

SAFETY DATA SHEET

RAMUC® KOP-COAT

Revision Date 17-Sep-2015
Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Ramuc Type DS - 303 Dark Blue
Product code 910130300

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Paint
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

Supplier Kop-Coat, Inc.
RAMUC
36 Pine Street
Rockaway, NJ 07866
1-800-221-4466

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

2.2 Label elements

Signal Word
Danger

Hazard Statements
May cause cancer
Causes damage to organs through prolonged or repeated exposure



Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance

This product is a mixture. Health hazard information is based on its components.

Mixture

Chemical Name	CAS-No	Weight %
Barium Sulfate	7727-43-7	10 - 20
Crystalline silica (quartz)	14808-60-7	5 - 10
Diacetone alcohol	123-42-2	1 - 5
C.I. Pigment Blue 15	147-14-8	1 - 5
Ethylene glycol monobutyl ether	111-76-2	1 - 5
Titanium dioxide	13463-67-7	1 - 5

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice	Show this safety data sheet to the doctor in attendance. When symptoms persist or in all cases of doubt seek medical advice.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician or poison control center immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a poison control center or doctor for treatment advice.
Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Call a physician or poison control center immediately.
Ingestion	If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician There is no specific antidote for effects from overexposure to this material. Treat symptomatically.

5. Fire-Fighting Measures**5.1 Extinguishing media****Suitable extinguishing media**

Water may be used to cool and prevent the rupture of containers that are exposed to the heat from a fire. Use water spray, fog, Carbon dioxide (CO₂), foam or dry chemical.

Unsuitable Extinguishing Media None known based on information supplied.

5.2 Special hazards arising from the substance or mixture**Special Hazard**

Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Combustion Products Possible formation of carbon oxides, nitrogen oxides, and hazardous organic compounds.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

5.3 Advice for firefighters

Evacuate personnel to safe areas. Move non-burning material, as feasible, to a safe location as soon as possible. As in any fire, wear self-contained breathing apparatus and full protective gear. Thoroughly decontaminate all protective equipment after use. Use water spray to cool fire-exposed containers.

6. Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment. Stop leak if you can do it without risk. Refer to protective measures listed in sections 7 and 8. Avoid exceeding of the given occupational exposure limits (see section 8). Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

6.2 Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly.

7. Handling and storage

7.1 Precautions for safe handling**Advice on safe handling**

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Use according to package label instructions. Empty containers may retain product residue or vapor.

Hygiene measures

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep away from food, drink and animal feedingsuffs. Keep from freezing.

Materials to Avoid

No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Barium Sulfate 7727-43-7	TWA: 5 mg/m ³ inhalable fraction, particulate matter containing no asbestos and <1% crystalline silica	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ TWA: 3 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³
Crystalline silica (quartz) 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	: (30)/(%SiO ₂ + 2) mg/m ³ TWA total dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	TWA: 0.025 mg/m ³	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.10 mg/m ³
Diacetone alcohol 123-42-2	TWA: 50 ppm	TWA: 50 ppm TWA: 240 mg/m ³	TWA: 50 ppm	TWA: 50 ppm TWA: 238 mg/m ³	TWA: 50 ppm TWA: 238 mg/m ³	TWA: 50 ppm
C.I. Pigment Blue 15 147-14-8	TWA: 1 mg/m ³ Cu dust and mist	-				
Ethylene glycol monobutyl ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ S*	TWA: 20 ppm	TWA: 20 ppm TWA: 97 mg/m ³	TWA: 20 ppm TWA: 97 mg/m ³	TWA: 20 ppm
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust	TWA: 10 mg/m ³ TWA: 3 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³

8.2 Appropriate engineering controls**Engineering Measures**

None under normal use conditions. Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

8.3 Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Safety glasses with side-shields.

