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— Section 1 —
Product Identification

Material Safety Data Sheet

The Sherwin-Williams Company
Krylon Products Group
101 Prospect Avenue N.W.
Cleveland, OH 44115

Emergency telephone numbers (216) 566-2917 United States

Information telephone number (800) 251-2486

August 2, 2000

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KRYLON® TOUGH COAT ™ - Miscellaneous

TCM1/KRI

— Section 2 — CAS No.	Hazardous Ingredients (percent by weight)	ACGIH TLV <STEL>	OSHA PEL <STEL>	Units	Vapor Pressure (mm Hg)	*High Heat Paints* S00324 Aluminum	*High Heat Paints* S00332 Black	*Fluorescents* S01811 Orange	*Fluorescents* S01812 Red	*Fluorescents* S01815 Electric Green
74-98-6	Propane	2500	1000	PPM	760.0	11	14	13	13	13
106-97-8	Butane	800	800	PPM	760.0	11	13	12	12	12
110-54-3 §	Hexane	50	50	PPM	127.0			1	1	1
64742-89-8	V. M. & P. Naphtha.	300	300 <400>	PPM	12.0			9	9	9
108-88-3 §	Toluene.	50	100 <150>	PPM (Skin)	22.0	14				
100-41-4 §	Ethylbenzene	100 <125>	100 <125>	PPM	7.1		6	2	2	2
1330-20-7 §	Xylene.	100 <150>	100 <150>	PPM	5.9	4	36	12	12	12
67-64-1	Acetone.	500 <750>	1000	PPM	180.0	42	22	15	15	15
141-78-6	Ethyl Acetate.	400	400	PPM	86.0	2				
108-21-4	Isopropyl Acetate.	250 <310>	250 <310>	PPM	47.5	6				
763-69-9	Ethyl 3-Ethoxypropionate.	Not Established			1.1	3				
471-34-1	Calcium Carbonate.	10	10[5]	Mg/M3 [Resp.	as Dust Fraction]			17	17	17
7782-42-5	Graphite	2	2.5	Mg/M3			2			
	Weight per Gallon (lbs.)					6.23	6.22	6.97	6.97	6.99
	VOC Less Federally Exempt Solvents - (percent by weight)					52.3	69.7	51.2	51.2	50.8
	Flash Point (°F)					< 0	< 0	< 0	< 0	< 0
	HMIS (NFPA) Rating (health - flammability - reactivity)					2 - 4 - 1	2 - 4 - 0	2* - 4 - 0	2* - 4 - 0	2* - 4 - 0

PERCENT BY WEIGHT

§ Ingredient subject to the reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313, 40 CFR 372.65 C

➔➔➔ *MSDS Text Page Follows* ➔➔➔

Section 3 — Physical Data

PRODUCT WEIGHT	See TABLE	*EVAPORATION RATE*	Faster than Ether
SPECIFIC GRAVITY	0.75-1.16	*VAPOR DENSITY*	Heavier than Air
BOILING RANGE	<0 - 342 °F	*MELTING POINT*	N.A.
VOLATILE VOLUME	82-96 %	*SOLUBILITY IN WATER*	N.A.

Section 4 — Fire And Explosion Hazard Data

FLASH POINT
See TABLE *LEL* 0.9 *UEL* 12.8
EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Isolate from heat, electrical equipment, sparks, and open flame. 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 5 — Health Hazard Data

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.
ACUTE Health Hazards
EFFECTS OF OVEREXPOSURE
Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
S01342 contains Cadmium. Overexposure to Cadmium may result in kidney damage.
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.
EMERGENCY AND FIRST AID PROCEDURES
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: Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING.
Give conscious patient several glasses of water. Seek medical attention.
CHRONIC Health Hazards
No ingredient in these products is an IARC, NTP or OSHA listed carcinogen.
Methyl Ethyl Ketone may increase the nervous system effects of other solvents.
Prolonged and repeated exposure to Hexane may cause damage to nerve tissue of the arms and legs (peripheral neuropathy), resulting in muscular weakness and loss of sensation. This effect may be increased by the presence of Methyl Ethyl Ketone.
Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary, blood forming, cardiovascular and reproductive systems.
Rats exposed to titanium dioxide dust at 250 mg./m3 developed lung cancer, however, such exposure levels are not attainable in the workplace.
Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Section 6 — Reactivity Data

