

VAC SYSTEMS INTERNATIONAL

Material Safety
Date Sheet

Tough Coat Mechanical Insulation Repair Coating
MSDS No. 1011-07

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Tough Coat Mechanical Insulation Repair Coating
Generic Name: Coatings (Acrylic)
Chemical Name: Acrylic emulsion

CAS#: Mixture/None Assigned
Formula: Mixture
Hazard Label: SS-001

Manufacturer: Vac Systems International
Address: 1800 East Cliff Road, #11
Burnsville, MN 55337

Telephone: 952-808-1616
Emergency: 1-800-424-9300
Internet Address: www.vacsysint.com

Trade Names: Tough Coat

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Component	Percent
Not Available	Acrylic emulsion	80-90
1163-19-5	Decabromodiphenyl oxide	1-10
1309-64-4	Antimony trioxide	1-5
7664-41-7	Ammonia	<0.5

Additional Component Information

Ammonia is used to adjust pH.

SECTION 3: HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE AND ODOR: Black or white water dispersion with slight ammonia odor.

Under normal conditions of use, this product is not expected to create any unusual emergency hazards.

Potential Health Effects

Summary:

Due to the form of the product, hazardous exposures are unlikely to occur. Exposure may cause slight temporary irritation to skin, eyes, nose, or throat.

Inhalation:

Temporary irritation of the nose and throat may occur.

Skin:

Temporary irritation (itching) or redness may occur.

Absorption:

Not applicable.

Ingestion:

This product is not intended to be ingested or eaten under normal conditions of use. If ingested, it may cause nausea and systemic poisoning.

Eyes:

Temporary irritation (itching) or redness may occur.

Target Organs:

Upper respiratory passages, skin and eyes.

Primary routes of entry (exposure):

Inhalation, skin and eye contact.

Medical conditions which may be aggravated by exposure:

None identified.

SECTION 4: FIRST AID MEASURES

First Aid: Inhalation

Remove to fresh air. If symptoms persist, contact a physician.

First Aid: Skin

Remove contaminated clothing. Wash exposed skin with soap and cold water. Launder contaminated clothing before reusing.

First Aid: Ingestion

This product is not intended to be ingested or eaten. If this product is ingested, do not induce vomiting. Drink plenty of water. Contact a physician immediately.

First Aid: Eyes

Flush eyes with large amounts of water for 5-20 minutes. Contact a medical professional.

First Aid: Notes to Physician

Treat symptomatically. Emesis may be indicated in recent (within 30 minutes) ingestion of large quantities.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: Nonflammable

Upper Flammable Limit (UFL): Not applicable

Auto Ignition: Not determined

Rate of Burning: Not determined

General Fire Hazards:

There is no potential for spontaneous fire or explosion.

Extinguishing Media:

NA

Fire Fighting Equipment/Instructions:

Product as supplied is water based and will not burn.

Method Used: Not applicable

Lower Flammable Limit (LFL): Not applicable

Flammability Classification: Not determined

SECTION 6: ACCIDENTAL RELEASE MEASURES

Containment Procedures:

Dam, mop, absorb onto sawdust and place into a suitable container. Prevent entry of material into sewers or other water sources. Material causes permanent stains.

Clean-Up Procedures:

No additional information available.

SECTION 7: HANDLING AND STORAGE

Handling Procedures:

Use protective equipment as described in Section 8 of this material safety data sheet when handling uncontained material. Store at temperatures between 4°-35°C/40°-95°F.

Storage Procedures:

Do not freeze.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

A. General Product Information

No information available for the product.

B. Component Exposure Limits

Ammonia (7664-41-7)

ACGIH: 25 ppmTWA

35 ppm STEL

OSHA: 35 ppm STEL; 27 mg/m3 STEL

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Safety glasses with side shields, chemical goggles, or face mask recommended.

Personal Protective Equipment: Skin

Use impervious gloves.

Personal Protective Equipment: Respiratory

Respiratory protection is not required if mechanical or dilution ventilation is sufficient to keep the exposure levels below the applicable exposure limits.

Ventilation:

Local exhaust or general dilution ventilation should be provided to keep exposure levels below the applicable exposure limits.

Personal Protective Equipment: General

An apron or coveralls impervious to chemicals can be used to protect clothing. Wash exposed skin after contact, before breaks and meals, and at end of work period.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black or white water dispersion (liquid)	Odor: Slight ammonia odor
Physical State: Liquid	pH: 8-11
Vapor Pressure: 17 mm Hg (approximate)	Vapor Density: Not applicable
Boiling Point: 100°C/212°F	Specific Gravity: Not determined
Solubility (H2O): Dispersible	Evaporation Rate: Same as water
Freezing Point: Not determined	Percent Volatile: 25-32%
Bulk Density: 10.0-13.0 lbs/gallon @77 degrees F	
VOC: 1.198 g/L	

SECTION 10: CHEMICAL STABILITY AND REACTIVITY INFORMATION

Chemical Stability: This is a stable material.

Chemical Stability: Conditions to Avoid: Keep away from excess heat. Do not freeze.

Incompatibility: Cationic chemicals and mineral acids.

Hazardous Decomposition: Dried films forced to burn will produce carbon monoxide, carbon dioxide, smoke, antimony halides, and hydrogen bromide.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity

A. General Product Information

Skin, eye and upper respiratory irritation may occur after contact with product.

