

Section 1 - Product and Company Identification

Hazard Label WARNING

Company Information

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Trade Names: AroLite®; Headliner Service Products; Standard Black Uncured Auto Insulation

General Comments: Moldable Glass Wool products

Section 2 - Hazards Identification

Emergency Overview

Inhalation of excessive amounts of dust from the product may cause temporary upper respiratory irritation and/or congestion--remove individual to fresh air.

Summary

Breathing dust from this product may cause a scratchy throat, congestion, and slight coughing. Getting dust or fibers on the skin, or in the eyes may cause itching, rash, or redness. Additional health and safety information is provided in Section 11 of this safety data sheet.

In high temperature applications, treatment, curing, or in geographic areas of high heat and humidity, this product may release gases irritating to the eyes, nose and throat.

Inhalation

Thermal processing or heating of this product may produce vapors or fumes that may cause irritation.

Skin

Temporary irritation (itching) or redness may occur. Skin irritation may result from contact with vapors, or prolonged contact with uncured product.

Absorption

Although phenol can be absorbed through unprotected skin, the amount of free phenol in this product should not cause any adverse effects. Absorption of phenol may result in paleness, weakness, sweating, headache, and ringing in the ears. Formaldehyde is a skin sensitizer and may lead to an allergic reaction in some individuals.

Ingestion

This product is not intended to be ingested (eaten). If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract.

Eyes

Temporary irritation (itching) or redness may occur. Thermal processing or heating of this product may produce vapors or fumes that may cause irritation.

Primary Routes of Entry (Exposure)

Inhalation (breathing dust, fibers, or vapors), skin, and eye contact.

Target Organs

Skin, eye, lungs, central nervous system (CNS), respiratory system, kidney, liver.

Medical Conditions Aggravated by Exposure

Pre-existing chronic eye, skin, respiratory, liver, or kidney diseases or conditions.

Section 3 - Composition/Information on Ingredients

CAS #	Component	Percent
Not Applicable	Fiber Glass Wool (generic CAS for fiber glass is 65997-17-3)	65-99
Not Available	Melamine phenol-formaldehyde binder, uncured	1-35*
Not Available	Urea extended phenol-formaldehyde binder, uncured	1-35*
1333-86-4	Carbon black	0-2**
108-95-2	Phenol	<1***
50-00-0	Formaldehyde	<1***
7664-41-7	Ammonia	<1***

Component Information

- * Binder may be either of these. AroLite® binder is melamine, which doesn't emit ammonia upon heating.
- ** A component of black products.
- *** May be released during the curing process.

General Product Description

White, pinkish, or black fibrous glass blanket. Phenol/formaldehyde odor.

Section 4 - First Aid Measures

First Aid: Inhalation

If dust is inhaled in excess of exposure limits referenced in section 8 of this safety data sheet, remove individual to fresh air. Drink water to clear throat, and blow nose to remove dust. A saline spray in the nose may help clear any fibers.

First Aid: Skin

Wash gently with soap and water to remove dust and fibers. Should irritation persist, seek medical attention.

First Aid: Ingestion

Rinse mouth with water to remove dust and fibers and drink plenty of water to help reduce irritation. If irritation persists, seek medical attention.

First Aid: Eyes

Do not rub or scratch eyes. Dust particles may cause the eye to be scratched. Flush eyes with large amounts of water until irritation subsides. If irritation persists, seek medical attention.

First Aid: Notes to Physician

Irritating gases may be released under conditions of high heat or humidity. At high levels, these could cause severe upper respiratory and eye irritation. Formaldehyde gas is a skin and respiratory sensitizer. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary.

Section 5 - Fire Fighting Measures

Flash Point: Not applicable

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. Inorganic glass fibers are naturally non-combustible and non-flammable. Organic binder can thermally decompose with elevated temperatures.

Extinguishing Media

Carbon dioxide (CO₂), water, water fog, dry chemical.

Fire Fighting Equipment/Instructions

No special procedures are expected to be necessary for this product. Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases.

Method Used: Not applicable

Lower Flammable Limit (LFL): Not applicable

Flammability Classification: Not determined

Section 6 - Accidental Release Measures

Clean-Up Procedures

Pick up large pieces. Vacuum dusts. Place in closable container for disposal.

Section 7 - Handling and Storage

Handling Procedures

Use protective equipment as described in Section 8 of this safety data sheet when handling uncontained material. Handle in accordance with good industrial hygiene and safety practices.