STABILITY — Stable
CONDITIONS TO AVOID — None known.
INCOMPATIBILITY — None known.
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Metals in Section 2
HAZARDOUS POLYMERIZATION — Will Not Occur

Section 7 — Spill Or Leak Procedures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate and remove with inert absorbent.
WASTE DISPOSAL METHOD
Waste from these products 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. Waste from products containing Barium must also require extractability testing. Waste from products containing Methyl Ethyl Ketone may also require extractability testing.
Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section 8 — Protection Information

PRECAUTIONS TO BE TAKEN IN USE
S01342 contains Cadmium. Before initial use, consult OSHA's Standard for Occupational Exposure to Cadmium (29 CFR 1910.1027).
Use all products only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.
These products 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
None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.
EYE PROTECTION — Wear safety spectacles with unperforated sideshields.

Section 9 — Precautions

DOL STORAGE CATEGORY — 1A
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.
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.
Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.
OTHER PRECAUTIONS
Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Section 10 — Other Regulatory Information

CALIFORNIA PROPOSITION 65
WARNING: These products contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION
All chemicals in these products are listed, or are exempt from listing, on the TSCA Inventory.
The above information pertains to these products as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to these products 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.

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KRYLON® TOUGH COAT ™ - Primers

TCM2/KRI

— Section 2 —

CAS No.	Hazardous Ingredients (percent by weight)	ACGIH TLV <STEL>	OSHA PEL <STEL>	Units	Vapor Pressure (mm Hg)	S00339 Red Oxide Rust Control	S00340 Gray Rust Control	S00341 Light Gray Sandable	S00342 Red Oxide Sandable	S00344 Green Rust Inhibiting	S01341 Zinc Rich Cold Galvanizing	S01342 Silver Galvanizing
74-98-6	Propane	2500	1000	PPM	760.0	14	14	14	14	14	13	15
106-97-8	Butane	800	800	PPM	760.0	13	13	13	13	13	12	
64742-89-8	Lt. Aliphatic Hydrocarbon Solvent.	100	100	PPM	53.0						2	
64742-89-8	V. M. & P. Naphtha.	300	300 <400>	PPM	12.0						3	2
108-88-3 §	Toluene.	50	100 <150>	PPM (Skin)	22.0			10	10		5	
100-41-4 §	Ethylbenzene	100 <125>	100 <125>	PPM	7.1	4	4			2		3
1330-20-7 §	Xylene.	100 <150>	100 <150>	PPM	5.9	23	20	6	5	10		16
67-63-0	2-Propanol	400 <500>	400 <500>	PPM	33.0			1	1			
71-36-3 §	1-Butanol	C 50	C 50	PPM (Skin)	5.5					2		
67-64-1	Acetone.	500 <750>	1000	PPM	180.0	22	28	34	34	20		
78-93-3 §	Methyl Ethyl Ketone.	200 <300>	200 <300>	PPM	70.0					19	11	34
110-19-0	Isobutyl Acetate.	150	150	PPM	12.5			5	5			
7440-66-6 §	Zinc	Not Established									47	20
14807-96-6	Talc	2	2	Mg/M3	as Resp. Dust	6	5	9	9	2		
471-34-1	Calcium Carbonate.	10	15[5]	Mg/M3 [Resp.	as Dust Fraction]				1	3		
13463-67-7	Titanium Dioxide.	10	10[5]	Mg/M3 [Resp.	as Dust Fraction]		3	1				
§	Zinc Compound. [% Zinc]					4 [2.0]	3 [1.7]				2 [47.2]	[20.0]
§	Barium Compound. [% Barium]									6 [3.1]		
	[% Cadmium]											0.02
	Weight per Gallon (lbs.)					6.72	6.61	6.48	6.48	6.53	9.61	7.73
	VOC Less Federally Exempt Solvents - (percent by weight)					55.2	52.2	50.1	50.1	59.7	49.1	71.052.3
	Flash Point (°F)					< 0	< 0	< 0	< 0	< 0	< 0	< 0
§	HMIS (NFPA) Rating (health - flammability - reactivity)					2 - 4 - 0	2 - 4 - 0	2 - 4 - 0	2 - 4 - 0	2 - 4 - 0	2 - 4 - 1	2 - 4 - 1

PERCENT BY WEIGHT

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