

**RAMUC®**



**RAMUC/BONDEX SURFACE PREP KIT KIT INCLUDES CODE 1802 PLAIN 1x2  
US GL PLASTIC PAIL WITH LID CODE 11505 12oz SULFAMIC ACID CODE  
11605**

Version 1

Print Date 05/09/2006

REVISION DATE: 09/19/2005

This is a kit that contains the following components:

RAMUC CRYSTALS

RAMUC TSP

RAMUC #13 QUICK PLUG



**RAMUC®****RAMUC CRYSTALS**Version 1  
REVISION DATE: 09/19/2005

Print Date 05/09/2006

**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : RAMUC CRYSTALS  
 Product code :  
 COMPANY : Republic Powdered Metals  
 2628 Pearl Road  
 Medina, OH 44256  
 Telephone : (800) 551-7081  
 Emergency Phone: : After Hours: Chemtrec 1-800-424-9300

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

White. Crystalline Powder. Dust may cause shortness of breath, pulmonary edema, oral and esophageal burns, and pneumonitis. May cause nausea, headaches, and dizziness. Inhalation overexposure may cause pulmonary edema. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : Dust may cause shortness of breath, pulmonary edema, oral and esophageal burns, and pneumonitis. May cause nausea, headaches, and dizziness. Inhalation overexposure may cause pulmonary edema.  
 Eyes : Direct contact may cause severe irritation. May cause mechanical irritation or abrasion, and possible chemical burns. May cause temporary injury.  
 Ingestion : Harmful or fatal if swallowed. May cause chemical burns to stomach, mouth, nose, and throat. May cause severe stomach and intestinal irritation, nausea, vomiting, diarrhea, and abdominal pain.  
 Skin : May cause severe irritation. May cause itching, reddening, inflammation.

**Aggravated Medical Conditions**

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

**Chronic Health Effects**

No known effects anticipated.

**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Sulfamic Acid	5329-14-6	> 60.0

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**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.

- Inhalation : Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
- Eye contact : Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
- Skin contact : Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

- Flash point : Not available.
- Method : Not available.
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : This product is not expected to burn under normal conditions of use. Use that which is appropriate to the surroundings.
- Hazardous combustion products : Not available.
- Protective equipment for firefighters : Not applicable. Product is not expected to burn.
- Fire and explosion conditions : This product not expected to ignite under normal conditions of use.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Dampen material with water to control dusting. Scoop up and transfer to appropriate container for disposal. Flush spill area with water.

**SECTION 7 - HANDLING AND STORAGE**

Prevent inhalation of dust and contact with skin and eyes. Clean hands thoroughly after handling. Precautions also apply to emptied containers. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Store in sealed containers in a cool, dry, ventilated warehouse location.

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**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Personal protection equipment**

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved dust respirator where airborne concentrations are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Skin and body protection : Prevent contact with shoes and clothing.
- Protective measures : Use professional judgment in the selection, care, and use. Wear gloves, head coverings and full body clothing as necessary to prevent skin irritation. Washable or disposable clothing may be used. Do not take unwashed clothing home. Work clothes should be washed separately from other clothing and the washing machine rinsed thoroughly following use. Inform the launderer of the proper procedures. Store work clothes and street clothes separately to prevent contamination.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

**Exposure Limits**

No known components with exposure limits.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Crystalline Powder
- Color : White
- Odor : None
- pH : Not available.
- Vapour pressure : Not available.
- Vapor density : Not available.
- Melting point/range : Not available.
- Freezing point : Not available.
- Boiling point/range : Not available.
- Water solubility : Miscible

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Specific Gravity : 2.1  
% Volatile Weight : 0 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Strong oxidizers.Nitric acid.Chlorine.Strong bases.  
Decomposition products : May emit ammonia, oxides of sulfur, oxides of nitrogen, and oxides of carbon.  
Stability : Material is stable under normal storage, handling, and use.  
Hazardous polymerization : Will not occur under normal conditions.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

No Data Available

**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal Method : Recycle or dispose of in compliance with local, provincial and federal regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**TDG / DOT Shipping Description:**  
SULFAMIC ACID, 8, UN2967, PG III

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory.  
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

**U.S. Federal Regulations:**

SARA 313 Components : None present or none present in regulated quantities.  
SARA 311/312 Hazards : Acute Health Hazard  
OSHA Hazardous Components :



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OSHA Status: Considered : Irritant  
 hazardous based on the : Corrosive  
 following criteria:

OSHA Flammability : Not Regulated

Regulatory VOC (less water and : 0 g/l  
 exempt solvent)

VOC Method 310 : 0 %

**U.S. State Regulations:**

Penn RTK Components : Sulfamic Acid 5329-14-6

NJ RTK Components : Sulfamic Acid 5329-14-6

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:  
 None known.

