



Material Safety Data Sheet

The Sherwin-Williams Co.
101 Prospect Ave. N.W.
Cleveland, OH 44115

Emergency telephone number
Information telephone number
Date of preparation

(216) 566-2917
(216) 566-2902
July 26, 2002

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Industrial Enamel - 1

B54/1

CAS No.	— Section 2 — Hazardous Ingredients (percent by weight)	ACGIH	OSHA	Units	LD50	LC50	Vapor	B54W100	B54W101	B54W113	B54T104	
		TLV <STEL>	PEL <STEL>		(Rat-Oral) mg/kg	(Rat) ppm/4hr.	Pressure mm	Ultra White	Pure White	Deep Base	Ultradeep Base	
107-21-1	§ Ethylene Glycol.	C 50	C 50	ppm	4700	NAv	0.1	< 2% may be added due to tinting				%
1332-58-7	Kaolin	[2]	10[5]	mg/m3 as Dust [Resp. Fraction]				< 2% may be added due to tinting				
64742-88-7	Mineral Spirits.	100	100	ppm	NAv	NAv	2.0	35	39	39	43	
100-41-4	§ Ethylbenzene	100 <125>	100 <125>	ppm	3500	NAv	7.1	0.1	0.1	0.1	0.1	
111-76-2	§ 2-Butoxyethanol	20	20	ppm (skin)	470	NAv	0.9			1		
14807-96-6	Talc	2	2	mg/m3 as Resp. Dust	NAv	NAv		3 - 5	5 - 7	0 - 2	0 - 2	
471-34-1	Calcium Carbonate.	10	15[5]	mg/m3 as Dust [Resp. Fraction]	NAv	NAv				17	16	
13463-67-7	Titanium Dioxide.	10	10[5]	mg/m3 as Dust [Resp. Fraction]	NAv	NAv		24	14	5	0 - 5	
1333-86-4	Carbon Black.	3.5	3.5	mg/m3	NAv	NAv		0 - 1	0 - 1	0 - 1	0 - 1	
Weight per Gallon (lbs.)								9.48	8.83	8.85	8.35	
Solids by Weight (%)								63.1	58.4	58.2	55.2	
Solids by Volume (%)								45.3	42.6	42.4	41.3	
VOC (Volatile Organic Compounds) - lbs./gal.								3.50	3.67	3.69	3.74	
Photochemically Reactive								No	No	No	No	
Flash Point (°F)								105	101	102	101	
HMIS (NFPA) Rating (health - flammability - reactivity)								2* - 2 - 0	2* - 2 - 0	2* - 2 - 0	2* - 2 - 0	

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

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. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

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

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*

See TABLE 1.0 10.6

FLAMMABILITY CLASSIFICATION - 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 STORING - 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.

These coatings 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.

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

Section 9 — Physical and Chemical Properties

PRODUCT WEIGHT	See TABLE	EVAPORATION RATE	Slower than ether
SPECIFIC GRAVITY	0.97 - 1.14	VAPOR DENSITY	Heavier than air
BOILING POINT	300 - 395 °F	MELTING POINT	Not Available
VOLATILE VOLUME	46 - 58 %	SOLUBILITY IN WATER	Not Available

Section 10 — Stability and Reactivity

STABILITY - Stable

CONDITIONS TO AVOID - None known.

INCOMPATIBILITY - None known.

HAZARDOUS DECOMPOSITION PRODUCTS - By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, possibility of Hydrogen Cyanide

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.

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.

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.

Ethylene Glycol is considered an animal teratogen. It has been shown to cause birth defects in rats and mice at high doses when given in drinking water or by gavage. There is no evidence to indicate it causes birth defects in humans.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary and blood forming 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 12 — Ecological Information

No data available.

Section 13 — Disposal Considerations

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.

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

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.

Section 16 — Other Information

These products have 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 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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Industrial Enamel - 2

B54/2

CAS No.	— Section 2 — Hazardous Ingredients (percent by weight)	ACGIH	OSHA	Units	LD50	LC50	Vapor	B54A12	B54A13	B54B11	B54E39	B54G14	B54N16	B54R15	B54R38	B54Y37	
		TLV <STEL>	PEL <STEL>		(Rat-Oral) mg/kg	(Rat) ppm/4hr.	Pressure mm	Tower Gray	Slate Gray	Black	Safety Orange	Cedar Green	Walnut Brown	Deck Red	Safety Red	Safety Yellow	
64742-88-7	Mineral Spirits.	100	100	ppm	NAv	NAv	2.0	41	42	44	42	32	43	40	42	42	W E I G H T
100-41-4	§ Ethylbenzene	100 <125>	100 <125>	ppm	3500	NAv	7.1	0.1	0.1	0.1	0.1		0.1	0.1	0.1	0.1	
136-52-7	Cobalt 2-Ethylhexanoate.	NAv	NAv		NAv	NAv						0.3					
14807-96-6	Talc	2	2	mg/m3 as Resp. Dust	NAv	NAv						15					
471-34-1	Calcium Carbonate.	10	15[5]	mg/m3 as Dust [Resp. Fraction]	NAv	NAv		9	9	8		5	6	9	7		
13463-67-7	Titanium Dioxide.	10	10[5]	mg/m3 as Dust [Resp. Fraction]	NAv	NAv		9	10		10			2	3	13	
1333-86-4	Carbon Black.	3.5	3.5	mg/m3	NAv	NAv		0.3		2			0.5				
	§ Cobalt Compound. [% Cobalt]											0.3[0.05]					
	Weight per Gallon (lbs.)							8.70	8.67	8.07	8.38	9.04	8.29	8.80	8.28	8.62	
	Solids by Weight (%)							57.2	56.9	54.6	56.6	67.2	54.9	57.7	56.2	57.0	
	Solids by Volume (%)							41.7	41.4	42.6	43.0	53.6	41.5	41.8	43.2	41.8	
	VOC (Volatile Organic Compounds) - lbs./gal.							3.71	3.73	3.66	3.63	2.96	3.74	3.72	3.62	3.71	
	Photochemically Reactive							No	No	No	No	No	No	No	No	No	
	Flash Point (°F)							102	102	101	101	101	101	101	104	101	
	HMIS (NFPA) Rating (health - flammability - reactivity)							2*-2-0	2*-2-0	2*-2-0	2*-2-0	2*-2-0	2*-2-0	2*-2-0	2*-2-0	2*-2-0	

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→→→ MSDS Text Page Follows →→→

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