

SAFETY DATA SHEET

RAMUC®

KOP-COAT

Revision Date 07-Oct-2015
Version 1

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

1.1 Product identifier

Product name Ramuc Type EP Hi-Build Immersion Activator - Part B
Product code 912230000

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

Recommended Use Paint/Paint Related Material
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

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Flammable liquids	Category 3

2.2 Label elements

Signal Word

Danger

Hazard Statements

Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
Suspected of causing cancer
Suspected of damaging fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
Flammable liquid and vapor

**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
 Wash face, hands and any exposed skin thoroughly after handling
 Contaminated work clothing must not be allowed out of the workplace
 Do not breathe dust/fume/gas/mist/vapors/spray
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Keep container tightly closed
 Ground/Bond container and receiving equipment
 Use explosion-proof electrical/ventilating/lighting/equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor
 If skin irritation or rash occurs: Get medical advice/attention
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
 Wash contaminated clothing before reuse
 In case of fire: Use CO₂, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep cool

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

21.6527% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance

Not applicable

Mixture

Chemical Name	CAS-No	Weight %
Calcium carbonate (Limestone)	1317-65-3	50 - 60
Polyamide Resin	68424-41-9	20 - 30
Xylene	1330-20-7	10 - 20
n-Butanol	71-36-3	5 - 10
Ethylbenzene	100-41-4	1 - 5
TRIETHYLENETETRAMINE	112-24-3	< 1

Toluene	108-88-3	< 1
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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	Call a poison control center or doctor for treatment advice. Remove and wash contaminated clothing before re-use. Wash off immediately with plenty of water for at least 15 minutes.
Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Call a physician or poison control center immediately.
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.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	See Section 2.2, Label Elements and/or Section 11, Toxicological effects.
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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.
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5. Fire-Fighting Measures

5.1 Extinguishing media

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.

Unsuitable Extinguishing Media None.

5.2 Special hazards arising from the substance or mixture

Special Hazard

None known based on information supplied

Hazardous Combustion Products No information available.

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. 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. Thoroughly decontaminate all protective equipment after use. Use water spray to cool fire-exposed containers. 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

6.1 Personal precautions, protective equipment and emergency procedures

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, especially in confined areas. 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.

6.2 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. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

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 must 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.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

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. Empty containers may retain product residue or vapor. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place.

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
Calcium carbonate (Limestone) 1317-65-3	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ TWA: 3 mg/m ³ STEL: 20 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³	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
n-Butanol 71-36-3	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m ³	TWA: 15 ppm Ceiling: 30 ppm	TWA: 20 ppm TWA: 60 mg/m ³	Ceiling: 50 ppm Ceiling: 152 mg/m ³ Skin	TWA: 20 ppm

Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³	TWA: 20 ppm	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 125 ppm STEL: 543 mg/m ³	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 125 ppm STEL: 543 mg/m ³	TWA: 20 ppm
TRIETHYLENETETRA MINE 112-24-3	-	-				TWA: 0.5 ppm TWA: 3 mg/m ³ Skin
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	TWA: 20 ppm Adverse reproductive effect	TWA: 50 ppm TWA: 188 mg/m ³ Skin	TWA: 50 ppm TWA: 188 mg/m ³ Skin	TWA: 20 ppm

8.2 Appropriate engineering controls

Engineering Measures

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

8.3 Individual protection measures, such as personal protective equipment

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.

Respiratory protection

. NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.

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	Clear Amber
Odor	Amine
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	Not applicable	
Melting/freezing point		No information available
Boiling point/boiling range	100 °C / 212 °F	
Flash Point	28 °C / 82 °F	
Evaporation rate	< 1	
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	1.485	
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		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content	342 g/L
Density	12.38 lb/gal

10. Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Direct sources of heat.

10.5 Incompatible Materials

None known based on information supplied.