Skin and body protection

Wear protective gloves/ protective clothing. Remove and wash contaminated clothing before re-use.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Color	Blue
Odor	Slightly sweet
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	8.0-9.5	
Melting/freezing point		No information available
Boiling point/boiling range		No information available
Flash Point	> 94 °C / > 201 °F	
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		No information available
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	1.24	
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic	> 21 mm ² /s	
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content	260 g/L
Density	10.34 lb/gal

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

No information available.

10.5 Incompatible Materials

No materials to be especially mentioned.

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

11.1 Acute toxicity**Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50 28,930.00 mg/kg
LC50 (Vapor) 822.00 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Barium Sulfate 7727-43-7	> 5005 mg/kg (rat)	-	-
Diacetone alcohol 123-42-2	4 g/kg (Rat)	-	-
Ethylene glycol monobutyl ether 111-76-2	470 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
Titanium dioxide 13463-67-7	10000 mg/kg (Rat)	-	-

11.2 Information on toxicological effects**Skin corrosion/irritation**Product Information

- No information available

Component Information

- No information available

Eye damage/irritationProduct Information

- No information available

Component Information

- No information available

Respiratory or skin sensitizationProduct Information

- No information available

Component Information

- No information available

Germ cell mutagenicityProduct Information

- No information available

Component Information

- No information available

CarcinogenicityProduct Information

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Component Information

- Contains a known or suspected carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA

Crystalline silica (quartz) 14808-60-7	A2	Group 1	Known	
Titanium dioxide 13463-67-7	-	Group 2B	-	

Reproductive toxicityProduct Information

- No information available

Component Information

- No information available

STOT - single exposure

No information available

STOT - repeated exposure

- No information available

Other adverse effectsProduct Information

- No information available

Component Information

- No information available

Aspiration hazardProduct Information

- No information available

Component Information

- No information available

12. Ecological information

12.1 ToxicityEcotoxicity

No information available

22.95993 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Diacetone alcohol 123-42-2	-	LC50: 96 h Lepomis macrochirus 420 mg/L static LC50: 96 h Lepomis macrochirus 420 mg/L	-
Ethylene glycol monobutyl ether 111-76-2	-	LC50: 96 h Lepomis macrochirus 1490 mg/L static LC50: 96 h Lepomis macrochirus 2950 mg/L	EC50: 48 h Daphnia magna 1000 mg/L

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
Diacetone alcohol 123-42-2	1.03
C.I. Pigment Blue 15 147-14-8	6.6
Ethylene glycol monobutyl ether 111-76-2	0.81

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations**13.1 Waste treatment methods**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

DOT	Not regulated
MEX	Not regulated
IMDG	Not regulated
IATA	Not regulated

15. Regulatory information**15.1 International Inventories**

TSCA	Complies
DSL	Complies
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
Barium Sulfate 7727-43-7	1.0
C.I. Pigment Blue 15 147-14-8	1.0

Ethylene glycol monobutyl ether 111-76-2	1.0
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15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Crystalline silica (quartz) - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
Crystalline silica (Quartz) (Respirable) - 14808-60-7	Carcinogen
Ethylbenzene - 100-41-4	Carcinogen
Benzyl chloride - 100-44-7	Carcinogen
Toluene - 108-88-3	Developmental Female Reproductive
1,4-DIOXANE - 123-91-1	Carcinogen

16. Other information

NFPA	Health Hazard 1	Flammability 1	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 1*	Flammability 1	Physical Hazard 0	Personal protection X

Legend:ACGIH (*American Conference of Governmental Industrial Hygienists*)

Ceiling (C)

DOT (*Department of Transportation*)EPA (*Environmental Protection Agency*)IARC (*International Agency for Research on Cancer*)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (*National Institute for Occupational Safety and Health*)NTP (*National Toxicology Program*)OSHA (*Occupational Safety and Health Administration of the US Department of Labor*)PEL (*Permissible Exposure Limit*)

Reportable Quantity (RQ)

Skin designation (S*)

STEL (*Short Term Exposure Limit*)TLV® (*Threshold Limit Value*)TWA (*time-weighted average*)**Revision Date** 17-Sep-2015**Revision Note**

No information available

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet