



SOUTH WESTERN DIVISION CC

KEM-AQUA® 300

WATER REDUCIBLE FAST DRY PRIMER

GRAY E61AV0500

PRODUCT DESCRIPTION

KEM-AQUA® 300 WATER REDUCIBLE PRIMER is a uniquely formulated primer that air dries quickly and improves the performance of Kem Aqua® 300 Gloss Enamel.

Advantages

- Very low VOC - under 2.3 lbs./gal. less water.
- Volatile organic emissions are less than 1.0 lbs./gal.
- Fast air dry - much faster than water reducible alkyds.
- This primer can be topcoated with most water reducible and many solvent borne topcoats.
- Free of lead and chromate hazards.
- Reduced fire hazard - lower insurance rates.
- Use water for reduction and clean-up.
- Package stability better than water reducible alkyds.

CHARACTERISTICS

Gloss:	5 max. @ 60° angle
Volume Solids:	36.1 +/- 1%
Weight solids:	49.0 +/- 1%
Package Viscosity:	40 - 55 sec. #4 Ford
Spreading Rate:	579 sq. ft./gal. 1 mil dry film, no application loss
PH:	8.5 - 9.5
Package life:	1 year (Protect from Freezing)
Drying:	(Air dry at 77° F. 50% R.H. at 1.0 mils DFT)
	To Touch: 10-15 minutes
	To Handle: 15-20 minutes

NOTE: Water Reducible Finishes dry partially by water evaporation. Best drying occurs at relative humidity of 50% or lower and temperatures of 77° F (23°C) or higher. Good air movement is essential for proper dry.

Force Dry: 10 - 20 minutes at 140°-180° F.

Flash Point: 499° F Penske-Martens CC.

Air Quality Data:

Non-Photochemically reactive. Volatile Organic compounds(VOC) - as packaged- <1.5 lbs./gal. (250 gms./liter) less water. Volatile organic emissions are less than 1.0 lb/gal. Free of lead and chromate hazards as packaged.

Salt Spray Resistance:

The Test below was conducted on Q-Steel at 1.25 mils dry film after 21 days air dry. 5% Salt Spray 125 hours - No Failure

Product limitations:

1. Store inside - Protect from freezing.

SPECIFICATIONS

2. Higher humidity will increase dry time.
3. Do not apply below 50° F.
4. Storage containers should be Stainless Steel, lined steel or plastic.

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Surface Preparation:

Iron and Steel: Substrate must be clean free of dirt, grease, rust, and other contaminants. To improve coating performance properties a surface chemical treatment, such as Iron or Zinc phosphate is recommended. Refer to Metal Preparation brochure CC-T1.

Aluminum and Galvanized Steel (Untreated):

Prime with Kem Aqua® Wash Primer E61G520 following data sheet instructions for use.

Application:

Recommended film thickness.
Wet 3.0 - 4.0 mils
Dry 1.0 - 1.4 mils

Conventional Spray:

Reduce 0-10% with water to 35-45 seconds Zahn #2. Use 40-45 psi atomizing pressure and 5-10 psi fluid pressure.

Airless Spray:

No reduction needed. Use .011-.013 tip and 1700-2300 psi fluid pressure.

HVLP:

Reduce 0-5% with water to 45-55 seconds Zahn #2. Use 70-80 psi atomizing air (Under 10 psi nozzle pressure) and 6-10 psi fluid pressure with Binks MACH I or similar.

Air Assisted Airless: Reduce 0-5% with water to 45-55 seconds Zahn #2. Spray at 800-900 psi fluid pressure and 10-15 psi atomizing pressure with an .011 finishing tip.

NOTE:

Water reducible enamels generally are applied at higher viscosities than solvent based enamels. They do apply and atomize easily at higher viscosity's.

Clean-up:

Use water when paint is wet. When dry, use a 1:1 blend of water and Butyl Cellosolve following supplier's recommendations.

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5. Mix thoroughly prior to use. Avoid vigorous agitation which may cause bubbling or foaming.
6. Must not be exposed to freezing temperatures. Store inside.
7. Dries partially by water evaporation. Drying is retarded by high humidity or cold conditions. Best drying occurs at relative humidity of 40% or lower and temperatures of 77° above. Good air movement is essential for complete dry.
8. Customer is urged to pre-test the system under shop conditions.
9. Coatings must be applied at temperatures above 55° F. Application at lower temperatures may exhibit film cracking.
10. Maximum dry film thickness of the system should not exceed 4.0 mils. Systems that exceed the recommended film build of 4.0 mils may exhibit cracking and crazing of finish as film ages.

NOTE:

Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used. The information, rating and opinions stated above pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application which are not known or not under our control, The Sherwin-Williams® Company cannot make any warranties or guarantees as to the end result

Safety Cautions:

VAPOR HARMFUL - IF INHALED-MAY AFFECT THE BRAIN OR NERVOUS SYSTEM, CAUSING DIZZINESS, HEADACHE OR NAUSEA. IRRITATES EYES, AND RESPIRATORY TRACT. CAN BE ABSORBED THROUGH THE SKIN, MAY CAUSE BLOOD DAMAGE.

Contents are **NON-COMBUSTIBLE**. - Use only with adequate ventilation. Wear an appropriate, properly fitted vapor/particulate respirator (NOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable levels. Follow respirator manufacturer's directions for respirator use. Avoid contact with skin and eyes. Can be absorbed through skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

FIRST AID:

IF INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

IF ON SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing. Launder before re-use.

IF IN EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

IF SWALLOWED: Get medical attention immediately.

SPILL AND WASTE:

Remove all sources of ignition. Ventilate and remove with inert absorbent. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State and Local regulation regarding pollution.

Delayed Effect From Long Term

Overexposure: Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

**DO NOT TAKE INTERNALLY
KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY**

Refer to Material Safety Data Sheet for further information.

(continued from column 3)

MATERIAL SAFETY DATA SHEET

VX0132E61
01 002

New GRAY Primer

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER	VX0132E61	HMIS CODES	
		Health	1*
		Flammability	0
		Reactivity	0
PRODUCT NAME	KEM AQUA 300 GRAY		
MANUFACTURER'S NAME	THE SHERWIN-WILLIAMS COMPANY		
	101 Prospect Avenue N.W.		
	Cleveland, OH 44115		
DATE OF PREPARATION	30-JAN-03	EMERGENCY TELEPHONE NO.	(216) 566-2917
		INFORMATION TELEPHONE NO.	(216) 566-2902

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS	VAPOR PRESSURE
4	29911-28-2	1-(2-Butoxymethylethoxy)-propanol		
		ACGIH TLV	Not Available	0.06 mm
		OSHA PEL	Not Available	
0.2	14808-60-7	Quartz		
		ACGIH TLV	0.05 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
22	14807-96-6	Talc		
		ACGIH TLV	2 mg/m3 as Resp. Dust	
		OSHA PEL	2 mg/m3 as Resp. Dust	
4	13463-67-7	Titanium Dioxide		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
0.5	1333-86-4	Carbon Black		
		ACGIH TLV	3.5 mg/m3	
		OSHA PEL	3.5 mg/m3	

Section 3 -- HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

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

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED: Do not induce vomiting. Get medical attention immediately.

Section 5 -- FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL
Not Applicable	N.A.	N.A.

FLAMMABILITY CLASSIFICATION

Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

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

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

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.

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 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).

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.

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 Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.32 lb/gal	1237 g/l
SPECIFIC GRAVITY	1.24	
BOILING POINT	212 - 449 F	100 - 231 C
MELTING POINT	Not Available	
VOLATILE VOLUME	63 %	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
pH	9.0	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical)		
1.01 lb/gal	121 g/l	Less Federally Exempt Solvents
0.42 lb/gal	50 g/l	Emitted VOC

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 Section 10 -- STABILITY AND REACTIVITY

STABILITY -- Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

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HAZARDOUS POLYMERIZATION

Will not occur

Section 11 -- TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

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.

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

Rats exposed to titanium dioxide dust at 250 mg./m3 developed lung cancer, however, such exposure levels are not attainable in the workplace.

TOXICOLOGY DATA

CAS No.	Ingredient Name				
29911-28-2	1-(2-Butoxymethylethoxy)-propanol	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
14808-60-7	Quartz	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
14807-96-6	Talc	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
13463-67-7	Titanium Dioxide	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
1333-86-4	Carbon Black	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available

Section 12 -- ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

Section 13 -- DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

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

No data available.

Section 15 -- REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
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No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

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 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.