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	2
Flammability	0
Reactivity	1
PPE	

0 = Minimum  
 1 = Slight  
 2 = Moderate  
 3 = Serious  
 4 = Severe

**Further information:**

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

**Prepared by: Rich Mikol**

**Legend**

ACGIH - American Conference of Governmental Hygienists  
 CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT - Department of Transportation  
 NTP - National Toxicology Program  
 EPA - Environmental Protection Agency  
 HMIS - Hazardous Materials Information System  
 IARC - International Agency for Research on Cancer  
 MSHA - Mine Safety Health Administration  
 NDSL - Non-Domestic Substance List  
 NIOSH - National Institute for Occupational Safety and Health

PEL - Permissible Exposure Limit  
 RCRA - Resource Conservation and Recovery Act  
 RTK - Right To Know  
 SARA - Superfund Amendments and Reauthorization Act  
 STEL - Short Term Exposure Limit  
 TLV - Threshold Limit Value  
 TSCA - Toxic Substances Control Act  
 TWA - Time Weighted Average  
 V - Volume  
 VOC - Volatile Organic Compound

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DSL - Domestic Substance List  
OSHA - Occupational Safety and Health Administration

WHMIS - Workplace Hazardous Materials Information System

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**REPUBLIC**  
POWDERED METALS, INC.

**RAMUC TSP**Version 1  
REVISION DATE: 09/19/2005

Print Date 05/09/2006

**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : RAMUC TSP  
 Product code :  
 COMPANY : Republic Powdered Metals  
 2628 Pearl Road  
 Medina, OH 44256  
 Telephone : (800) 551-7081  
 Emergency Phone: : After Hours: Chemtrec 1-800-424-9300

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

White. Powder. Dust may irritate nose and throat. Dust irritating to the respiratory tract. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : Dust may irritate nose and throat. Dust irritating to the respiratory tract.  
 Eyes : May cause mechanical irritation or abrasion.  
 Ingestion : May cause irritation to the mouth, throat and stomach. May cause gastrointestinal irritation, nausea, and vomiting.  
 Skin : May cause mild irritation.

**Aggravated Medical Conditions**

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

**Chronic Health Effects**

No known effects anticipated.

**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Sodium carbonate	497-19-8	40.0 - 70.0
Trisodium phosphate	7601-54-9	40.0 - 70.0

**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.

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- Inhalation : Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
- Eye contact : Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
- Skin contact : Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

- Flash point : Not available.
- Method : Not available.
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : This product is not expected to burn under normal conditions of use. Use that which is appropriate to the surroundings.
- Hazardous combustion products : Not available.
- Protective equipment for firefighters : Not applicable. Product is not expected to burn.
- Fire and explosion conditions : This product not expected to ignite under normal conditions of use.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Dampen material with water to control dusting. Scoop up and transfer to appropriate container for disposal. Flush spill area with water.

**SECTION 7 - HANDLING AND STORAGE**

Prevent inhalation of dust and contact with skin and eyes. Clean hands thoroughly after handling. Precautions also apply to emptied containers. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Store in sealed containers in a cool, dry, ventilated warehouse location.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Personal protection equipment**



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- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved dust respirator where airborne concentrations are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Skin and body protection : Prevent contact with shoes and clothing.
- Protective measures : Use professional judgment in the selection, care, and use. Wear gloves, head coverings and full body clothing as necessary to prevent skin irritation. Washable or disposable clothing may be used. Do not take unwashed clothing home. Work clothes should be washed separately from other clothing and the washing machine rinsed thoroughly following use. Inform the launderer of the proper procedures. Store work clothes and street clothes separately to prevent contamination.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

**Exposure Limits**

No known components with exposure limits.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Powder
- Color : White
- Odor : None
- pH : Not available.
- Vapour pressure : Not available.
- Vapor density : Not available.
- Melting point/range : Not available.
- Freezing point : Not available.
- Boiling point/range : Not available.
- Water solubility : Miscible
- Specific Gravity : 0.85
- % Volatile Weight : 0 %

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**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Oxidizing agents.Bases.  
Stability : Material is stable under normal storage, handling, and use.  
Hazardous polymerization : Will not occur under normal conditions.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Sodium carbonate, CAS-No.: 497-19-8  
Acute oral toxicity (LD-50 oral) 4,090 mg/kg ( Rat )  
Acute inhalation toxicity (LC-50) 2.3 mg/l ( Rat )  
Trisodium phosphate, CAS-No.: 7601-54-9  
Acute oral toxicity (LD-50 oral) 7,400 mg/kg ( Rat )

**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal Method : Recycle or dispose of in compliance with local, provincial and federal regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**TDG / DOT Shipping Description:**  
NOT REGULATED

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory.  
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

**U.S. Federal Regulations:**

None present or none present in regulated quantities.

