MATERIAL SAFETY DATA SHEET

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
CM0843H81

PRODUCT NAME
JETGLO® EXPRESS Hardener, 85285, T1

MANUFACTURER’S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight | CAS Number | Ingredient | Units | Vapor Pressure |
---|---|---|---|---|
4 | 107-87-9 | Methyl n-Propyl Ketone | ACGIH TLV | 150 PPM STEL | 27.8 mm |
| | | | OSHA PEL | 200 PPM | |
| | | | OSHA PEL | 250 PPM STEL | |
20 | 110-43-0 | Methyl n-Amyl Ketone | ACGIH TLV | 50 PPM | 3.855 mm |
| | | | OSHA PEL | 100 PPM | |
11 | 141-78-6 | Ethyl Acetate | ACGIH TLV | 400 PPM | 86 mm |
| | | | OSHA PEL | 400 PPM | |
5 | 103-09-3 | 2-Ethylhexyl Acetate | ACGIH TLV | Not Available | 0.4 mm |
| | | | OSHA PEL | Not Available | |
5 | 108419-35-8 | Oxo-Tridecyl Acetate | ACGIH TLV | Not Available | 0.011 mm |
| | | | OSHA PEL | Not Available | |
0.1 | 822-06-0 | Hexamethylene Diisocyanate (max.) | ACGIH TLV | 0.005 PPM | 0.05 mm |
| | | | OSHA PEL | Not Available | |
55 | 3779-63-3 | Hexamethylene Diisocyanate Polymer | ACGIH TLV | Not Available | |
| | | | OSHA PEL | Not Available | |

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
**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. Remove contaminated clothing and launder before re-use.

**INHALATION:** If any breathing problems occur during use, LEAVE THE AREA and get fresh air. If problems remain or occur later, IMMEDIATELY get medical attention.

**INGESTION:** Do not induce vomiting. Get medical attention immediately.

**SECTION 5 — FIRE FIGHTING MEASURES**

**FLASH POINT**  24 °F PMCC

**LEL**  0.8

**UEL**  10.7

**FLAMMABILITY CLASSIFICATION**  RED LABEL -- Flammable, Flash below 100 °F (38 °C)

**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.
- All personnel in the area should be protected as in Section 8.
- Cover spill with absorbent material. Deactivate spilled material with a 10% ammonium hydroxide solution (household ammonia). After 10 minutes, collect in open containers and add more ammonia. Cover loosely. Wash spill area with soap and water.

**SECTION 7 — HANDLING AND STORAGE**

**STORAGE CATEGORY**
- DOL Storage Class IB

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**
- Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.
- During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
- 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**
- NO PERSON SHOULD USE THIS PRODUCT, OR BE IN THE AREA WHERE IT IS BEING USED, IF THEY HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS OR IF THEY EVER HAD A REACTION TO ISOCYANATES.
- 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).
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
Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturer’s directions for use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THIS PRODUCT IS BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS.
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
To prevent skin contact, wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

OTHER PROTECTIVE EQUIPMENT
Use barrier cream on exposed skin.

OTHER PRECAUTIONS
This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.
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>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT WEIGHT</td>
<td>8.24 lb/gal</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>0.99</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>163 - 545 °F</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>Not Available</td>
</tr>
<tr>
<td>VOLATILE VOLUME</td>
<td>52%</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>SOLUBILITY IN WATER</td>
<td>Not Available</td>
</tr>
<tr>
<td>VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)</td>
<td>3.69 lb/gal 442 g/l Less Water and Federally Exempt Solvents</td>
</tr>
<tr>
<td></td>
<td>3.69 lb/gal 442 g/l Emitted VOC</td>
</tr>
</tbody>
</table>

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID
None known.

INCOMPATIBILITY
Contamination with Water, Alcohols, Amines and other compounds which react with isocyanates, may result in dangerous pressure in, and possible bursting of, closed containers.

HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.
Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
TOXICOLOGY DATA

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient Name</th>
<th>LC50 RAT</th>
<th>LD50 RAT</th>
<th>% by WT</th>
<th>% Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-87-9</td>
<td>Methyl n-Propyl Ketone</td>
<td>Not Available</td>
<td>1600 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110-43-0</td>
<td>Methyl n-Amyl Ketone</td>
<td>Not Available</td>
<td>1670 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>141-78-6</td>
<td>Ethyl Acetate</td>
<td>Not Available</td>
<td>5600 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-09-3</td>
<td>2-Ethylhexyl Acetate</td>
<td>Not Available</td>
<td>Not Available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>108419-35-8</td>
<td>Oxo-Tridecyl Acetate</td>
<td>Not Available</td>
<td>Not Available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>822-06-0</td>
<td>Hexamethylene Diisocyanate (max.)</td>
<td>Not Available</td>
<td>738 mg/kg</td>
<td></td>
<td></td>
</tr>
</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)
5 Liters (1.3 Gallons) and Less may be Classified as LTD. QTY. OR ORM-D
Larger Containers are Regulated as:
UN1263, PAINT RELATED MATERIAL, 3, PG II, (ERG#128)

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

Canada (TDG)
UN1263, PAINT RELATED MATERIAL, CLASS 3, PG II, (ERG#128)

IMO
5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT RELATED MATERIAL, CLASS 3, PG II, (-4 C c.c.), EmS F-E, S-E

IATA/ICAO
UN1263, PAINT RELATED MATERIAL, 3, PG II

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION
No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

CALIFORNIA PROPOSITION 65
WARNING: This product contains a chemical known to the State of California to cause cancer.

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.