SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
3220

PRODUCT NAME
MINWAX® Indoor/Outdoor HELMSMAN® Spar Urethane (350 V.O.C. Compliant), Clear Satin

MANUFACTURER’S NAME
MINWAX Company
10 Mountainview Road
Upper Saddle River, NJ 07458

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight   CAS Number   Ingredient                  Units   Vapor Pressure
---           -----          ---------------------------   -----   -------------------
11            64742-47-8  Light Aliphatic Hydrocarbon
              ACGIH TLV             100 PPM           1.27 mm
              OSHA PEL             100 PPM

18            64741-65-7  Mineral Spirits (Odorless)
              ACGIH TLV             100 PPM           1 mm
              OSHA PEL             100 PPM

11            98-56-6     p-Chlorobenzotri fluoride
              ACGIH TLV             Not Available
              OSHA PEL             Not Available

0.2           61789-51-3  Cobalt Naphthenate
              ACGIH TLV             Not Available
              OSHA PEL             Not Available

2             112926-00-8  Amorphous Precipitated Silica
              ACGIH TLV             10 mg/m3 as Dust
              OSHA PEL             6 mg/m3 as Dust

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:
• the liver
• the urinary system

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT  LEEL  UEL  FLAMMABILITY CLASSIFICATION
101°F TCC  0.9  10.5  Combustible, Flash above 99 and below 200°F

EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY
DOL Storage Class II

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Contents are COMBUSTIBLE. Keep away from heat and open flame.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally.
Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).
Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES
Wear gloves which are recommended by glove supplier for protection against materials in Section 2.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS
Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>PRODUCT WEIGHT</td>
<td>8.17 lb/gal</td>
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<tr>
<td>SPECIFIC GRAVITY</td>
<td>0.98</td>
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<tr>
<td>BOILING POINT</td>
<td>282 - 412 °F</td>
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<tr>
<td>MELTING POINT</td>
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<tr>
<td>VOLATILE VOLUME</td>
<td>47%</td>
</tr>
<tr>
<td>EVAPORATION RATE</td>
<td>Slower than ether</td>
</tr>
<tr>
<td>VAPOR DENSITY</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>0.98</td>
</tr>
<tr>
<td>VAPOR DENSITY</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER</td>
<td>Not Available</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>138 - 211 °C</td>
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<tr>
<td>MELTING POINT</td>
<td>Not Available</td>
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<tr>
<td>VOLATILE VOLUME</td>
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VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

<table>
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<tr>
<th>Value</th>
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<tr>
<td>2.77 lb/gal</td>
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<tr>
<td>2.54 lb/gal</td>
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</table>

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable
CONDITIONS TO AVOID
None known.

INCOMPATIBILITY
None known.

HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
Cobalt and cobalt compounds are classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is inadequate evidence in humans for its carcinogenicity.

TOXICOLOGY DATA

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient Name</th>
<th>LC50 RAT</th>
<th>LD50 RAT</th>
<th>4HR</th>
<th>Not Available</th>
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<tbody>
<tr>
<td>64742-47-8</td>
<td>Light Aliphatic Hydrocarbon</td>
<td></td>
<td></td>
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</tbody>
</table>

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD
Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)
May be Classed as a Combustible Liquid for U.S. Ground.
UN1263, PAINT, 3, PG III, (ERG#128)

Bulk Containers may be Shipped as:
UN1263, PAINT, 3, PG III, (ERG#128)

Canada (TDG)
May be Classed as a Combustible Liquid for Canadian Ground.
UN1263, PAINT, 3, PG III, (ERG#128)

IMO
Not Regulated for Transportation.

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, 3, PG III (38 C c.c.), EmS F-E, S-E

IATA/ICAO
UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>CHEMICAL/COMPOUND</th>
<th>% by WT</th>
<th>% Element</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cobalt Compound</td>
<td>0.2</td>
<td>0.01</td>
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</tbody>
</table>

CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.