

RAMUC[®]



DURATHANE WHITE 30 EA/CS (LOW VOC)

Version 1

Print Date 05/09/2006

REVISION DATE: 07/11/2005

SECTION 1 - PRODUCT IDENTIFICATION

Trade name : DURATHANE WHITE 30 EA/CS (LOW VOC)
Product code :
COMPANY : Republic Powdered Metals
2628 Pearl Road
Medina, OH 44256
Telephone : (216) 514-7599
Emergency Phone: : 1-800-551-7081
After Hours: Chemtrec 1-800-424-9300
Product use : Sealant

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

White. Non-sag gunnable paste. May cause slight irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. May cause allergic respiratory sensitization. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel.

Acute Potential Health Effects/ Routes of Entry

Inhalation : May cause slight irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. May cause allergic respiratory sensitization.
Eyes : Direct contact may cause mild irritation.
Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.
Skin : May cause sensitization resulting in irritation, itching and redness.

Aggravated Medical Conditions

Chronic Health Effects

Prolonged or repeated contact/exposure to aromatic petroleum distillates may cause defatting, drying, and irritation of the skin, dermatitis, and central nervous system (CNS) effects. Prolonged or repeated exposure to butyl benzyl phthalate may cause reduced body weights and adverse effects on the liver, kidney, spleen, pancreas, and reproductive organs. 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. Fillers are encapsulated and not expected to be released from product under normal conditions of use. Prolonged or repeated exposure to mineral spirits (petroleum naphtha or stoddard solvent) may cause defatting, drying, and irritation of the skin, dermatitis, central nervous system (CNS) effects, and adverse liver, kidney, and lung effects.

RAMUC[®]

REPUBLIC
 POWDERED METALS, INC.
DURATHANE WHITE 30 EA/CS (LOW VOC)

Version 1

Print Date 05/09/2006

REVISION DATE: 07/11/2005

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Aromatic Polyisocyanate Resin	NJT SRN# 51721300-5381P	30.0 - 60.0
Limestone (Calcium carbonate)	1317-65-3	10.0 - 30.0
Diisodecyl phthalate	26761-40-0	10.0 - 30.0
Tackifier	NJT SRN# 51721300-5372P	5.0 - 10.0
Butyl benzyl phthalate	85-68-7	5.0 - 10.0
Titanium dioxide	13463-67-7	5.0 - 10.0
Thickener	NJT SRN# 51721300-5300P	3.0 - 7.0
1,2-Benzenedicarboxylic acid	111381-89-6	1.0 - 5.0
1,2-Benzenedicarboxylic acid	68515-45-7	1.0 - 5.0
1,2-Benzenedicarboxylic acid	68515-44-6	1.0 - 5.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	<1.0

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. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel.
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	:	150 °F, 66 °C
Method	:	Tag Closed Cup
Lower explosion limit	:	0.60 %(V) Solvent
Upper explosion limit	:	7 %(V) Solvent
Autoignition temperature	:	Not available.
Extinguishing media	:	If water fog is ineffective, use carbon dioxide, dry chemical or foam.
Hazardous combustion products	:	Carbon monoxide and carbon dioxide can form. Hydrocyanic acid and nitrogen oxides can form.
Protective equipment for firefighters	:	Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).

RAMUC®



DURATHANE WHITE 30 EA/CS (LOW VOC)

Version 1

Print Date 05/09/2006

REVISION DATE: 07/11/2005

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Scrape up and transfer to appropriate container for disposal.

SECTION 7 - HANDLING AND STORAGE

Prevent inhalation of vapor, ingestion and contact with skin, eyes and clothing. Preferably use entire contents in one continuous work session. Do not smoke, weld, generate sparks, or use flame near container. Change soiled work clothes frequently. Clean hands thoroughly after handling. Do not store or use near food. Keep container closed when not in use. Since emptied containers retain product residue and vapor, observe precautions even after container is emptied. Store under dry warehouse conditions away from heat and all ignition sources.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved organic vapor or supplied air respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Use safety glasses if eye contact is likely.
- Skin and body protection : Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.
- Protective measures : Use professional judgment in the selection, care, and use.
- Engineering measures : Use general ventilation and/ or local exhaust to reduce the airborne contaminant concentration below the exposure limit listed in the MSDS

Exposure Limits

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Limestone (Calcium carbonate)	1317-65-3	OSHA PEL:	5 mg/m3	Respirable fraction.
		OSHA PEL:	15 mg/m3	Total dust.
		ACGIH TWA:	3 mg/m3	Respirable particles.
		ACGIH TWA:	10 mg/m3	Inhalable particles.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.
Titanium dioxide	13463-67-7	ACGIH TWA:	10 mg/m3	Total dust.
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.

