

Safety Data Sheet

RAMUC®

KOP-COAT

Revision Date 13-Jan-2014
Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product name Ramuc Type EP - Part B
Product code 908100100
Recommended Use Paint/Paint Related Material

Supplier Kop-Coat, Inc.
RAMUC
36 Pine Street
Rockaway, NJ 07866

Emergency telephone number Chemtrec: 1-800-424-9300 for US
+1 703-527-3887 outside US

2. Hazards identification

Emergency Overview

Flammable liquid and vapor
Vapor harmful
May cause skin, eye, and respiratory tract irritation

Potential Health Effects

Principle Routes of Exposure Eye contact, ingestion, skin contact, inhalation, and absorption.

Acute toxicity

Eyes Causes serious eye irritation.

Skin May cause skin irritation and/or dermatitis. Repeated exposure may cause skin dryness or cracking. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Inhalation May cause irritation of respiratory tract. Inhalation of vapors in high concentration may cause irritation of respiratory system. High concentrations can cause unconsciousness and death. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.

Ingestion If ingested, product may cause irritation of mouth, throat, stomach, and digestive and central nervous systems; signs and symptoms may include headache, drowsiness, dizziness, swelling, abdominal discomfort, and/or burning sensation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects

Repeated and prolonged exposure to solvents may cause brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Xylene: Laboratory animals exposed to high levels of xylene showed evidence of effects on the liver, kidneys, lungs, spleen, and caused hearing loss. Rats exposed during pregnancy to xylene showed fetotoxic effects.

Aggravated Medical Conditions Neurological disorders. Liver disorders. Skin disorders.

Environmental hazard See Section 12 for additional Ecological Information.

3. Composition/information on ingredients

Hazardous Components

Chemical Name	CAS-No	Weight %
Polyamide resin	68410-23-1	60-100
Xylene	1330-20-7	10-30

4. First aid measures

General advice	Show this material 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 soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Call a poison control center or doctor for treatment advice. Remove and wash contaminated clothing before re-use.
Inhalation	Call a physician or poison control center immediately. Move victim to fresh air. Apply artificial respiration if victim is not breathing.
Ingestion	Call a physician or poison control center immediately. 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.
Notes to physician	There is no specific antidote for effects from overexposure to this material. Treat symptomatically.

5. Fire-fighting measures

Flammable Properties	Flammable.
Flash point	84 °F / 29 °C
Suitable extinguishing media	Use CO2, dry chemical, or foam. Water may be unsuitable for extinguishing fires. Water may be used to cool and prevent the rupture of containers that are exposed to the heat from a fire.
Hazardous Combustion Products	Combustion may produce carbon monoxide, carbon dioxide, and irritating or toxic vapors and gases.
Explosion Data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
Protective Equipment and Precautions for Firefighters	Evacuate personnel to safe areas. Move non-burning material, as feasible, to a safe location as soon as possible. Thoroughly decontaminate all protective equipment after use. Use water spray to cool fire-exposed containers. Fire fighters should be protected from potential explosion hazards while extinguishing the fire. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. DO NOT extinguish a fire resulting from the flow of flammable liquid until the flow of the liquid is effectively shut off. This precaution will help prevent the accumulation of an explosive vapor-air mixture after the initial fire is extinguished.

6. Accidental release measures

Personal precautions	Stop leak if you can do it without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation. Take precautionary measures against static discharges. Avoid contact with skin, eyes and inhalation of vapors. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Try to prevent the material from entering drains or water courses. Prevention of fire and explosion. Recover the product in solid form, if possible.
Methods for Containment	Dike to collect large liquid spills. Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Prevent material from entering surface waters, drains or sewers, and soil. Spills of material which could reach surface waters may need to be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.
Methods for cleaning up	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use clean non-sparking tools to collect absorbed material. Keep in suitable and closed containers for disposal.
Other information	Follow personal protective equipment recommendations found in 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. Never exceed any occupational exposure limits. Shut off ignition sources; including electrical equipment and flames. Do not allow the spilled product to enter public drainage systems or open waterways. Do not allow smoking in the area.

7. Handling and storage

Advice on safe handling	Empty containers may retain product residue or vapor. Keep away from open flames, hot surfaces and sources of ignition. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only in well-ventilated areas. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.
Technical measures/Storage conditions	Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m ³		TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 655 mg/m ³
Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 125 ppm (vacated) STEL: 545 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³
Component	British Columbia	Alberta	Quebec	Ontario TWA/EV

Xylene 1330-20-7 (10-30)	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm STEL: 150 ppm
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NIOSH IDLH: *Immediately Dangerous to Life or Health*

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering Measures Use adequate ventilation to maintain airborne concentrations at levels below permissible or recommended occupational exposure limits. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

- Hand Protection** Solvent-resistant gloves
- Eye/Face Protection** Wear chemical-resistant glasses and/or goggles and a face shield when eye and face contact is possible due to handling and processing of material.
- Skin and body protection** Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate. Wear protective gloves and additional protective clothing as necessary to prevent exposures. Wash hands thoroughly after handling. Care must be taken to wash down suit, gloves and boots before removal.
- Respiratory protection** A NIOSH-approved air-purifying respirator with the appropriate cartridge may be appropriate under certain circumstances where airborne concentrations are expected to exceed permissible exposure limits.

Hygiene measures It is good practice to avoid contact with the product and/or its vapor, mists or dust by using appropriate protective measures. Wash thoroughly after handling and before eating or drinking.

