Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID:	**KU100**
Product Name:	CATYALYST KU-100 URETHANE SYSTEMS
Product Use:	Paint or Coatings Related Product
Print date:	18/Jul/2014
Revision Date:	17/Jul/2014

Company Identification
The Valspar Corporation
PO Box 1461
Minneapolis, MN 55440

Manufacturer's Phone: 1-612-851-7000

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:
Inhalation
Ingestion
Skin absorption

Eye Contact:

- Moderate eye irritation
- Risk of serious damage to eyes.

Skin Contact:

- Causes skin irritation.
- Dermatitis
- May cause defatting of the skin.
- Can be absorbed through skin.
- May cause sensitization by skin contact.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Harmful if swallowed.
- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Difficulty in breathing
- May cause pulmonary edema.
- May cause bronchopneumonia or bronchitis.
- May cause sensitization by inhalation.

Target Organ and Other Health Effects:
- Causes headache, drowsiness or other effects to the central nervous system.
- Liver injury may occur.
- Blood disorders
- Kidney injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:
- 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.
- Overexposures may cause certain individuals to develop isocyanate sensitization which causes a reaction in isocyanates below the TLV.
- Chronic exposure may cause permanent damage of health.
- Possible sensitization.
- As a result of a previous exposure or a large single dose certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to subsequent exposures to isocyanates below the TLV. Symptoms of wheezing, cough, shortness of breath or asthma attack. Individuals may develop lung sensitivity which may persist for long periods. May cause lung damage or impairment. Sensitization may be temporary or permanent.

Carcinogens:
- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
HEXANE, 1,6-DIISOCYANATO-, HOMOPOLYMER 28182-81-2	40 - 45	HEXANE, 1,6-DIISOCYANATO-, HOMOPOLYMER
METHYL ISOBUTYL KETONE 108-10-1	15 - 20	Methylisobutyl ketone
XYLENE 1330-20-7	10 - 15	Xylenes (o-, m-, p- isomers)
AROMATIC NAPHTHA, HEAVY 64742-94-5	10 - 15	Solvent naphtha, petroleum, heavy arom.
ETHYLBENZENE 100-41-4	1 - 5	Ethyl benzene
BUTYL ACETATE 123-86-4	1 - 5	n-Butyl acetate
AROMATIC NAPHTHA, LIGHT 64742-95-6	1 - 5	Petroleum naphtha, light aromatic
NAPHTHALENE 91-20-3	1 - 5	Naphthalene
1,2,4-TRIMETHYLBENZENE 95-63-6	1 - 5	1,2,4-Trimethylbenzene

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

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Eye Contact:
Remove any contact lenses and open eyes wide apart. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:
Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:
Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:
Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration.

Medical conditions aggravated by exposure:
Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	81
Flash point (Celsius):	27
Lower explosive limit (%):	1
Upper explosive limit (%):	8
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:
None known.

Extinguishing media:
Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:
Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:
Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid all personal contact.

7. HANDLING AND STORAGE

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Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear chemical goggles with splash shields or face shield. Contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury in case of exposure.

Skin protection:

Gloves: Neoprene or other nonporous.

Other Personel Protection Data:

To prevent skin contact wear protective clothing covering all exposed areas. Ensure that eyewash stations and safety showers are close to the workstation location. Chemical resistant apron

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
METHYL ISOBUTYL KETONE 108-10-1	15 - 20	100 ppm TWA 410 mg/m^3 TWA		
XYLENE 1330-20-7	10 - 15	100 ppm TWA 435 mg/m^3 TWA		
ETHYLBENZENE 100-41-4	1 - 5	100 ppm TWA 435 mg/m^3 TWA		
BUTYL ACETATE 123-86-4	1 - 5	150 ppm TWA 710 mg/m^3 TWA		
NAPHTHALENE 91-20-3	1 - 5	10 ppm TWA 50 mg/m^3 TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
METHYL ISOBUTYL KETONE 108-10-1	15 - 20	20 ppm TWA	75 ppm STEL		
XYLENE 1330-20-7	10 - 15	100 ppm TWA	150 ppm STEL		
ETHYLBENZENE 100-41-4	1 - 5	100 ppm TWA	125 ppm STEL		
BUTYL ACETATE 123-86-4	1 - 5	150 ppm TWA	200 ppm STEL		
NAPHTHALENE 91-20-3	1 - 5	10 ppm TWA	15 ppm STEL		CAN BE ABSORBED THROUGH THE SKIN
1,2,4-TRIMETHYLBENZENE 95-63-6	1 - 5	25 PPM			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	liquid
pH:	not determined
Vapor pressure:	15.037594 mmHg @ 68ºF (20ºC)
Vapor density (air = 1.0):	4.7
Boiling point:	237.2ºF (114ºC)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	8.05
Specific Gravity:	.96
Evaporation rate (butyl acetate = 1.0):	1.6
Flash point (Fahrenheit):	81
Flash point (Celsius):	27
Lower explosive limit (%):	1
Upper explosive limit (%):	8
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Nitrogen compounds.