SARA 311/312 Hazards : Based on an evaluation of the components used, this product does not contain hazardous ingredients identified as per 29 CFR 1910.1200



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OSHA Hazardous Components :

OSHA Flammability : Not Regulated

Regulatory VOC (less water and exempt solvent) : 0 g/l

VOC Method 310 : 0 %

**U.S. State Regulations:**

MASS RTK Components : Trisodium phosphate 7601-54-9

Penn RTK Components : Sodium carbonate 497-19-8  
 Trisodium phosphate 7601-54-9

NJ RTK Components : Sodium carbonate 497-19-8  
 Trisodium phosphate 7601-54-9

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:

None known.

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	2
Flammability	0
Reactivity	0
PPE	

0 = Minimum  
 1 = Slight  
 2 = Moderate  
 3 = Serious  
 4 = Severe

**Further information:**

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

**Prepared by: Rich Mikol**

**Legend**

ACGIH - American Conference of Governmental Hygienists  
 CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT - Department of Transportation  
 NTP - National Toxicology Program  
 EPA - Environmental Protection Agency  
 HMIS - Hazardous Materials Information System  
 IARC - International Agency for Research on Cancer  
 MSHA - Mine Safety Health Administration  
 NDSL - Non-Domestic Substance List  
 NIOSH - National Institute for Occupational Safety and Health

PEL - Permissible Exposure Limit  
 RCRA - Resource Conservation and Recovery Act  
 RTK - Right To Know  
 SARA - Superfund Amendments and Reauthorization Act  
 STEL - Short Term Exposure Limit  
 TLV - Threshold Limit Value  
 TSCA - Toxic Substances Control Act  
 TWA - Time Weighted Average  
 V - Volume  
 VOC - Volatile Organic Compound

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DSL - Domestic Substance List  
OSHA - Occupational Safety and Health Administration

WHMIS - Workplace Hazardous Materials Information System

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**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : RAMUC #13 QUICK PLUG  
 Product code :  
 COMPANY : Republic Powdered Metals  
 2628 Pearl Road  
 Medina, OH 44256  
 Telephone : (800) 551-7081  
 Emergency Phone: : After Hours: Chemtrec 1-800-424-9300

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

Gray. Powder. Dust may irritate nose and throat. Dust irritating to the respiratory tract. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : Dust may irritate nose and throat. Dust irritating to the respiratory tract.  
 Eyes : Direct contact may cause severe irritation. May cause mechanical irritation or abrasion, and possible chemical burns. May cause temporary injury.  
 Ingestion : May cause irritation to the mouth, throat and stomach. May cause gastrointestinal irritation, nausea, and vomiting.  
 Skin : May cause severe irritation. May cause dryness, cracking, irritation, and chemical burns. May produce cement dermatitis due to primary irritation from alkaline, hydroscopic and abrasive properties.

**Aggravated Medical Conditions**

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

**Chronic Health Effects**

Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica.

**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Portland cement	65997-15-1	40.0 - 70.0
Cement alumina chemicals	NJTSRN# 51721300-5813P	15.0 - 40.0

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Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	15.0 - 40.0
Calcium salt	7778-18-9	1.0 - 5.0
Hydrated Lime	39445-23-3	1.0 - 5.0

**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.

Inhalation	:	Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
Eye contact	:	Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
Skin contact	:	Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
Ingestion	:	Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

Flash point	:	Not available.
Method	:	Not available.
Lower explosion limit	:	Not available.
Upper explosion limit	:	Not available.
Autoignition temperature	:	Not available.
Extinguishing media	:	This product is not expected to burn under normal conditions of use. Use that which is appropriate to the surroundings.
Hazardous combustion products	:	Not available.
Protective equipment for firefighters	:	Not applicable. Product is not expected to burn.
Fire and explosion conditions	:	This product not expected to ignite under normal conditions of use.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Dampen material with water to control dusting. Scoop up and transfer to appropriate container for disposal. Flush spill area with water.