9. Physical and chemical properties

Physical state Liquid
Odor Amine
Color amber

Property	Values	Remarks • Methods
pH	Not applicable	
Boiling point/boiling range	139 °C / 282 °F	
Flash Point	29 °C / 84 °F	
Evaporation rate	< 1	
Explosion Limits		
upper		
lower		
Vapor pressure	no data available	
Vapor density	no data available	
Specific Gravity	0.94	
Viscosity, kinematic	no data available	
Water solubility	no data available	
Partition coefficient: n-octanol/water	no data available	
Explosive properties	no data available	

Other information
Volatile organic compounds (VOC) content 281 g/L
Melting/freezing point

10. Stability and reactivity

Stability/Reactivity Stable under recommended storage conditions.

Incompatible products Oxidizing or reducing agents. Keep away from heat and sources of ignition.

Conditions to Avoid Direct sources of heat.

Hazardous Decomposition Products Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

Hazardous Polymerization Hazardous polymerization does not occur.

11. Toxicological information

Acute toxicity

Product Information The product itself has not been tested.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Xylene	4300 mg/kg (Rat)	1700 mg/kg (Rabbit)	5000 ppm (Rat) 4 h 47635 mg/L (Rat) 4 h
Ethylbenzene	3500 mg/kg (Rat)	15354 mg/kg (Rabbit)	17.2 mg/L (Rat) 4 h

Chronic toxicity

Chronic toxicity

Repeated and prolonged exposure to solvents may cause brain and nervous system damage
 Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal
 Xylene: Laboratory animals exposed to high levels of xylene showed evidence of effects on the liver, kidneys, lungs, spleen, and caused hearing loss. Rats exposed during pregnancy to xylene showed fetotoxic effects

Carcinogenicity

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

Chemical Name	ACGIH	IARC	NTP	OSHA	Mexico
Xylene		Group 3			
Ethylbenzene	A3	Group 2B		X	

IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Target Organ Effects

Not determined.

12. Ecological information

Ecotoxicity

. Ecological evaluation of this material has not been performed; however, do not allow the product to be released to the environment without governmental approval/permits.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms	Toxicity to other organisms

Xylene		LC50: 96 h Pimephales promelas 13.4 mg/L flow-through LC50: 96 h Oncorhynchus mykiss 2.661 - 4.093 mg/L static LC50: 96 h Oncorhynchus mykiss 13.5 - 17.3 mg/L LC50: 96 h Lepomis macrochirus 13.1 - 16.5 mg/L flow-through LC50: 96 h Lepomis macrochirus 19 mg/L LC50: 96 h Lepomis macrochirus 7.711 - 9.591 mg/L static LC50: 96 h Pimephales promelas 23.53 - 29.97 mg/L static LC50: 96 h Cyprinus carpio 780 mg/L semi-static LC50: 96 h Cyprinus carpio 780 mg/L LC50: 96 h Poecilia reticulata 30.26 - 40.75 mg/L static	EC50: 48 h water flea 3.82 mg/L LC50: 48 h Gammarus lacustris 0.6 mg/L		
Ethylbenzene	EC50: 72 h Pseudokirchneriella subcapitata 4.6 mg/L EC50: 96 h Pseudokirchneriella subcapitata 438 mg/L EC50: 72 h Pseudokirchneriella subcapitata 2.6 - 11.3 mg/L static EC50: 96 h Pseudokirchneriella subcapitata 1.7 - 7.6 mg/L static	LC50: 96 h Oncorhynchus mykiss 11.0 - 18.0 mg/L static LC50: 96 h Oncorhynchus mykiss 4.2 mg/L semi-static LC50: 96 h Pimephales promelas 7.55 - 11 mg/L flow-through LC50: 96 h Lepomis macrochirus 32 mg/L static LC50: 96 h Pimephales promelas 9.1 - 15.6 mg/L static LC50: 96 h Poecilia reticulata 9.6 mg/L static	EC50: 48 h Daphnia magna 1.8 - 2.4 mg/L		

Persistence and degradability No information available.

Bioaccumulation .

Mobility No information available.

Chemical Name	log Pow
Xylene	2.77 - 3.15

13. Disposal considerations

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use a cutting torch on, the empty drum.

US EPA Waste Number D001

14. Transport information

Note ORM-D

DOT

Proper shipping name Paint
 Hazard class 3
 UN/ID No UN1263
 Packing Group III

MEX

15. Regulatory information

International Inventories

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

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified 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
 "-" - Unknown. Not listed.

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	Weight %	SARA 313 - Threshold Values %
Xylene	10-30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
 Chronic Health Hazard No
 Fire Hazard Yes
 Sudden Release of Pressure Hazard No
 Reactive Hazard No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Xylene	100 lb			X
TOLUENE	1000 lb	X	X	X
Ethylbenzene	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Xylene	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
TOLUENE	1000 lb 1 lb		RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
Ethylbenzene	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
TOLUENE	Developmental Female Reproductive
Ethylbenzene	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Xylene	X	X	X	X	
ALIPHATIC NAPHTHA		X			
TOLUENE	X	X	X	X	
1,3,5-Trimethylbenzene	X				
Ethylbenzene	X	X	X	X	

International Regulations

Mexico - Grade

Serious risk, Grade 3

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

B2 Flammable liquid

D2A Very toxic materials



