

B54XX
86A MATERIAL SAFETY DATA SHEET
FOR COATINGS, RESINS AND RELATED MATERIALS
(Approved by U.S. Department of Labor 'Essentially Similar' to form OSHA-20)

B54XX Industrial Enamel, Non-Lead Colors page 2

MANUFACTURER'S NAME THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland Ohio 44115
DATE OF PREPARATION 11-Jul-86
EMERGENCY TELEPHONE NO. (216) 566-2917
INFORMATION TELEPHONE NO. (216) 566-2902

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 V -- HEALTH HAZARD DATA
THRESHOLD LIMIT VALUE -- See Section II
EFFECTS OF OVEREXPOSURE

Section I -- PRODUCT IDENTIFICATION

PRODUCT NAME Industrial Enamel, Non-Lead Colors
PRODUCT NUMBERS AND COLORS
B54 A 12 Tower Gray
B54 A 13 Slate Gray
B54 B 11 Black
B54 E 29 Safety Orange
B54 G 14 Cedar Green
B54 N 16 Walnut Brown
B54 R 15 Deck Red
B54 R 28 Safety Red
B54 T 104 Ultradeep Base
B54 W 10 Brilliant White
B54 W 101 Pure White
B54 W 102 Midtone Base
B54 W 103 Deepstone Base
B54 Y 27 Safety Yellow

ACUTE: Overexposure causes eye, skin and respiratory irritation. May cause nervous system depression accompanied by headache, dizziness, nausea, confusion and staggering gait. Extreme overexposure may result in unconsciousness and possible death.
CHRONIC: Prolonged overexposure to ingredients in Section II may cause adverse effects to the liver, and urinary system.
Rats exposed to titanium dioxide dust at 250 ug./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.
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.

PRODUCT CLASS Alkyd Enamel
Including Non-Lead Tinted Colors

Section VI -- REACTIVITY DATA

Section II -- HAZARDOUS INGREDIENTS

CAS No.	INGREDIENT	% BY WEIGHT	ACGIH-TLV	OSHA-PEL	UNITES	V.P.
64742-47-8	Mineral Spirits.	35-45	100	500	PPM	2.0
13463-67-7	Titanium Dioxide.	0-25	10		Mg/M3	
1308-38-9	Chromium Oxide	0-5	.50		Mg/M3	
	Chromium III (as Cr)	0.0-2.3	0.50		Mg/M3	
	[Cr III present in B54G14 only.]					

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen

STABILITY -- Stable
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION -- Will Not Occur

Section III -- PHYSICAL DATA

EVAPORATION RATE -- Slower than Ether
BOILING RANGE (F) 300 - 395
% VOLATILE VOLUME 55-60
VAPOR DENSITY -- Heavier than Air
WT/GAL 8-10

Section VII -- 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 this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability and extractability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and local regulations regarding pollution.

Section IV -- FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION Combustible, Flash above 99 and below 200 F
EXTINGUISHING MEDIA Carbon Dioxide, Dry Chemical, Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flames. 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.

Section VIII -- PROTECTION INFORMATION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.
Protect against hazardous dust or fumes which may be generated by sanding, wirebrushing, abrading, burning, brazing or welding of the dried film.
VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section II 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 respiratory device approved by NIOSH/MSHA for protection against materials in Section II.

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PROTECTIVE GLOVES
Wear gloves which are recommended by glove supplier for protection against materials in Section II.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

Section IX -- PRECAUTIONS

DOT STORAGE CATEGORY -- 1B
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.
OTHER PRECAUTIONS
This coating contains materials classified as nuisance particulates, for example titanium dioxide, calcium carbonate, etc. (see ACGIH TLV List, Preface and Appendix D), which may be present at hazardous levels only during sanding or abrading of the dried film.
Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

HMIS Ratings

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0

B54 Lead-Containing Colors on reverse.

This Material Safety Data Sheet conforms to the Hazard Communication standard, 29 CFR 1910.1200(g)(4), for similar complex mixtures.
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.

