

MATERIAL SAFETY DATA SHEET

MSDS NO. 2

June 19, 2001



KOSMIC KOLOR URETHANE ENAMEL SYSTEM

SECTION I - MANUFACTURER

Manufacturer:

House of Kolor
210 Crosby Street
Picayune, Mississippi 39466

Telephone:

Medical Emergency (888) 345-5732
Transportation Emergency (888) 748-5558
Product Information (601) 798-4731

Prepared by: Tim Herrington

Product: Kosmic Kolor – Urethane Enamel System

OSHA Hazard Class: Flammable Liquid

DOT Shipping Name: Paint, UN1263

Hazardous Material Information: See Section X

SECTION II - HAZARDOUS INGREDIENTS

(See SECTION X)

Ingredients	CAS No.	Vapor Pressure (20°C. mm Hg)	Exposure Limit (TLV)
1. N-methylpyrrolidone	872-50-4	0.3	None-A,O 100 ppm-V
2. 2-benzotriazole	25973-55-1	4.7	None-A,O OTHER: 2 mg/m ³
3. 2-butoxyethyl acetate	112-07-02	0.3	None-A,O
4. Acrylic resin E	Not Available	None	None-A,O
5. Acrylic resin M	Not Available	None	None-A,O
6. Aromatic hydrocarbon A	64742-95-6	10.0	25 ppm-A,O as Trimethyl benzene
7. Aromatic hydrocarbon B	64742-94-5	5.0 @ 37.8°C	None-A
8. Carbon black*	1333-86-4	None	3.5 mg/m ³ -A,O
9. Cellulose acetate butyrate	9004-36-8	None	None-A,O
10. Cyclohexanone	108-94-1	4.3 @ 77°F	25 ppm-A 25 ppm-O skin
11. Ethyl 3-ethoxypropionate	763-69-9	1.5 @ 25°C	None-A, O 50 ppm-V
12. Ethylbenzene*	100-41-4	8.5	100 ppm-A,O
13. Isoindolinone pigment A	106276-80-6	None	None-A, O
14. Light aromatic solvent			
15. Methyl ethyl ketone	78-93-3	82.5 @ 23.9°C	200 ppm-A 300 ppm-A 15 min (STEL)
16. Methyl isobutyl ketone	108-10-1	15.0	50 ppm-A,O 100 ppm-O 75 ppm-A 15 min (STEL)
17. Methyl n-amyl ketone	110-43-0	2.1	50 ppm-A 100 ppm-O
18. N-butyl acetate	123-86-4	8.4	150 ppm-A,O 200 ppm-A,O 15 min (STEL)
19. N-methyl-2-pyrrolidone	872-50-4	0.0	None-A, O
20. PCBTF (Parachlorobenzotrifluoride)	98-56-6	5.3	None-A, O
21. PM acetate	108-65-6	3.7	None-A, O 10 ppm-V
22. Titanium dioxide	13463-67-7	None	10 mg/m ³ -A 15 mg/m ³ -O
23. Toluene* [65]	108-88-3	36.7	100 ppm-A 200 ppm-O 300 ppm-O Ceiling
24. Xylene	1330-20-7	25.0 @ 25°C	100 ppm-A,O 150 ppm-A,O 15 min (STEL)

A = ACGIH TLV; O = OSHA; S = Supplier furnished limit; STEL = Short term exposure limit; C = Ceiling; V = Valspar limit, TLV = Threshold Limit Value
* = See Section V - Special effects

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE: 171 TO 392°F
SPECIFIC GRAVITY: (H20=1): 0.9 - 1.2
VAPOR DENSITY: Heavy Than Air
EVAPORATION RATE: Slower Than Ether
COATING V.O.C.: 0.86 - 6.10 lb/gal
MATERIAL V.O.C.: 0.47 - 6.10 lb/gal
SOLUBILITY IN WATER: 0.5%
APPEARANCE AND ODOR: Liquid paint with a characteristic odor.

* = See Section V - Special effects

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: See Section X

METHOD USED: T.C.C.