Storage Procedures

Warehouse storage should be in accordance with package directions, if any. Material should be kept clean and in original packaging.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines

A: General Product Information

The Occupational Safety and Health Administration (OSHA) has not adopted specific occupational exposure standards for fiber glass. Fiber glass is treated as a nuisance dust and is regulated by OSHA as a particulate not otherwise regulated (total dust) shown in CFR 1910.1000 Table Z-3.

Respirable fraction 5 mg/m³

Total dust 15 mg/m³

JM has adopted the fiber glass industry voluntary Product Stewardship Program (PSP), formerly the NAIMA-OSHA Health and Safety Partnership Program (HSPP). Under the PSP, JM recommends that exposures be limited to the voluntary concentration of 1 f/cc TWA for fibers longer than 5 microns with a diameter less than 3 microns. This will help minimize potential irritation effects. The PSP also includes the PPE recommendations described below.

B: Component Exposure Limits

Carbon black (1333-86-4)

OSHA: 3.5 mg/m³ TWA
3.5 mg/m³ TWA
ACGIH: 3.5 mg/m³ TWA

Ammonia (7664-41-7)

OSHA: 50 ppm TWA; 35 mg/m³ TWA
ACGIH: 25 ppm TWA
35 ppm STEL

Formaldehyde (50-00-0)

OSHA: 0.75 ppm TWA
0.5 ppm Action Level; 0.75 ppm TWA; 2 ppm STEL (Irritant and potential cancer hazard - see 29 CFR 1910.1048)
3 ppm TWA (unless specified in 1910.1048)
ACGIH: 0.3 ppm Ceiling

Phenol (108-95-2)

OSHA: 5 ppm TWA; 19 mg/m³ TWA
5 ppm TWA; 19 mg/m³ TWA
ACGIH: 5 ppm TWA
Skin - potential significant contribution to overall exposure by the cutaneous route

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Safety goggles are recommended to keep dust, fibers, gases, and vapors out of the eyes.

Personal Protective Equipment: Skin

During prolonged contact with wet, uncured product, impervious gloves (butyl rubber and vitron-fluorocarbon rubber) should be worn to prevent excessive skin contact with phenol. Barrier creams may help reduce skin contact and irritation caused by fiber glass, but may be ineffective against formaldehyde vapors that may be released during curing.

Personal Protective Equipment: Respiratory

A NIOSH-approved respirator should be used if ventilation is unavailable, or is inadequate for keeping levels below the applicable exposure limits referenced in Section 8 of this SDS.

Ventilation

Open the product container in areas with adequate ventilation. In fixed manufacturing settings, local exhaust ventilation should be provided at areas of cutting, milling or other processing to remove airborne dust and fibers.

Personal Protective Equipment: General

Wear a cap, a loose-fitting, long-sleeved shirt and long pants to protect skin from irritation. Exposed skin areas should be washed with soap and water after handling or working with fiber glass. Clothing should be washed separately from other clothes, and the washer should be rinsed thoroughly (run empty for a complete wash cycle). This will reduce the chances of fiber glass being transferred to other clothing.

Section 9 - Physical & Chemical Properties

Appearance:	White to pinkish-white or black fibrous glass blanket	Odor:	Phenol/Formaldehyde odor
Physical State:	Solid	pH:	Not applicable
Vapor Pressure:	Not applicable	Vapor Density:	Not applicable
Boiling Point:	Not applicable	Melting Point:	>87°C/1600°F
Solubility (H₂O):	Variable	Specific Gravity:	Variable
Freezing Point:	Not applicable	Evaporation Rate:	Not applicable
Percent Volatile:	Variable	VOC:	15-27 g/L

Section 10 - Stability & Reactivity Information

Stability

These products are not reactive.

Hazardous Decomposition

The decomposition products from this material are those that would be expected from any organic (carbon-containing) material, and are mainly derived from pyrolysis, or burning, of the resin. These decomposition products may include carbon monoxide, carbon dioxide, carbon particles, and traces of hydrogen cyanide. Formaldehyde gas may also be released during decomposition.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Acute Toxicity

A: General Product Information

If dust evolves from this product during use it may cause temporary mechanical irritation or scratchiness of the throat and/or itching of the eyes and skin.

Exposure to formaldehyde may cause eye and upper respiratory irritation, and possible respiratory or skin sensitization (allergy). If sensitization occurs, subsequent exposures to formaldehyde may worsen asthma or other respiratory problems, and cause allergic-type reactions.

