

MATERIAL SAFETY DATA SHEET

MSDS NO. 5

5 September 2003



MATERIAL SAFETY DATA SHEET PEARL CONCENTRATES, DRY FLAKES, AND KOSMIC GLO

MSDS NO. 5 House of Kolor Sales

Effective Date: 09/05/03

Manufacturer:

House of Kolor, Inc.
210 Crosby Street
Picayune, Mississippi 39466

Telephone:

Medical Emergency (888) 345-5732
Transportation Emergency (888) 748-5558 or (703) 527-3887
Product Information (800) 845-2500

1. PRODUCT IDENTIFICATION

Product: PEARL CONCENTRATES, DRY FLAKES, AND KOSMIC GLO

Synonyms: none

2. COMPOSITION/INFORMATION ON INGREDIENTS

(See SECTION X)

Ingredients No.	CAS	Vapor Pressure (20°C. mm Hg)	Exposure Limit (TLV)	Ingredients No.	CAS	Vapor Pressure (20°C. mm Hg)	Exposure Limit (TLV)
1. Acrylic resin E	Not Available	None	None-A,O	7. Toluene [65]	108-88-3	36.7	100 ppm-A 200 ppm-O 300 ppm-O Ceiling
2. Micaceous pigment	Not Available	None	0.5 mg/m ³ -A,O	8. Xylene	1330-20-7	25.0 @ 25°F	100 ppm-A,O 150 ppm-A,O 15 min (STEL)
3. Mixed metal alkanoates	Not Available	None	None-A, O	9. Zinc sulphide copper doped	68611-70-1	None	10 mg/m ³ -A 15 mg/m ³ -O
4. N-butyl acetate	123-86-4	8.4	150 ppm-A,O 200 ppm-A,O 15 min (STEL)				
5. Polyester (polyethylene terephthlate)	25038-59-9	None	0.5 mg/m ³ -V				
6. Propylene Glycol n-Propyl Ether	1569-01-3						

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

3. HAZARDS IDENTIFICATION

Emergency Overview

DANGER! HARMFUL OR FATAL IF SWALLOWED. VAPOR HARMFUL. AFFECTS CENTRAL NERVOUS SYSTEM. CAUSES SEVERE EYE IRRITATION. CAUSES IRRITATION TO SKIN AND RESPIRATORY TRACT. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CHRONIC EXPOSURE CAN CAUSE ADVERSE LIVER, KIDNEY, AND BLOOD EFFECTS. FLAMMABLE LIQUID AND VAPOR.

Health Rating: 2 - Moderate (Life)

Flammability Rating: 3 - Severe

Reactivity Rating: 0 - None

Contact Rating: 3 - Severe

Protective Equip: Combination vapor-particulate respirator for use in solvent-containing environments is recommended if ventilation is inadequate. If over-exposure is possible, use Air Supplied Respirator. Local ventilation should be sufficient to reduce airborne vapor concentration to below LEL and TLV to be considered adequate. Wear solvent resistant gloves such as nitrile rubber. Chemical splash goggles are required if splashing is possible. Solvent resistant clothing is recommended as needed to avoid skin contact. Class B extinguisher should be available.

Work/Hygienic Practices: Wash hands thoroughly after handling product and before smoking or eating.

Potential Health Effects

Inhalation:

Inhalation of vapors may be irritating to the nose and throat. Inhalation of high concentrations may result in nausea, vomiting, headache, ringing in the ears, and severe breathing difficulties which may be delayed in onset. Substernal pain, cough, and hoarseness are also reported. High vapor concentrations are anesthetic and central nervous system depressants.

Ingestion:

Ingestion causes burning sensation in mouth and stomach, nausea, vomiting and salivation. Minute amounts aspirated into the lungs can produce a severe hemorrhagic pneumonitis with severe pulmonary injury or death.

Skin Contact:

Skin contact results in loss of natural oils and often results in a characteristic dermatitis. May be absorbed through the skin.

Eye Contact:

Vapors cause eye irritation. Splashes cause severe irritation, possible corneal burns and eye damage.

Chronic Exposure:

Chronic inhalation can cause headache, loss of appetite, nervousness and pale skin. Repeated or prolonged skin contact may cause a skin rash. Repeated exposure of the eyes to high concentrations of vapor may cause reversible eye damage. Repeated exposure can damage bone marrow, causing low blood cell count. May damage the liver and kidneys.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney, blood, or respiratory function may be more susceptible to the effects of the substance.