FLAMMABLE LIMITS IN AIR BY VOLUME:

LOWER EXPLOSIVE LIMIT (LEL): 0.9%

UPPER EXPLOSIVE LIMIT (UEL): 11.0%

EXTINGUISHED MEDIA: Foam, CO₂, or Dry Chemical

SPECIAL FIREFIGHTING PROCEDURES:

Cool fire exposed containers with water. Do not enter confined fire space without proper protective equipment – including a NIOSH approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Solvent vapors can travel to an ignition source and flash back. Explosive mixture can form with air.

SECTION V - PHYSICAL/CHEMICAL CHARACTERISTICS

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Over-exposure can lead to central nervous system depression producing such effects as headache, dizziness, nausea, and loss of consciousness.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF

EXPOSURE: Can cause defatting and drying of skin resulting in irritation and dermatitis. Irritating to eyes. Irritating to mucous membranes.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Can be absorbed through the skin causing effects similar to inhalation and ingestion.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Liquid ingesting may result in vomiting. Aspiration of liquid into the lungs must be avoided as liquid contact with the lungs can result in chemical pneumonitis and pulmonary edema/hemorrhage.

HEALTH HAZARDS (ACUTE AND CHRONIC):

ACUTE: Shortness of breath, burning sensation of respiratory passages, nausea, headache, and increased proneness to accident.

CHRONIC: Narcosis, kidney, and liver dysfunction with possible central nervous system effects.

CARCINOGENICITY:

NTP CARCINOGEN? No

IARC MONOGRAPHS? No

OSHA REGULATED? No

Except for Ethylbenzene*.

CALIFORNIA PROPOSITION 65 STATEMENT: Check Section II of this MSDS for hazardous ingredients whose name contains the character [65]. These ingredients are listed or have trace components that are listed in California Prop 65 lists.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Allergies, respiratory problems, asthma, and dermatitis.

EMERGENCY AND FIRST AID PROCEDURES:

FOR EYES: Flush with plenty of clean flowing water for at least 15 minutes and get medical attention.

FOR SKIN: Wash affected areas with plenty of warm soapy water. Remove contaminated clothing and shoes. If irritation persists, get medical attention.

INHALATION: Move victim to fresh air. Provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

INGESTION: Consult a physician immediately. Product contains both naphthas and oxygenated solvents. See section II.

SPECIAL EFFECTS:

Aromatic hydrocarbon A, B - Laboratory studies with rats have shown that petroleum distillates cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors. **Carbon black** – Possible cancer hazard. Contains ingredients that may cause cancer based on animal data. Risk of cancer depends on level and duration of exposure. **Ethylbenzene** - Tests by the NTP have shown that Ethylbenzene is a carcinogen in animals. The relevance to humans is unknown. **Methyl ethyl ketone** - High concentrations have caused embryotoxic effects in laboratory animals. Methyl ethyl ketone has been demonstrated to potentiate (i.e. shorten the time of onset) the peripheral neuropathy caused by either n-hexane or methyl n-butyl ketone. MEK by itself has not been demonstrated to cause peripheral neuropathy. Liquid splashes in the eye may result in chemical burns. N-

butyl acetate - May cause abnormal liver function. Tests for embryotoxic activity in animals has been inconclusive. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. **Titanium dioxide** - In a lifetime inhalation test, lung cancers were found in some rats exposed to 250-mg/m³ respirable titanium dioxide dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250-mg/m³ level are not relevant to the workplace. **Toluene** - Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heartbeats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. **Warning:** This chemical is known to the State of California to cause reproductive harm. **Xylene** - High concentrations have caused embryotoxic effects in laboratory animals. Recurrent overexposure may result in liver and kidney injury. Can be absorbed through the skin in harmful amounts.

SECTION VI - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Keep away from excessive heat or open flame. Store below maximum storage temperature.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid strong alkalis. Oxidizing materials can cause a reaction.

HAZARDOUS DECOMPOSITION OR BY PRODUCTS: Carbon dioxide, carbon monoxide, and unidentified organics.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION VII - PRECAUTIONS FOR SAFE HANDLING

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Eliminate potential sources of ignition. Wear respirator and other protective clothing. For large spills dike and contain. Soak up residue with non-combustible absorbent. Keep out of surface waterways and sewers. Flush area with water to remove trace residue.

