritation of nasal and respiratory passages. Intentional misuse by deliberately concentrating and inhaling the contents of this product can be harmful or fatal.
Respiratory symptoms associated with pre-existing lung disorders may be aggravated by exposure to material(s) in this product. Persons with pre-existing, non-specific bronchial hyperreactivity can respond to concentrations below the TLV with symptoms as well as an asthma attack.

INGESTION:
Moderately toxic. May cause stomach discomfort, nausea, vomiting, diarrhea, and narcosis.
Aspiration of material into the lungs if swallowed or if vomiting occurs can cause chemical pneumonitis which can be fatal.
May cause nausea, vomiting and diarrhea.

CHRONIC EFFECTS:
Chronic overexposure to a component or components in this material has been found to cause the following effects in laboratory animals:
- Kidney damage
- Lung damage
- Liver damage
- Spleen damage
- Brain damage

Chronic overexposure to a component or components in this material has been suggested as a cause of the following effects in humans:
- Liver damage

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Rats exposed to titanium dioxide dust at 250 mg/m³ developed lung cancer, however, such exposure levels are not attainable in the workplace with this material.

There is evidence that repeated long-term exposure to vapor concentrations greater than 50 ppm of n-butyl alcohol may result in some hearing loss.
Breathing air containing n-butyl acetate, which results from its use in aerosol applications, may cause delayed lung injury.
Product contains toluene which may be harmful to the fetus based on animal studies.
Repeated exposure to toluene has been associated with high frequency hearing loss in laboratory animals. The human consequences of this finding is uncertain.

SECTION 4 - FIRST AID MEASURES

EYE CONTACT:
Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.
Flush with large quantities of water for 15 minutes.

SKIN CONTACT:
Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.
Wash thoroughly with soap and water and seek medical attention if irritation persists. Remove contaminated clothing. Launder contaminated clothing before reuse.

INHALATION:
For inhalation overexposure move person to fresh air. If breathing stops, apply artificial respiration and seek medical attention.

INGESTION:
Since this product may contain materials which can cause lung damage if aspirated into the lungs, the decision whether to induce vomiting or not must be made by a physician after careful consideration of all materials ingested.

SECTION 5 - FIRE FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES OF THE PRODUCT:
Flashpoint: 45.0 °F
Explosion Level: Low (LEL) - .9
EXTINGUISHING MEDIA:
Use Dry Chemical, Carbon Dioxide or Chemical Foam.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT:
Keep containers tightly closed. Isolate from heat, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Product vapors are heavier than air and may travel a long distance to a source of ignition and flash back.
Full protective equipment including self-contained breathing apparatus to avoid inhalation of vapors should be used.
Water spray should not be used except to keep down vapors or cool closed containers to prevent build-up of pressure. If water is used, fog nozzles are preferred.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CLEAN-UP AND CONTAINMENT:
Remove all sources of ignition. Avoid heat, sparks, flames and anything which could cause fire. Ventilate area of spill and adjacent low lying areas. Avoid breathing solvent vapors. Remove with inert absorbent materials and non-sparking tools.
Use water spray to disperse vapors. Minimize breathing gases, vapor, fumes or decomposition products. Use self-contained breathing apparatus with full face piece operated in positive pressure mode as needed.

SECTION 7 - HANDLING AND STORAGE

HANDLING:
Wash hands thoroughly after handling.
This product contains chemical(s) which are listed on California's proposition 65 list. If the product is to be sold or used in California a clear and reasonable warning must be provided such as:

STORAGE:
Store in a cool dry area with ventilation suitable for storing materials shown in section 2.
Keep away from heat, sparks and flame.
Store in a cool place away from direct sunlight or any source of ignition. Do not store at temperatures above 120 degrees F.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS:
Sufficient ventilation, in volume and pattern, should be provided to keep air contamination below current applicable OSHA permissible exposure limit or ACGIH's TLV limit.

RESPIRATORY PROTECTION:
If workplace exposure limits are exceeded for any component(see section 2 for hazardous components and exposure limits), a NIOSH/OSHA approved respirator suitable for components listed is recommended.

SKIN PROTECTION:
Chemical resistant plastic or rubber gloves recommended for prolonged or repeated contact.

EYE PROTECTION:
Chemical goggles with side shields or face shield recommended if contact with the eyes is likely.

OTHER PROTECTIVE EQUIPMENT:
Appropriate impervious clothing is recommended if prolonged or repeated contact is likely.