B. Component Analysis – LD50/LC50

Decabromodiphenyl oxide (1163-19-5)

Inhalation LC50 Rat: >48.2 mg/L/1H; Oral LD50 Rat: > 2000 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

Antimony trioxide (1309-64-4)

Oral LD50 Rat: >34600 mg/kg

Ammonia (7664-41-7)

Inhalation LC50 Rat: 5.1 mg/L/1H; Inhalation LC50 Rat: 2000 ppm/4H; Oral LD50 Rat: 350 mg/kg

Carcinogenicity

A. General Product Information

According to the International Agency for Research on Cancer (IARC), Monograph, Volume 47, antimony trioxide is classified as a Group 2B chemical agent; possibly carcinogenic to humans. The Monograph states that benign and malignant lung tumors have been seen in rats exposed to concentrations of antimony trioxide of 4.2 and 45 mg/m³. No lung tumors were reported in rats exposed to 1.6 mg/m³. However, there is inadequate evidence of the carcinogenicity of the antimony trioxide in humans.

B. Component Carcinogenicity

Decabromodiphenyl oxide (1163-19-5)

IARC: Group 3 – Not Classifiable (IARC Monograph 71, 1999; Monograph 48, 1990)

Antimony trioxide (1309-64-4)

ACGIH: A2-suspected human carcinogen (production)

IARC: Group 2B - possibly carcinogenic to humans (IARC Monograph 47, 1989)

Chronic Toxicity : None known.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

A. General Product Information

No additional information available.

B. Component Analysis – Ecotoxicity – Aquatic Toxicity

Decabromodiphenyl oxide (1163-19-5)

72 Hr EC50 Skeletonema costatum:>1 mg/L

Antimony trioxide (1309-64-4)

96 Hr LC50 Pimephales promelas: 833.0 mg/L; 96 Hr LC50 Lepomis macrochirus: 530 mg/L; 96 Hr LC50 Brachydanio rerio: >1000 mg/L [static]

72 Hr EC50 Selenastrum capricornutum: 67 mg/L

7 Hr EC50 Pseudomonas putida:>3.5 mg/L

48 Hr EC50 Daphnia magna: >1000 mg/L

Ammonia (7664-41-7)

96 Hr LC50 Cyprinus carpio: 1.1 mg/L; 96 Hr LC50 Lepomis macrochirus: 0.26-4.6 mg/L; 96 Hr LC50 Pimephales promelas 0.73-2.35 mg/L; 96 Hr LC50 Poecilia reticulata: >1.5 mg/L

5 min EC50 Photobacterium phosphoreum: 2.0 mg/L (15 degrees C)

48 Hr EC50 Daphnia magna:25.4 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

SECTION 14: TRANSPORTATION INFORMATION

Shipping Name: This product is not classified a hazardous material for transport.

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

A. General Product Information

SARA 311/312: This product is not classified as hazardous under SARA 311/312.

B. Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Decabromodiphenyl oxide (1163-19-5)

SARA 313: 1.0 percent de minimis concentration

Antimony trioxide (1309-64-4)

CERCLA: 1000 lb final RQ; 454 kg final RQ

Ammonia (7664-41-7)

SARA 302: 500 lb TPQ

CERCLA: 100 lb final RQ; 45.4 kg final RQ

State Regulations:

A. General Product Information

Other state regulations may apply. Check individual state requirements.

B. Component Analysis – State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
Decabromodiphenyl oxide	1163-19-5	No	No	Yes	Yes	Yes	Yes
Antimony trioxide	1309-64-4	Yes	No	Yes	Yes	Yes	Yes
Ammonia	7664-41-7	Yes	No	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): **WARNING!** This product contains a chemical known to the state of California to cause cancer.

Antimony trioxide CAS# 1309-64-4

Other Regulatory Information

A. General Product Information

No information available for the product.

B. TSCA Status

This product and its components are listed on the TSCA 8(b) inventory.

The following components listed in this product are listed on the TSCA Export Notification 12(b) list.

Component	CAS #	TSCA 12 (b)
Decabromodiphenyl oxide	1163-19-5	Yes

C. Component Analysis – Inventory

Component	CAS #	TSCA	DSL	EINECS
Decabromodiphenyl oxide	1163-19-5	Yes	Yes	Yes
Antimony trioxide	1309-64-4	Yes	Yes	Yes
Ammonia	7664-41-7	Yes	Yes	Yes

Component Analysis – WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	
Antimony trioxide	1309-64-4	1%

SECTION 16: OTHER INFORMATION

Other Information:

Prepared for and by:
Vac Systems International
1800 E. Cliff Road, #11
Burnsville, MN 55337

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial and local laws.

Date	MSDS No.	Reason
August 1, 2000	1011-05	New MSDS authoring system.
October 14, 2002	1011-06	Update Sect 15 for TSCA 12B: Tetrahydrofuran has been delisted.
November 30, 2005	1011-07	Section 15, TSCA 12b, add decabromodiphenyl oxide; Updated Section 15, State data, Antimony Trioxide and Ammonia. Minor edits throughout MSDS. VOC data entered in Section 9.
December 15, 2008	1011-07	Regulatory update. Minor edits in Section 11 LD50 and Section 15 WHMIS. Minor edits and date change

-- END OF MSDS 1011-07 --