



Material Safety Data Sheet

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Corothane® II Low VOC Gloss Polyurethane

B65-400

— Section 2 — CAS No. Hazardous Ingredients (percent by weight)		ACGIH TLV <STEL>	OSHA PEL <STEL>	Units	Vapor Pressure (mm Hg)	B65W401 Pure White	B65W402 Midtone Base	B65W403 Deeptone Base	B65T404 Ultradisp Base	B65B411 Black	B65R438 Safety Red	B65W400 Ultra White	B65Y437 Safety Yellow	B60V2 Hardener	P E R C E N T B Y W E I G H T
64742-88-7	Mineral Spirits.	100	100	PPM	2.0	less than 3% may be added due to tinting				1	1		1		
108-65-6	1-Methoxy-2-Propanol Acetate	Not Established			1.8	less than 3% may be added due to tinting									
100-42-5	§ Styrene.	50 <100>	50 <100>	PPM	4.3	1	1	1	1	1	1	1	1		
100-41-4	§ Ethylbenzene	100 <125>	100 <125>	PPM	7.1									3	
1330-20-7	§ Xylene.	100 <150>	100 <150>	PPM	5.9									16	
108-10-1	§ Methyl Isobutyl Ketone.	50 <75>	50 <75>	PPM	16.0	2	2	2	2	1	2	2	1		
110-43-0	Methyl n-Amyl Ketone.	50	100	PPM	2.1	11	12	12	12	12	12	11	12	25	
123-86-4	n-Butyl Acetate.	150 <200>	150 <200>	PPM	10.0									8	
88230-35-7	Oxo-Hexyl Acetate.	Not Established			0.7	2	2	2	2	3	2	2	3		
28182-81-2	Hexamethylene Diisocyanate Polymer	0.5 C 1		Mg/M3 Supplier Limit										48	
822-06-0	Hexamethylene Diisocyanate (max.)	0.005		PPM	0.05									0.8	
14808-60-7	Quartz	0.1	0.1	Mg/M3 as Resp. Dust		12	14	15	9	18	17	8	12		
1332-58-7	Kaolin	2	5	Mg/M3 as Resp. Dust		15	16	17	30	18	18	9	13		
13463-67-7	Titanium Dioxide.	10	10[5]	Mg/M3 [Resp. Fraction]		17	12	9				29	8		
1333-86-4	Carbon Black.	3.5	3.5	Mg/M3		0 - 1	0 - 1	0 - 1	0 - 1	4					
Weight per Gallon (lbs.)						11.63	11.32	11.19	10.85	10.77	10.76	12.14	10.78	8.00	
Solids by Weight (%)						81.6	81.2	80.9	80.6	80.4	80.1	82.4	80.3	47.7	
Solids by Volume (%)						68.8	69.0	68.9	69.3	69.4	68.9	69.0	69.2	40.0	
VOC (Volatile Organic Compounds) - lbs./gal.						2.13	2.11	2.12	2.09	2.10	2.13	2.12	2.11	4.18	
Photochemically Reactive						No	No	No	No	No	No	No	No	Yes	
Flash Point (°F)						95	95	95	95	95	95	95	95	85	
HMIS (NFPA) Rating (health - flammability - reactivity)						2* - 3 - 2	2* - 3 - 2	2* - 3 - 2	2* - 3 - 2	2* - 3 - 2	2* - 3 - 2	2* - 3 - 2	2* - 3 - 2	2* - 3 - 1	

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

Section 3 — Physical Data

PRODUCT WEIGHT See TABLE
 SPECIFIC GRAVITY 0.96-1.46
 BOILING RANGE 237-395 °F
 VOLATILE VOLUME 30-60 %

EVAPORATION RATE Slower than Ether
 VAPOR DENSITY Heavier than Air
 MELTING POINT N.A.
 SOLUBILITY IN WATER N.A.

Section 4 — Fire And Explosion Hazard Data

FLAMMABILITY CLASSIFICATION FLASH POINT See TABLE LEL 1.0 UEL 8.0
 RED LABEL -- Flammable, Flash below 100 °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 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. Follow recommendations for proper use, ventilation, and personal protective equipment to minimize exposure.
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.

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.

EMERGENCY AND FIRST AID PROCEDURES
IF INHALED: If any breathing problems occur during use, LEAVE THE AREA and get fresh air. If problems remain or occur later, IMMEDIATELY get medical attention.
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: Get medical attention.

CHRONIC Health Hazards
 Styrene is listed by IARC as a possible human carcinogen based on "inadequate evidence" in humans, "limited evidence" in animals, and the fact that it is metabolized to styrene oxide, which has been shown to induce cancer in animals. However, studies of humans exposed for long periods of time to styrene have not demonstrated any carcinogenic effect.

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.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary, blood forming and reproductive systems.
 Hardener contains isocyanates. Persons sensitive to isocyanates will experience increased allergic reaction on repeated exposure.

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
 Contamination of Hardener with Water, Alcohols, Amines and other compounds which react with isocyanates, may result in dangerous pressure in, and possible bursting of, closed containers containing Hardener.

HAZARDOUS DECOMPOSITION PRODUCTS
 By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, possibility of Hydrogen Cyanide
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 the area.
 For BASE: Remove with inert absorbent.
 For HARDENER: All personnel in the area should be protected as in Section 8. Cover spill with absorbent material. Deactivate spilled material with a 10% ammonium hydroxide solution (household ammonia). After 10 minutes, collect in open containers and add more ammonia. Cover loosely. Wash spill area with soap and water.

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, and Local regulations regarding pollution.

Section 8 — Protection Information

PRECAUTIONS TO BE TAKEN IN USE
 NO PERSON SHOULD USE THESE PRODUCTS, OR BE IN THE AREA WHERE THESE PRODUCTS ARE 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 breathing vapor and spray mist. Avoid contact with skin and eyes. 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
 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 manufacturer's 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
 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.

Section 9 — Precautions

DOL STORAGE CATEGORY - 1C
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 CONTENTS ARE FLAMMABLE. Keep away from heat, sparks, and open flame. 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.

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
 These products 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 10 — Other Regulatory Information

CALIFORNIA PROPOSITION 65
 WARNING: These products, except for B60V2, contain a chemical known to the State of California to cause cancer. B60V2 contains 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 this 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.