4. FIRST AID MEASURES

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

Ingestion:

Aspiration hazard. If swallowed, vomiting may occur spontaneously, but **DO NOT INDUCE**. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.

Skin Contact:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

Fire:

Flash point: See Section X

Autoignition temperature: 464C (867F)

Flammable limits in air % by volume:

LEL: 1.0; UEL: 7.0

Explosion:

Above flash point, vapor-air mixtures are explosive within flammable limits noted above.

Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated.

Sensitive to static discharge.

Fire Extinguishing Media:

Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode. Vapors can flow along surfaces to distant ignition source and flash back.

6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and

unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. HANDLING AND STORAGE

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits:

See Section 2

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details. Use explosion-proof equipment.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapor respirator may be worn for up to ten times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece organic vapor respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. Where respirators are required, you must have a written program covering the basic requirements in the OSHA respirator standard. These include training, fit testing, medical approval, cleaning, maintenance, cartridge change schedules, etc. See

29CFR1910.134 for details.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Opaque or translucent powder or liquid.

Odor:

Characteristic odor.

Solubility:

Insoluble in water.

Specific Gravity:

See Section 16

pH:

Not applicable.

% Volatiles by volume:

See Section 16

Boiling Point:

165 TO 354°F

Vapor Density:

Heavy Than Air

Evaporation Rate:

Slower Than Ether

10. STABILITY AND REACTIVITY

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Involvement in a fire causes formation of carbon monoxide and unidentified organic components.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong oxidizing agents and strong acids.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Xylene: oral rat LD50: 4300 mg/kg; inhalation rat LC50: 5000 ppm/4H; skin rabbit LD50: > 1700 mg/kg; Irritation eye rabbit: 87 mg mild (Std. Draize); irritation skin rabbit 500 mg/24 moderate (Std. Draize); investigated as a tumorigen, mutagen, reproductive effector.

Ethyl benzene: oral rat LD50: 3500 mg/kg; skin rabbit LD50: 17800 uL/kg; investigated as a tumorigen, mutagen, reproductive effector.

Reproductive Toxicity:

May cause teratogenic effects.

Ingredient	---NTP Carcinogen---		
	Known	Anticipated	IARC Category
m-Xylene (108-38-3)	No	No	3
o-Xylene (95-47-6)	No	No	3
p-Xylene (106-42-3)	No	No	3
Ethyl Benzene (100-41-4)	No	No	2B

Special Effects

Ethylbenzene* - Tests by the NTP have shown that Ethylbenzene* is a carcinogen in animals. The relevance to humans is unknown. **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. **Fe₂O₃ coated mica** - Repeated and prolonged overexposure may lead to chronic lung disease. **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. **Mica coated with TiO₂** - Repeated and prolonged overexposure may lead to chronic lung disease. 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. **TiO₂/CrO₂ coated mica flake** - Repeated and prolonged overexposure may lead to chronic lung disease. Tests for mutagenic activity in bacterial or mammalian cell cultures have been inconclusive. Tests for embryotoxic activity in animals have been inconclusive. **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.

12. ECOLOGICAL INFORMATION

Environmental Fate:

When released into the soil, this material may evaporate to a moderate extent. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material may biodegrade to a moderate extent. When released into water, this material may evaporate to a moderate extent. When released into water, this material may biodegrade to a moderate extent. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of less than 1 day. This material is not expected to significantly bioaccumulate. (mixed xylenes: octanol / water partition coefficient 3.1 - 3.2; bioconcentration factor = 1.3, eels)

Environmental Toxicity:

This material is expected to be slightly toxic to aquatic life. The LC50/96-hour values for fish are between 10 and 100 mg/l.

13. DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

Domestic (Land, D.O.T.)

Proper Shipping Name: Paint
Hazard Class: 3
UN/NA: UN1263
Packing Group: II

International (Water, I.M.O.)