WASTE DISPOSAL METHOD: Remove with vacuum truck into storage/salvage vessel. Keep out of surface waters and any watercourses or sewers entering or leading to surface water. Dispose of in an appropriate facility in compliance with local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container closed. Do not store near heat, sparks, flame, or oxidizing materials. Vapors are heavier than air and will collect in low places. Ground all containers when transferring liquid. Use non-sparking tools. Wash thoroughly after handling and before eating or smoking. Do not store above 120 degrees F. Observe label precautions.

OTHER CAUTIONS: Avoid breathing sanding dust. Prevent prolonged or repeated breathing of vapor or spray mist. Store only in well ventilated areas.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION: Use NIOSH approved respirator if chance of overexposure. Use MSHA/NIOSH TC19C for spray booth spraying or confined area. Use MSHA/NIOSH TC23C for outdoor spraying or well-ventilated areas.

VENTILATION: Use explosion proof ventilation to maintain vapor concentrations below the TLV. See section II.

PROTECTIVE GLOVES: Wear protective gloves to minimized skin contact.

EYE PROTECTION: Wear safety glasses with side shields, goggles, face shield, or other protective eyewear to avoid eye contact.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear protective clothing to minimize skin contact.

WORK/HYGIENIC PRACTICES: Keep respirators in proper working condition. Follow general industrial hygienic practices.

SECTION IX - DISCLAIMER

DISCLAIMER: The recommendations provided herein are based on information believed to be accurate. None of the information stated is to be construed as any warranty. These products are intended for industry use only and should be used by professionals who have carefully evaluated this product.

* = See Section V - Special effects

SECTION X - OTHER INFORMATION

FLASH POINT: 23°F

UK-17 - Acrylic resin E, N-butyl acetate, Ethyl 3-ethoxypropionate, Xylene (0.5%), Light aromatic solvent, Ethylbenzene* (0.1%), GAL WT: 8.43 WT PCT SOLIDS: 43.51 VOL. PCT SOLIDS: 37.09 VOC: 4.76 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 81°F

Section 313 Supplier Notification: The chemicals listed below with percentages are subject to the reporting requirements of Section 313 of the Emergency Planning and Right-To-Know Act of 1986 and of 40 CFR 372.

PRODUCT CODE INGREDIENTS (See Section II)

SG-100 - N-butyl acetate, Xylene (24.9%), Acrylic resin E, Methyl isobutyl ketone (8.5%), Cellulose acetate butyrate, Ethylbenzene* (4.2%), Toluene (0.6%) [65], GAL WT: 7.73 WT PCT SOLIDS: 25.91 VOL. PCT SOLIDS: 20.29 VOC: 5.72 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 60°F

UB-4 - Acrylic resin E, N-butyl acetate, Ethyl 3-ethoxypropionate, Methyl isobutyl ketone (7.0%), Xylene (5.3%), EB Acetate, Toluene (1.9%) [65], Carbon black* (1.1%), Ethylbenzene* (1.1%), GAL WT: 8.32 WT PCT SOLIDS: 46.62 VOL. PCT SOLIDS: 39.61 VOC: 4.46 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 60°F

UB-5 - Acrylic resin E, Titanium dioxide, N-butyl acetate, Ethyl 3-ethoxypropionate, Xylene (2.9%), EB Acetate, Ethylbenzene* (0.6%), Toluene (0.1%) [65], GAL WT: 10.11 WT PCT SOLIDS: 58.86 VOL. PCT SOLIDS: 44.25 VOC: 4.15 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 59°F

UC-1 - Acrylic resin E, N-butyl acetate, Xylene (14.2%), Methyl isobutyl ketone (8.6%), Ethyl 3-ethoxypropionate, Ethylbenzene* (3.0%), EB Acetate, Toluene (0.4%) [65], GAL WT: 8.11 WT PCT SOLIDS: 41.45-54.20 VOL. PCT SOLIDS: 34.72-48.52 VOC: 4.75 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 60°F

UC-3 - Acrylic resin E, N-butyl acetate, Aromatic hydrocarbon A, GAL WT: 8.75 WT PCT SOLIDS: 54.2 VOL. PCT SOLIDS: 48.5 VOC: 4.00 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 45°F

