

# MATERIAL SAFETY DATA SHEET

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DATE OF PREPARATION  
 Apr 24, 2013

**SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NUMBER**

Y-, YM-, Z-, ZM-

**PRODUCT NAME**

JET GLO Express™ Polyester Urethane Topcoat, All Colors

**MANUFACTURER'S NAME**

THE SHERWIN-WILLIAMS COMPANY  
 101 Prospect Avenue N.W.  
 Cleveland, OH 44115

**Telephone Numbers and Websites**

<b>Product Information</b>	www.sherwin-williams.com/aerospace
<b>Regulatory Information</b>	(216) 566-2902
<b>Medical Emergency</b>	(216) 566-2917
<b>Transportation Emergency*</b>	(800) 424-9300
<small>*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)</small>	

**SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS**

% by Weight	CAS Number	Ingredient	Units	Japor Pressure
0.1!*\$	100-41-4	<b>Ethylbenzene</b> ACGIH TLV OSHA PEL OSHA PEL	20 PPM 100 PPM 125 PPM STEL	7.1 mm
\$)!1	1330-20-7	<b>Xylene</b> ACGIH TLV ACGIH TLV OSHA PEL OSHA PEL	100 PPM 150 PPM STEL 100 PPM 150 PPM STEL	5.9 mm
!\$!(\$	110-43-0	<b>Methyl n-Amyl Ketone</b> ACGIH TLV OSHA PEL	50 PPM 100 PPM	3.9 mm
\$)!%	112926-00-8	<b>Amorphous Precipitated Silica</b> ACGIH TLV OSHA PEL	10 mg/m3 as Dust 6 mg/m3 as Dust	
!\$!4)	13463-67-7	<b>Titanium Dioxide</b> ACGIH TLV OSHA PEL OSHA PEL	10 mg/m3 as Dust 10 mg/m3 Total Dust 5 mg/m3 Respirable Fraction	
!0!'	1333-86-4	<b>Carbon Black</b> ACGIH TLV OSHA PEL	3.5 mg/m3 3.5 mg/m3	

**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.

**HMIS Codes**

<b>Health</b>	2*
<b>Flammability</b>	2
<b>Reactivity</b>	0

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
- the reproductive 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**

May cause allergic respiratory and/or skin reaction in susceptible persons or sensitization. This effect may be delayed several hours after exposure.

Persons sensitive to isocyanates will experience increased allergic reaction on repeated exposure.

**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. Remove contaminated clothing and laundry 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**

<b>FLASH POINT</b> 100 - 105 °F TCC	<b>LEL</b> 1.0	<b>UEL</b> 7.9	<b>FLAMMABILITY CLASSIFICATION</b> Combustible, Flash above 99 and below 200 °F
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**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**

**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 manufacturers 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**

<b>PRODUCT WEIGHT</b>	8.5 - 13 lb/gal	1000 - 1600 g/l
<b>SPECIFIC GRAVITY</b>	1.0 - 1.6	
<b>BOILING POINT</b>	281 - 308 °F	138 - 153 °C
<b>MELTING POINT</b>	Not Available	
<b>VOLATILE VOLUME</b>	30 - 35%	
<b>EVAPORATION RATE</b>	Slower than ether	
<b>VAPOR DENSITY</b>	Heavier than air	
<b>SOLUBILITY IN WATER</b>	Not Available	
<b>VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)</b>		
	< 3.2 lb/gal	<380 g/l Less Water and Federally Exempt Solvents
	<3.2 lb/gal	<380 g/l Emitted VOC

**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.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

Carbon Black is classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is insufficient evidence in humans for its carcinogenicity.

**TOXICOLOGY DATA**

CAS No.	Ingredient Name			
100-41-4	Ethylbenzene	LC50 RAT LD50 RAT	4HR	Not Available 3500 mg/kg
1330-20-7	Xylene	LC50 RAT LD50 RAT	4HR	5000 ppm 4300 mg/kg
110-43-0	Methyl n-Amyl Ketone	LC50 RAT LD50 RAT	4HR	Not Available 1670 mg/kg
112926-00-8	Amorphous Precipitated Silica	LC50 RAT LD50 RAT	4HR	Not Available Not Available
13463-67-7	Titanium Dioxide	LC50 RAT LD50 RAT	4HR	Not Available Not Available
1333-86-4	Carbon Black	LC50 RAT LD50 RAT	4HR	Not Available Not Available

**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)**

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

**Canada (TDG)**

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

**IMO**

UN1263, PAINT, CLASS 3, PG III, (39 C c.c.), EmS F-E, ADR (D/E). 5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.

**IATA/ICAO**

UN1263, PAINT, 3, PG III

**SECTION 15 — REGULATORY INFORMATION****SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION**

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	maximum 0.2	
1330-20-7	Xylene	maximum 1	

**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.