HYGIENIC PRACTICES:
Wash hands before eating or smoking. Smoke in designated areas only.
Avoid prolonged or repeated contact with skin.
Avoid breathing vapors from heated material.
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure : 38.00 mm Hg @ 20 °C
Vapor Density : N/A
Boiling Range : Lower - 131.0 °F
                Higher - 377.6 °F
Specific Gravity : .989
Formula Weight per Volume : 8.2308 LB/GL
VOC (Calculated, LB/GAL) : 5.647
VOC (Calculated, GM/L) : 676.68
Percent Volatile by Weight : 78.1494
Percent Volatile by Volume : 86.0420
Evaporation Rate : 2.700 (n-Butyl Acetate = 1)
Viscosity : N/A

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID:
避接触 with heat, sparks, and open flame.

INCOMPATIBILITIES:
Strong oxidizing agents.

DECOMPOSITION:
Thermal decomposition may produce carbon dioxide, carbon monoxide, and
unidentifiable organic materials.

POLYMERIZATION:
No hazardous polymerization will occur under normal conditions.

STABILITY:
The product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

No specific information is available. Please refer to Section 2 and 3
for available information on exposure limits and hazards identification.

SECTION 12 - ECOLOGICAL INFORMATION

No specific ecological information is available for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:
Place in closed containers. Dispose of product in accordance with local,
county, state, and federal regulations.

SECTION 14 - TRANSPORT INFORMATION

Ground shipment of limited or excepted quantities of aerosols or liquid
paint in containers of 1 quart or less:
CONSUMER COMMODITY, ORM-D

Ground shipment of liquid paint in containers more than 1 quart:
PAINT, FLAMMABLE LIQUID, UN1263, CLASS 3, GROUP II
(Regulatory sources: DOT 49CFR 172.101)

Air shipment of limited or excepted quantities of aerosols or liquid paint
in containers of 1 quart or less:
CONSUMER COMMODITY, ID 8000, CLASS 9 MISCELLANEOUS LABEL
(Regulatory sources: IATA Quantity Exemptions - Table 2.8.4, 2.7.A,
2.7.5, Packaging Instruction: 910)
OR
AEROSOLS, FLAMMABLE, UN1950, CLASS 2.1 LABEL
(Regulatory sources: IATA Quantity Exemptions - Table 2.8.1, 2.8.4,
Packaging Instruction: Y203)
SECTION 15 - REGULATORY INFORMATION

SARA 313 INFORMATION:
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

2-BUTOXYETHYL ACETATE
CAS#  112-07-2  PCT BY WT:  3.8290

N-BUTYL ALCOHOL
CAS#  71-36-3  PCT BY WT:  4.7370

TOLUENE
CAS#  108-88-3  PCT BY WT:  8.4460

FEDERAL REGULATIONS:
TOXIC SUBSTANCES CONTROL ACT: The chemical substances in this product are listed on the TSCA Section 8 inventory.

STATE REGULATIONS:
This product contains chemical(s) which are listed on California's proposition 65 list. If the product is to be sold or used in California a clear and reasonable warning must be provided such as:
Warning! This product contains a chemical or chemicals known to the State of California to cause birth defects or other reproductive harm.

NEW JERSEY RIGHT-TO-KNOW
The following non-hazardous ingredients are among the top five components in this product
---------------------------------  CHEMICAL NAME  ---------------------------------  CAS NUMBER

PENNSYLVANIA RIGHT-TO-KNOW
The following non-hazardous ingredients are present in the product at greater than 3 %
---------------------------------  CHEMICAL NAME  ---------------------------------  CAS NUMBER

INTERNATIONAL REGULATIONS:
CANADA: The chemical substances in this product are listed on the Canadian Domestic Substances List.

SECTION 16 - OTHER INFORMATION

The information contained on this MSDS is believed to be reliable and accurate. Due to the changing nature of government information, it is impossible to guarantee the accuracy of the information contained herein. Since the conditions of handling and use are beyond our control, we make no guarantee of results and assume no liability for damages incurred by the use of this material. This information should not be regarded as legal advice or regulation. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations. For questions relating to specific aspects of the requirements and regulations consult the proper regulatory agency.

HMIS RATINGS:
HEALTH: 2    FLAMMABILITY: 3    REACTIVITY: 0    PERSONAL PROTECTION: G