B: Component Analysis - LD50/LC50

Carbon black (1333-86-4)

Oral LD50 Rat: >15400 mg/kg; Dermal LD50 Rabbit:>3 g/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

Formaldehyde (50-00-0)

Inhalation LC50 Rat: 0.578 mg/L/4H; Oral LD50 Rat:500 mg/kg

Phenol (108-95-2)

Oral LD50 Rat: 317 mg/kg; Dermal LD50 Rat:525 mg/kg; Dermal LD50 Rabbit:630 mg/kg; Inhalation LC50 Rat:316 mg/m³/4H

Component Carcinogenicity

Fiber Glass Wool (generic CAS for fiber glass is 65997-17-3)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Synthetic Vitreous Fibers)

NTP: Reasonably Anticipated To Be A Human Carcinogen (respirable size)

IARC: Group 3 – Not Classifiable (IARC Monograph 81 [2002] (listed under Man-made mineral fibres), Monograph 43 [1988])

Carbon black (1333-86-4)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Group 2B – Possibly Carcinogenic to Humans (IARC Monograph 93 [in preparation], Monograph 65 [1996])

Formaldehyde (50-00-0)

ACGIH: A2 - Suspected Human Carcinogen
OSHA: 0.5 ppm Action Level; 0.75 ppm TWA; 2 ppm STEL (Irritant and potential cancer hazard - see 29 CFR 1910.1048)
NTP: Known to be a human carcinogen
IARC: Group 1 – Known Human Carcinogen (IARC Monograph 88 [2006], Monograph 62 [1995], Supplement 7 [1987])

Phenol (108-95-2)

ACGIH: A4 - Not Classifiable as a Human Carcinogen
IARC: Monograph 71 [1999], Monograph 47 [1989] (Group 3 (not classifiable))

Chronic Toxicity

Exposure to formaldehyde gas (released under conditions of high heat or humidity) may cause eye and upper respiratory irritation, and possible respiratory or skin sensitization (allergy). If sensitization occurs, subsequent exposures to formaldehyde may worsen asthma or other respiratory problems, and cause allergic-type reactions.

Formaldehyde has been classified as a known human carcinogen, Group 1, by the International Agency for Research on Cancer (IARC). The US Occupational Safety and Health Administration (OSHA) and the US National Toxicology Program (NTP) list formaldehyde as a known carcinogen. OSHA specifically regulates formaldehyde under 29 CFR 1910.1048.

Phenol, present in the uncured product and in vapors generated during the curing process, may be absorbed through unprotected skin. Absorption of phenol may result in paleness, weakness, sweating, headache, convulsions, cyanosis (skin turning blue), and, in extreme cases, death.

Section 12 - Ecological Information

Ecotoxicity

A: General Product Information

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Carbon black (1333-86-4)

24 Hr EC50 Daphnia magna: >5600 mg/L

Ammonia (7664-41-7)

96 Hr LC50 Cyprinus carpio: 0.44 mg/L; 96 Hr LC50 Lepomis macrochirus: 0.26 - 4.6 mg/L; 96 Hr LC50 Lepomis macrochirus: 1.17 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 0.73 - 2.35 mg/L; 96 Hr LC50 Pimephales promelas: 5.9 mg/L [static]; 96 Hr LC50 Poecilia reticulata: >1.5 mg/L; 96 Hr LC50 Poecilia reticulata: 1.19 mg/L [static]
48 Hr EC50 Daphnia magna: 25.4 mg/L

Formaldehyde (50-00-0)

96 Hr EC50 water flea: 20 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L

Phenol (108-95-2)

96 Hr LC50 Pimephales promelas: 11.9-50.5 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 20.5-25.6 mg/L [static]; 96 Hr LC50 Pimephales promelas: 32 mg/L; 96 Hr LC50 Oncorhynchus mykiss: 5.449-6.789 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 7.5-14 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.23-7.49 mg/L [semi-static]; 96 Hr LC50 Oncorhynchus mykiss: 5.0-12.0 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.5 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 11.9-25.3 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 11.5 mg/L [semi-static]; 96 Hr LC50 Poecilia reticulata: 34.09-47.64 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 31 mg/L [semi-static]; 96 Hr LC50 Brachydanio rerio: 27.8 mg/L; 96 Hr LC50 Cyprinus carpio: 0.00175 mg/L [semi-static]; 96 Hr LC50 Oryzias latipes: 33.9-43.3 mg/L [flow-through]; 96 Hr LC50 Oryzias latipes: 23.4-36.6 mg/L [static]
96 Hr EC50 Selenastrum capricornutum: 150 mg/L
48 Hr EC50 water flea: 23.0 mg/L; 48 Hr LC50 Daphnia magna: 13 mg/L