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 Cleveland, Ohio 44115
 DATE OF PREPARATION 11-Jul-86
 EMERGENCY TELEPHONE NO. (216) 566-2917
 INFORMATION TELEPHONE NO. (216) 566-2902

Section I -- PRODUCT IDENTIFICATION

PRODUCT NAME Industrial Enamel, Lead-Containing Colors
 TRADE MARK
 PRODUCT NUMBERS AND COLORS B54 E 19 OSBA Orange
 B54 R 18 OSBA Red
 B54 Y 17 OSBA Yellow
 --- Including Lead-Containing Tinted Colors ---
 PRODUCT CLASS Alkyd Enamel

Section II -- HAZARDOUS INGREDIENTS

CAS No.	INGREDIENT	% by weight	ACGIH-TLV	OSHA-PEL	UNIT	V.P.
42-47-8	Mineral Spirits	40	100	500	PPH	2.0
63-67-7	Titanium Dioxide	0.5	10		Mg/M3	
44-37-2	Lead Chromate. <I>		0.05	0.05	Mg/M3	
58-97-6	Lead Chromate. <I>	<15	0.05	0.05	Mg/M3	
36-85-8	Molybdate Orange. <I>		0.05		Mg/M3	
< > In ingredient is an IARC(I), NTP(K) or OSHA(K) listed carcinogen						
	Lead (as Pb)	<11.5	0.05	0.05	Mg/M3	
	Chromium VI (as Cr)	<3.0	0.05		Mg/M3	

For specific percent hazardous ingredients in each product, see Section X

Section III -- PHYSICAL DATA

EVAPORATION RATE -- Slower than Ether
 FLASH RANGE (F) 300 - 395
 VAPOR DENSITY -- Heavier than Air
 VOLATILE VOLUME 55-60
 WT./GAL 8-10

Section IV -- FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION Combustible, Flash above 99 and below 200 F
 FLASH POINT 101 F PNCC
 LEL 1.0
 EXTINGUISHING MEDIA Carbon Dioxide, Dry Chemical, Foam
 SPECIAL FIRE AND EXPLOSION HAZARDS Keep containers tightly closed. 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. Seek 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 V -- HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE -- See Section II
 EFFECTS OF OVEREXPOSURE
 ACUTE: Overexposure causes eye, skin and respiratory irritation. May cause nervous system depression accompanied by headache, dizziness, nausea, confusion and staggering gait. Extreme overexposure may result in unconsciousness and possible death.
 CHRONIC: Prolonged overexposure to ingredients in Section II may cause adverse effects to the liver, urinary, blood forming, nervous, and reproductive systems (including embryotoxic effects).
 Studies have associated exposure to Chromium VI compounds with an increased risk of respiratory cancer, however, the risk appears to be less significant with insoluble or highly soluble Chromium VI compounds.
 Rate 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.

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.

Section VI -- REACTIVITY DATA

STABILITY -- Stable
 HAZARDOUS DECOMPOSITION PRODUCTS By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Metals in Section II
 HAZARDOUS POLYMERIZATION -- Will Not Occur

Section VII -- 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 this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability and extractability to determine the applicable EPA hazardous waste numbers.
 Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section VIII -- PROTECTION INFORMATION

PRECAUTIONS TO BE TAKEN IN USE
 Before initial use, consult OSHA's Standard for Occupational Exposure to Lead (29 CFR 1910.1025).
 Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.
 Protect against hazardous dust or fumes which may be generated by sanding, wirebrushing, abrading, burning, brazing or welding of the dried film.

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VENTILATION Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section II 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 respiratory device approved by NIOSH/MSHA for protection against materials in Section II.
 PROTECTIVE GLOVES Wear gloves which are recommended by glove supplier for protection against materials in Section II.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

Section IX -- PRECAUTIONS

DOL STORAGE CATEGORY -- 2

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.
 OTHER PRECAUTIONS

This coating contains materials classified as nuisance particulates, for example titanium dioxide, calcium carbonate, etc. (see ACGIH TLV List, Preface and Appendix D), which may be present at hazardous levels only during sanding or abrading of the dried film.
 CONTAINS LEAD. Do not apply on toys and other children's articles, furniture, or any interior surface of a dwelling or facility which may be occupied or used by children. Do not apply on any exterior surface of dwelling units, such as window sills, porches, stairs, or railings to which children may be commonly exposed.

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

Section X -- PERCENT HAZARDOUS INGREDIENTS

	B54E19	B54R18	B54Y17
Mineral Spirits	40	40	40
Titanium Dioxide	--	--	5
Lead Chromate. <I>	15	--	15
Molybdate Orange. <I>	<5	10	--
Lead (as Pb)	11.3	6.3	8.6
Chromium (as Cr VI)	2.8	1.2	1.5

HMIS Ratings

HEALTH	2*
FLAMMABILITY	2
REACTIVITY	0

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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.