UC-35 - PCBTF, Acrylic resin M, EB acetate, Cellulose acetate butyrate, 2-benzotriazole, Methyl n-amyl ketone, Xylene (0.1%), GAL WT: 10.42 WT PCT SOLIDS: 38.47 VOL. PCT SOLIDS: 41.60 VOC: COATING VOC 0.68 LB/GL MATERIAL VOC: 0.31 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 81°F

UFB-4 - Acrylic resin E, N-butyl acetate, Ethyl 3-ethoxypropionate, Xylene (4.9%), Aromatic hydrocarbon B, Aromatic hydrocarbon A, Toluene (2.3%) [65], Carbon black* (1.4%), EB Acetate, Ethylbenzene* (1.0%), GAL WT: 8.39 WT PCT SOLIDS: 48.45 VOL. PCT SOLIDS: 41.88 VOC: 4.38 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 60°F

UFB-5 - Titanium dioxide, Acrylic resin E, N-butyl acetate, Ethyl 3-ethoxypropionate, Xylene (3.3%), Aromatic hydrocarbon A, Ethylbenzene* (0.7%), Toluene (0.1%) [65], GAL WT: 10.47 WT PCT SOLIDS: 62.3 VOL. PCT SOLIDS: 47.4 VOC: 3.94 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 59°F

UFB-6 - Acrylic resin E, N-butyl acetate, Methyl isobutyl ketone (4.2%), PM acetate, Aromatic hydrocarbon A, Ethylbenzene* (0.1%), GAL WT: 8.39 WT PCT SOLIDS: 49.2 VOL. PCT SOLIDS: 42.2 VOC: 4.26 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 64°F

UFC-1 - Acrylic resin E, N-butyl acetate, Ethyl 3-ethoxypropionate, Xylene (3.7%), Aromatic hydrocarbon B, Aromatic hydrocarbon A, EB Acetate, Ethylbenzene* (0.8%) Toluene (0.1%) [65], GAL WT: 8.5 WT PCT SOLIDS: 49.8 VOL. PCT SOLIDS: 43.44 VOC: 4.28 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 59°F

UFC-35 - PCBTF, Acrylic resin M, Methyl n-amyl ketone, EB acetate, 2-benzotriazole, Xylene (0.1%), GAL WT: 10.28 WT PCT SOLIDS: 39.81 VOL. PCT SOLIDS: 42.76 COATING VOC: 0.78 LB/GL MATERIAL VOC: 0.37 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 81°F

UK-01, UK-02, UK-04, UK-07, UK-11, UK-12, UK-14 Thru UK-16, UK-19, UK-20 - Acrylic resin E, N-butyl acetate, Ethyl 3-ethoxypropionate, Methyl ethyl ketone (11.0%), Isoindolinone pigment A, EB Acetate, GAL WT: 8.26-8.46 WT PCT SOLIDS: 40.5-45.4 VOL. PCT SOLIDS: 33.8-38.8 VOC: 4.93 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 23°F

UK-03, UK-05, UK-06, UK-10, UK-13 - Acrylic resin E, N-butyl acetate, Ethyl 3-ethoxypropionate, Methyl ethyl ketone (3.8%), Cyclohexanone, EB Acetate, Ethylbenzene* (0.1%), GAL WT: 8.35-8.38 WT PCT SOLIDS: 40.9-41.9 VOL. PCT SOLIDS: 34.8-35.8 VOC: 4.93 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 23°F

UK-09, UK-18 - Acrylic resin E, N-butyl acetate, Ethyl 3-ethoxypropionate, Methyl ethyl ketone (3.5%), EB Acetate, 1-methyl-2-pyrrolidone (m-pyrrol), Ethylbenzene* (0.1%), GAL WT: 8.26-8.45 WT PCT SOLIDS: 40.45-45.36 VOL. PCT SOLIDS: 33.80-38.80 VOC: 4.94 LB/GL H: 2 F: 3 R: 0 FLASH POINT: 23°F

UK-08 - Acrylic resin E, Ethyl 3-ethoxypropionate, N-butyl acetate, Methyl ethyl ketone (2.6%), EB Acetate, GAL WT: 8.36 WT PCT SOLIDS: 41.4-41.9 VOL. PCT SOLIDS: 35.1-35.7 VOC: 4.93 LB/GL H: 2 F: 3 R: 0

* = See Section V - Special effects