Sensitivity to static discharge: Subject to static discharge hazards. Please see bonding and grounding information in Section 7.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s

11. TOXICOLOGICAL INFORMATION

HEXANE, 1,6-DIISOCYANATO-, HOMOPOLYMER 28182-81-2	40 - 45	= 18500 mg/m^3 Inhalation LC50 Rat 1 h
METHYL ISOBUTYL KETONE 108-10-1	15 - 20	= 2080 mg/kg Oral LD50 Rat = 8.2 mg/L Inhalation LC50 Rat 4 h > 16000 mg/kg Dermal LD50 Rabbit
XYLENE 1330-20-7	10 - 15	= 4300 mg/kg Oral LD50 Rat = 47635 mg/L Inhalation LC50 Rat 4 h = 5000 ppm Inhalation LC50 Rat 4 h > 1700 mg/kg Dermal LD50 Rabbit
AROMATIC NAPHTHA, HEAVY 64742-94-5	10 - 15	> 2000 mg/kg Dermal LD50 Rabbit > 5000 mg/kg Oral LD50 Rat > 590 mg/m^3 Inhalation LC50 Rat 4 h
ETHYLBENZENE 100-41-4	1 - 5	= 15354 mg/kg Dermal LD50 Rabbit = 17.2 mg/L Inhalation LC50 Rat 4 h = 3500 mg/kg Oral LD50 Rat
BUTYL ACETATE 123-86-4	1 - 5	= 10768 mg/kg Oral LD50 Rat = 390 ppm Inhalation LC50 Rat 4 h > 17600 mg/kg Dermal LD50 Rabbit
AROMATIC NAPHTHA, LIGHT 64742-95-6	1 - 5	= 3400 ppm Inhalation LC50 Rat 4 h = 8400 mg/kg Oral LD50 Rat > 2000 mg/kg Dermal LD50 Rabbit > 5.2 mg/L Inhalation LC50 Rat 4 h
NAPHTHALENE 91-20-3	1 - 5	= 490 mg/kg Oral LD50 Rat > 20 g/kg Dermal LD50 Rabbit > 2500 mg/kg Dermal LD50 Rat > 340 mg/m^3 Inhalation LC50 Rat 1 h
1,2,4-TRIMETHYLBENZENE 95-63-6	1 - 5	= 18 g/m^3 Inhalation LC50 Rat 4 h = 3400 mg/kg Oral LD50 Rat > 3160 mg/kg Dermal LD50 Rabbit

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains ethylbenzene, which has been determined by NTP to be an animal carcinogen with no known relevance to humans. IARC has classified ethylbenzene as possibly carcinogenic to humans (2b) on the basis of sufficient evidence of carcinogenicity in laboratory animals but inadequate evidence of cancer in humans.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Developmental Toxicity	California Prop 65 - Reproductive (Male)
METHYL ISOBUTYL KETONE 108-10-1	15 - 20	Listed. Initial date 03/28/14 - developmental toxicity	

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
METHYL ISOBUTYL KETONE 108-10-1	15 - 20		carcinogen, initial date 11/04/11
ETHYLBENZENE 100-41-4	1 - 5		Listed. initial date 6/11/04 - carcinogen
NAPHTHALENE 91-20-3	1 - 5		Listed. initial date 4/19/02 - carcinogen

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
METHYL ISOBUTYL KETONE 108-10-1	15 - 20			Monograph 101 [in preparation]
ETHYLBENZENE 100-41-4	1 - 5			Monograph 77 [2000]
NAPHTHALENE 91-20-3	1 - 5			Monograph 82 [2002]

Ingredient Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens
NAPHTHALENE 91-20-3	1 - 5		Reasonably Anticipated To Be A Human Carcinogen

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
METHYL ISOBUTYL KETONE 108-10-1	15 - 20			A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans
ETHYLBENZENE 100-41-4	1 - 5	Present		A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans
NAPHTHALENE 91-20-3	1 - 5	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):	UN1263
Proper Shipping Name:	PAINT
Hazard Class:	3
Packing Group:	III

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:	UN1263
Proper shipping name:	Paint
Hazard Class:	3

Packing Group: III

International Maritime Organization (IMO):

UN/ID No:	UN1263
Proper shipping name:	PAINT
Hazard Class:	3
Packing Group:	III
Marine Pollutant	YES
Marine Pollutant Ingredient 1	NAPHTHALENE
Marine Pollutant Ingredient 2	AROMATIC NAPHTHA, HEAVY

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
METHYL ISOBUTYL KETONE 108-10-1	15 - 20		form R reporting required for 1.0% de minimis concentration	5000
XYLENE 1330-20-7	10 - 15		form R reporting required for 1.0% de minimis concentration	100
ETHYLBENZENE 100-41-4	1 - 5		form R reporting required for 1.0% de minimis concentration	1000
BUTYL ACETATE 123-86-4	1 - 5			5000
NAPHTHALENE 91-20-3	1 - 5		form R reporting required for 1.0% de minimis concentration	100
1,2,4-TRIMETHYLBENZENE 95-63-6	1 - 5		Listed.	

SARA 311/312 Hazard Class:

Acute:	yes
Chronic:	yes
Flammability:	yes
Reactivity:	no
Sudden Pressure:	no

U.S. STATE REGULATIONS:

Right to Know:
The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

METHYL ISOBUTYL KETONE	108-10-1
ETHYLBENZENE	100-41-4
XYLENE	1330-20-7
BUTYL ACETATE	123-86-4
AROMATIC NAPHTHA, LIGHT	64742-95-6
1,2,4-TRIMETHYLBENZENE	95-63-6
HEXANE, 1,6-DIISOCYANATO-, HOMOPOLYMER	28182-81-2
AROMATIC NAPHTHA, HEAVY	64742-94-5
NAPHTHALENE	91-20-3

California Proposition 65:
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Rule 66 status of product Photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:
All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:
All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	3
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:
OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:
The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
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