RAMUC[®]

REPUBLIC
 POWDERED METALS, INC.
DURATHANE WHITE 30 EA/CS (LOW VOC)

Version 1

Print Date 05/09/2006

REVISION DATE: 07/11/2005

Chemical Name	CAS Number	Regulation	Limit	Form
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	ACGIH TWA:	0.05 mg/m ³	Respirable fraction.
		OSHA TWA:	0.1 mg/m ³	Respirable.
		OSHA TWA:	0.3 mg/m ³	Total dust.
		OSHA PEL:	15 mg/m ³	Total dust.
		OSHA PEL:	5 mg/m ³	Respirable fraction.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form	: Non-sag gunnable paste
Color	: White
Odor	: PetroleumSolvent
pH	: Not available.
Vapour pressure	: Not available.
Vapor density	: Heavier than air
Melting point/range	: Not available.
Freezing point	: Not available.
Boiling point/range	: 280 °F, 138 °C
Water solubility	: Insoluble
Specific Gravity	: 1.1344
% Volatile Weight	: 6 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid	: Amines.Water or moisture and oxidizing agents.Alcohols.Strong acids.Strong bases.
Stability	: Material is stable under normal storage, handling, and use.
Hazardous polymerization	: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Butyl benzyl phthalate, CAS-No.: 85-68-7	
Acute oral toxicity (LD-50 oral)	13,500 mg/kg (Rat)

RAMUC®



DURATHANE WHITE 30 EA/CS (LOW VOC)

Version 1

Print Date 05/09/2006

REVISION DATE: 07/11/2005

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method : Waste not regulated under RCRA. Incinerate at EPA approved facility or dispose of waste in compliance with state and local 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:

SARA 313 Components : None present or none present in regulated quantities.

SARA 311/312 Hazards : Acute Health Hazard
Fire Hazard

OSHA Hazardous Components :

Limestone (Calcium carbonate)	1317-65-3
Titanium dioxide	13463-67-7
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7

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

OSHA Flammability : IIIA

Regulatory VOC (less water and : 77 g/l
exempt solvent)

VOC Method 310 : 2 %

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	:	Limestone (Calcium carbonate)	1317-65-3
		Butyl benzyl phthalate	85-68-7



DURATHANE WHITE 30 EA/CS (LOW VOC)

Version 1

Print Date 05/09/2006

REVISION DATE: 07/11/2005

	Titanium dioxide	13463-67-7
Penn RTK Components	: Aromatic Polyisocyanate Resin	NJTSRN# 51721300-5381P
	Limestone (Calcium carbonate)	1317-65-3
	Diisodecyl phthalate	26761-40-0
	Tackifier	NJTSRN# 51721300-5372P
	Butyl benzyl phthalate	85-68-7
	Titanium dioxide	13463-67-7
	Thickener	NJTSRN# 51721300-5300P
	1,2-Benzenedicarboxylic acid	111381-89-6
	1,2-Benzenedicarboxylic acid	68515-45-7
	1,2-Benzenedicarboxylic acid	68515-44-6
NJ RTK Components	: Aromatic Polyisocyanate Resin	NJTSRN# 51721300-5381P
	Limestone (Calcium carbonate)	1317-65-3
	Diisodecyl phthalate	26761-40-0
	Tackifier	NJTSRN# 51721300-5372P
	Butyl benzyl phthalate	85-68-7
	Crystalline Silica (Quartz)/ Silica Sand	14808-60-7

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

14808-60-7	Crystalline Silica (Quartz)/ Silica Sand
91-08-7	Toluene-2,6-Diisocyanate
584-84-9	2,4-Toluene diisocyanate
1333-86-4	Carbon Black
91-20-3	Naphthalene
108-88-3	Toluene

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	2
Flammability	2
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
 NTP - National Toxicology Program
 DOT - Department of Transportation
 DSL - Domestic Substance List

PEL - Permissible Exposure Limit
 RCRA - Resource Conservation and Recovery Act
 RTK - Right To Know
 SARA - Superfund Amendments and Reauthorization Act

RAMUC®



DURATHANE WHITE 30 EA/CS (LOW VOC)

Version 1

Print Date 05/09/2006

REVISION DATE: 07/11/2005

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
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
OSHA - Occupational Safety and Health Administration

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