10.6 Hazardous Decomposition Products

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

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 21.6527% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50	5,835.00 mg/kg
Dermal LD50	16,113.00 mg/kg
LC50 (Vapor)	59.87 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Xylene 1330-20-7	3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h
n-Butanol 71-36-3	700 mg/kg (Rat)	= 3402 mg/kg (Rabbit)	> 8000 ppm (Rat) 4 h
Ethylbenzene 100-41-4	3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat) 4 h
TRIETHYLENETETRAMINE 112-24-3	2500 mg/kg (Rat)	= 550 mg/kg (Rabbit)	-
Toluene 108-88-3	2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 28.1 mg/L (Rat) 4 h

11.2 Information on toxicological effects

Skin corrosion/irritation

Product Information

- No information available

Component Information

- No information available

Eye damage/irritation

Product Information

- No information available

Component Information

- No information available

Respiratory or skin sensitization

Product Information

- No information available

Component Information

- No information available

Germ cell mutagenicity

Product Information

- No information available

Component Information

- No information available

Carcinogenicity

Product 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

Ethylbenzene 100-41-4	-	Group 2B	-	
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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 Toxicity**Ecotoxicity**

No information available

21.6527 % 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
Xylene 1330-20-7	-	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 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	EC50: 48 h water flea 3.82 mg/L LC50: 48 h Gammarus lacustris 0.6 mg/L
n-Butanol 71-36-3	EC50: 96 h Desmodesmus subspicatus 500 mg/L EC50: 72 h Desmodesmus subspicatus 500 mg/L	LC50: 96 h Pimephales promelas 1730 - 1910 mg/L static LC50: 96 h Pimephales promelas 1740 mg/L flow-through LC50: 96 h Lepomis macrochirus 100000 - 500000 µg/L static LC50: 96 h Pimephales promelas 1910000 µg/L static	EC50: 48 h Daphnia magna 1983 mg/L EC50: 48 h Daphnia magna 1897 - 2072 mg/L Static
Ethylbenzene	EC50: 72 h Pseudokirchneriella	LC50: 96 h Oncorhynchus mykiss	EC50: 48 h Daphnia magna 1.8 -

100-41-4	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	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	2.4 mg/L
TRIETHYLENETETRAMINE 112-24-3	EC50: 72 h Desmodesmus subspicatus 2.5 mg/L EC50: 72 h Pseudokirchneriella subcapitata 20 mg/L EC50: 96 h Pseudokirchneriella subcapitata 3.7 mg/L	LC50: 96 h Poecilia reticulata 570 mg/L semi-static LC50: 96 h Pimephales promelas 495 mg/L	EC50: 48 h Daphnia magna 31.1 mg/L
Toluene 108-88-3	EC50: 96 h Pseudokirchneriella subcapitata 433 mg/L EC50: 72 h Pseudokirchneriella subcapitata 12.5 mg/L static	LC50: 96 h Pimephales promelas 15.22 - 19.05 mg/L flow-through LC50: 96 h Pimephales promelas 12.6 mg/L static LC50: 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L flow-through LC50: 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L static LC50: 96 h Oncorhynchus mykiss 5.8 mg/L semi-static LC50: 96 h Lepomis macrochirus 11.0 - 15.0 mg/L static LC50: 96 h Oryzias latipes 54 mg/L static LC50: 96 h Poecilia reticulata 28.2 mg/L semi-static LC50: 96 h Poecilia reticulata 50.87 - 70.34 mg/L static	EC50: 48 h Daphnia magna 5.46 - 9.83 mg/L Static EC50: 48 h Daphnia magna 11.5 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
Xylene 1330-20-7	3.15
n-Butanol 71-36-3	0.785
Ethylbenzene 100-41-4	3.118
TRIETHYLENETETRAMINE 112-24-3	-1.4
Toluene 108-88-3	2.65

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment 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.

14. Transport Information

Note	ORM-D Limited quantity
DOT	Quarts and gallons ship as limited quantity.
UN/ID No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	III
MEX	no data available
IMDG	
Proper shipping name	UN1263, Paint, 3, PG III
IATA	
Proper shipping name	UN1263, Paint, 3, PG III

15. Regulatory information

15.1 International Inventories

TSCA	Complies
DSL	Complies
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	Complies
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 %
Xylene 1330-20-7	1.0
n-Butanol 71-36-3	1.0
Ethylbenzene 100-41-4	0.1

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
Ethylbenzene - 100-41-4	Carcinogen
Toluene - 108-88-3	Developmental Female Reproductive

16. Other information

NFPA	Health Hazard 2	Flammability 3	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2*	Flammability 3	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)

Prepared By Kop-Coat, Inc.
Regulatory Affairs

Revision Date 07-Oct-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