**SECTION 7 - HANDLING AND STORAGE**

Prevent inhalation of dust and contact with skin and eyes. Clean hands thoroughly after handling. Precautions



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also apply to emptied containers. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Store in sealed containers in a cool, dry, ventilated warehouse location.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Personal protection equipment**

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved dust respirator where airborne concentrations are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Skin and body protection : Prevent contact with shoes and clothing.
- Protective measures : Use professional judgment in the selection, care, and use. Wear gloves, head coverings and full body clothing as necessary to prevent skin irritation. Washable or disposable clothing may be used. Do not take unwashed clothing home. Work clothes should be washed separately from other clothing and the washing machine rinsed thoroughly following use. Inform the launderer of the proper procedures. Store work clothes and street clothes separately to prevent contamination.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

**Exposure Limits**

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Portland cement	65997-15-1	ACGIH TWA: OSHA PEL: OSHA PEL:	10 mg/m3 5 mg/m3 15 mg/m3	Respirable fraction. Total dust.
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	ACGIH TWA: OSHA TWA: OSHA TWA: OSHA PEL: OSHA PEL:	0.05 mg/m3 0.1 mg/m3 0.3 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Respirable. Total dust. Total dust. Respirable fraction.
Calcium salt	7778-18-9	ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA: OSHA TWA:	10 mg/m3 5 mg/m3 15 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Total dust. Total dust. Respirable fraction.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Form : Powder  
Color : Gray  
Odor : None  
pH : Not available.  
Vapour pressure : Not available.  
Vapor density : Not available.  
Melting point/range : Not available.  
Freezing point : Not available.  
Boiling point/range : Not available.  
Water solubility : Miscible  
Specific Gravity : 2.9  
% Volatile Weight : 0 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Not Applicable.  
Stability : Material is stable under normal storage, handling, and use.  
Hazardous polymerization : Will not occur under normal conditions.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

No Data Available

**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal Method : Recycle or dispose of in compliance with local, provincial and federal regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**TDG / DOT Shipping Description:**  
NOT REGULATED



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**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory.  
 One or more components are listed on the NDSL.

**U.S. Federal Regulations:**

None present or none present in regulated quantities.

SARA 311/312 Hazards : Acute Health Hazard

OSHA Hazardous Components :

Portland cement	65997-15-1
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
Calcium salt	7778-18-9

OSHA Status: Considered : Irritant  
 hazardous based on the following criteria:

OSHA Flammability : Not Regulated

Regulatory VOC (less water and exempt solvent) : 0 g/l

VOC Method 310 : 0 %

Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:  
 Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

**U.S. State Regulations:**

MASS RTK Components	:	Portland cement	65997-15-1
		Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		Calcium salt	7778-18-9

Penn RTK Components	:	Portland cement	65997-15-1
		Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		Cement alumina chemicals	NJTSRN# 51721300-5813P
		Calcium salt	7778-18-9

NJ RTK Components	:	Portland cement	65997-15-1
		Cement alumina chemicals	NJTSRN# 51721300-5813P
		Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		Calcium salt	7778-18-9
		Hydrated Lime	39445-23-3

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:



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14808-60-7

Crystalline Silica (Quartz)/ Silica Sand

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	1
Flammability	0
Reactivity	0
PPE	

0 = Minimum  
 1 = Slight  
 2 = Moderate  
 3 = Serious  
 4 = Severe

**Further information:**

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

**Prepared by: Rich Mikol**

**Legend**

ACGIH - American Conference of Governmental Hygienists  
 CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT - Department of Transportation  
 NTP - National Toxicology Program  
 EPA - Environmental Protection Agency  
 HMIS - Hazardous Materials Information System  
 IARC - International Agency for Research on Cancer  
 MSHA - Mine Safety Health Administration  
 NDSL - Non-Domestic Substance List  
 NIOSH - National Institute for Occupational Safety and Health  
 DSL - Domestic Substance List  
 OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit  
 RCRA - Resource Conservation and Recovery Act  
 RTK - Right To Know  
 SARA - Superfund Amendments and Reauthorization Act  
 STEL - Short Term Exposure Limit  
 TLV - Threshold Limit Value  
 TSCA - Toxic Substances Control Act  
 TWA - Time Weighted Average  
 V - Volume  
 VOC - Volatile Organic Compound  
 WHMIS - Workplace Hazardous Materials Information System