Section 13 - Disposal Considerations

US EPA Waste Number & Descriptions

A: General Product Information

Cure materials prior to disposal to minimize residual resin content. After curing, comply with applicable federal, state, and local regulations for disposal. Product characterization after use is recommended to ensure proper disposal under federal and/or state requirements. If you are unsure of the regulations, contact your local Public Health Department or the local office of the Environmental Protection Agency (EPA).

B: Component Waste Numbers

Phenol (108-95-2)

RCRA: waste number U188

Disposal Instructions

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

Section 14 - Transport Information

International Transport Regulations

These products are not classified as dangerous goods according to international transport regulations.

Section 15 - Regulatory Information

US Federal Regulations

A: General Product Information

SARA 311 Status. The following SARA 311 designations apply to this product: Immediate (acute) health hazard. Delayed (chronic) health hazard.

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).

Ammonia (7664-41-7)

SARA 302: 500 lb TPQ

CERCLA: 100 lb final RQ; 45.4 kg final RQ

Formaldehyde (50-00-0)

SARA 302: 500 lb TPQ

CERCLA: 100 lb final RQ; 45.4 kg final RQ

Phenol (108-95-2)

SARA 302: 500 lb lower threshold TPQ; 10000 lb upper threshold TPQ

CERCLA: 1000 lb final RQ; 454 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
Fiber Glass Wool (generic CAS for fiber glass is 65997-17-3) (related to Glass wool fiber)	Not Applicable	Yes ¹	No	Yes ¹	Yes	No	Yes ¹
Carbon black	1333-86-4	Yes	No	Yes	Yes	Yes	Yes
Ammonia	7664-41-7	Yes	No	Yes	Yes	Yes	Yes
Formaldehyde	50-00-0	Yes	No	Yes	Yes	Yes	Yes
Phenol	108-95-2	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.

Component	CAS #
Fiber Glass Wool (generic CAS for fiber glass is 65997-17-3)	Not Applicable
Carbon black	1333-86-4
Formaldehyde	50-00-0

TSCA Status

This product and its components are listed on the TSCA 8(b) inventory.
None of the components listed in this product are listed on the TSCA Export Notification 12(b) list.

International Regulations

A: General Product Information

These products are considered articles under both U.S. and international product regulations and as such, these products do not require registration or notification on the various country-specific inventories.

B: Component Analysis - WHMIS IDL

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

Component	CAS #	Minimum Concentration
Carbon black	1333-86-4	1 %

WHMIS Classification

Controlled Product Classification: D2A, D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. This SDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information

Other Information

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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 #	Reason
08/01/00	1040-1.0000	New MSDS authoring system.
01/07/02	1040-2.0000	Update Sections 3, 11 & 15 for IARC 2001 re-classification of fiber glass wool to Group 3, not classifiable as to carcinogenicity to humans.
04/10/03	1040-2.0001	Minor edits.
08/27/03	1040-2.0100	Division name change. Edit Sect. 1 product names.
10/22/03	1040-2.0101	Section 15, TSCA 12b, add Phenol
05/07/04	1040-2.0202	Sect. 13 waste edits. Regulatory update. Minor edits.
07/02/04	1040-2.0203	Sect. 11 formaldehyde IARC update from 2A to 1. Sect. 1 label ID edit.
07/14/05	1040-2.0204	Regulatory updates: Sections 8, 11, 12, 13, & 15
08/14/06	1040-2.0205	Edited Section 8 and storage to include adequate ventilation statement. Added VOCs to Section 9.

Material Name: Fiber Glass Wool Automotive Insulation, Uncured (Moldable Glass Wool)

**Safety Data Sheet
ID: 1040**

06/13/07	1040-2.0206	Addition of Moldable Glass Wool to section 1. Addition of article statement in Section 15. Addition of glass dust exposure limits in section 8. Edits throughout.
06/14/10	1040-2.0207	Regulatory update. Updated SDS to GHS format.
06/20/10	1040-2.0208	Minor edits to composition notes.
09/1/2011	1040-2.0209	Regulatory update.
09/08/2011	1040-2.03	Regulatory update.

End of Sheet 1040