Proper Shipping Name: Paint
Hazard Class: 3
UN/NA: UN1263
Packing Group: II

15. REGULATORY INFORMATION

All Ingredients are TSCA and DSL listed.
OSHA Hazard Class: Flammable Liquid

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

NFPA Ratings: Health: **2** Flammability: **3** Reactivity: **0**

Label Hazard Warning:

Danger! Extremely flammable liquid and vapor. Vapors may cause flash fire. Vapor harmful. Causes eye irritation. Causes skin irritation. Harmful or fatal if swallowed. Vapor harmful. May affect the brain or nervous system causing dizziness, headache or nausea. Causes nose and throat irritation. Causes lung irritation. Overexposure may cause kidney damage. May be harmful if absorbed through skin. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

Label First Aid:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. (Thoroughly clean or destroy contaminated shoes). If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately. If swallowed, do not induce vomiting. Get medical attention immediately.

Label Precautions:

Vapors may ignite explosively. Keep away from heat, sparks and flame. Vapors may cause flash fire. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. Use only with adequate ventilation. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. KEEP OUT OF REACH OF CHILDREN.

Product Use:

Automotive Refinish

Revision Information:

MSDS Section(s) changed since last revision of document include: 2.

Contents/Physical Properties for Products

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)
--------------	------------------------------

DP-16 thru DP-46 – Micaceous pigment, GAL WT: 21.10-29.48 WT PCT SOLIDS: 90.00-100.00 VOL. PCT SOLIDS: 71.70-100.00 VOC: 0.00 LB/GL H: 1 F: 0 R: 0 FLASH POINT: N/A

DR-1 thru DR-3 - Micaceous pigment (100.03%), GAL WT:23.32-25.00 WT PCT SOLIDS: 100.00 VOL. PCT SOLIDS: 100.00 VOC: 0.00 LB/GL H: 0 F: 0 R: 0 FLASH POINT: N/A

PP-1 thru PP-5 – Acrylic resin E, N-butyl acetate, Xylene (21.8%), Mica/titanium dioxide/tin oxide/n-propoxypropanol, Mica/titanium dioxide/iron oxide/tin oxide/n-propoxypropanol, Ethylbenzene* (4.5%), Propylene glycol n-propyl ether, Toluene

(0.7%) [65], GAL WT: 9.35-10.95 WT PCT SOLIDS: 67.10-67.91 VOL. PCT SOLIDS: 50.17-56.91 VOC: 3.51 LB/GL H: 3 F: 3 R: 0 FLASH POINT: 60°F

PP-6 thru PP-8 – Mica/titanium dioxide/tin oxide/n-propoxypropanol, Acrylic resin E, Xylene (18.2%), N-butyl acetate, Ethylbenzene* (3.8%), Toluene (0.6%) [65], GAL WT: 10.45-11.14 WT PCT SOLIDS: 60.31-64.89 VOL. PCT SOLIDS: 42.82-46.16 VOC: 4.14 LB/GL H: 3 F: 3 R: 0 FLASH POINT: 81°F

F-14 thru F-68 – Polyester (polyethylene terephthlate), GAL WT: 10.83-11.66 WT PCT SOLIDS: 100.00 VOL. PCT SOLIDS: 100.00 VOC: 0.00 LB/GL H: 0 F: 0 R: 0 FLASH POINT: N/A

MF-1, MF-2 - Polyester (polyethylene terephthlate), GAL WT: 9.00 WT PCT SOLIDS: 100.00 VOL. PCT SOLIDS: 100.00 VOC: 0.00 LB/GL H: 0 F: 0 R: 0 FLASH POINT: N/A

UMF-1, UMF-2 - Polyester (polyethylene terephthlate), GAL WT: 9.00 WT PCT SOLIDS: 100.00 VOL. PCT SOLIDS: 100.00 VOC: 0.00 LB/GL H: 0 F: 0 R: 0 FLASH POINT: N/A

KG-00 thru KG-07 – Zinc sulphide copper doped, GAL WT: 33.82 WT PCT SOLIDS: 100.00 VOL. PCT SOLIDS: 100.00 VOC: 0.00 LB/GL H: 0 F: 0 R: 0 FLASH POINT: N/A

Disclaimer:

House of Kolor Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

House of Kolor, Inc. makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Valspar Refinish, Inc. will not be responsible for damages resulting from use of or reliance upon this information.

Prepared by: Tim Herrington, Color and Compliance Manager, Valspar Refinish, Inc.

* = See Section V - Special effects