

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: ASSM-39600
Product Name: ArmorSheet 600
Revision Date: Oct 12, 2017 **Date Printed:** Oct 12, 2017
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Mar-flex Waterproofing & Building Products
Address: 500 Business Parkway Carlisle, OH, US, 45005
Emergency Phone: Chem-Trec: 1-800-424-9300
Information Phone Number: 513-422-7285
Fax: 513-422-7282
Product/Recommended Uses:

SECTION 2) HAZARDS IDENTIFICATION

Classification

Specific Target Organ Toxicity - Single Exposure - Category 2
Skin Irritation - Category 2
Reproductive Toxicity - Category 1B

Pictograms



Signal Word

Danger

Hazardous Statements - Health

May cause damage to organs.
Causes skin irritation
May damage fertility or the unborn child

Precautionary Statements - General

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

Precautionary Statements - Response

IF exposed or concerned: Call a POISON CENTER/doctor.

IF ON SKIN: Wash with plenty of water.

Specific treatment (see First-aid measures on this SDS).

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing. And wash it before reuse.

IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to disposal recycling center. Waste management should be in full compliance with federal, state and local laws.

Hazards Not Otherwise Classified (HNOC)

None.

Acute toxicity of less than one percent of the mixture is unknown

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0008052-42-4	BITUMENS	0.0% - 75%
0064742-93-4	Asphalt, oxidized	0.0% - 75%
0068955-27-1	Distillates (petroleum), petroleum residues vacuum	0.0% - 75%
0064741-56-6	VACUUM RESIDUES (PETROLEUM)	0.0% - 75%
0064742-52-5	MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY NAPHTHENIC	5% - 10%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell or are concerned.

Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Skin Contact

Rinse/wash with lukewarm, gently flowing water and mild soap for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

Ingestion

Rinse mouth. If you feel unwell or if concerned : Get medical advice/attention. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do NOT induce vomiting unless under the advice/direction of doctor/POISON CENTER. Note: Never give anything by mouth to an unconscious or convulsing victim.

Most Important Symptoms and Effects, Both Acute and Delayed

Skin irritation, allergic reactions.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If ingested, seek immediate medical attention and have product container or label at hand.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Slight fire hazard.

Hazardous Decomposition products can include oxides of carbon, nitrogen and various hydrocarbons.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water may also be used to cool exposed, but not burning, containers. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

ELIMINATE all ignition sources (no smokes, flares, sparks or flames in immediate area).

Isolate hazard area and keep unnecessary people away. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

Do not touch or walk through spilled material.

If spilled material is cleaned up using a regulated solvent, the resulting mixture may be regulated.

Recommended Equipment

Positive pressure, full-facepiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions

Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

Contain and collect spilled materials with non-combustible, absorbent material and place in a container for disposal according to local regulations. The spill area should then be washed down with soap and water to dilute and remove traces of material. Ventilate area to remove the remaining vapors. Dispose via a licensed waster disposal contractor. Contaminated absorbent material may pose the same physical hazards as the product.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

All containers must be properly labelled.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong

oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers can retain residue and may be dangerous.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)	NIOSH STEL (mg/m3)	NIOSH STEL (ppm)	NIOSH Carcinogen
BITUMENS												1
Distillates (petroleum), petroleum residues vacuum		2000	500				1					
MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY NAPHTHENIC		2000	500				1					
VACUUM RESIDUES (PETROLEUM)		2000	500				1					

Chemical Name	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH TLV Basis	ACGIH Carcinogen	ACGIH Notations
BITUMENS	0.5				URT & eye irr	A4	A4; BEI
Distillates (petroleum), petroleum residues vacuum							
MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY NAPHTHENIC							
VACUUM RESIDUES (PETROLEUM)							

A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	10.01
% Solids By Weight	93.46%
Density VOC	0.66
% VOC	6.54%
Specific Gravity	1.20

Appearance	Black rubberized asphalt sheet
Odor Threshold	N/A
Odor Description	Slight,petroleum
pH	N/A
Water Solubility	Negligible
Flash Point Symbol	>
Flammability	N/A
Flash Point	450 °F
Viscosity	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Freezing Point	N/A
Melting Point	N/A
Low Boiling Point	N/A
High Boiling Point	N/A
Auto Ignition Temp	N/A
Decomposition Pt	N/A
Evaporation Rate	<0.01
Coefficient Water/Oil	N/A

SECTION 10) STABILITY AND REACTIVITY

Stability

The product is stable under normal storage conditions.

Conditions to Avoid

Avoid heat, sparks, flame and contact with incompatible materials.

Hazardous Reactions/Polymerization

No data available.

Incompatible Materials

Strong oxidizing agents, strong acids and bases.

Hazardous Decomposition Products

Combustion produces toxic oxides of carbon and various hydrocarbons.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure

Inhalation, ingestion, skin absorption, eye contact.

Skin Corrosion/Irritation

Causes skin irritation

Serious Eye Damage/Irritation

May cause mild eye irritation

Respiratory/Skin Sensitization

May cause respiratory irritation.

Germ Cell Mutagenicity

No data available

Carcinogenicity

No data available

Reproductive Toxicity

May damage fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

May cause damage to organs.

Kidneys, liver, thymus

Specific Target Organ Toxicity - Repeated Exposure

No data available

Aspiration Hazard

No data available

Acute Toxicity

No data available

0008052-42-4 BITUMENS

LC50 (Rodent - rat, Inhalation) : >94.4 mg/m³, Toxic effects : Details of toxic effects not reported other than lethal dose value.

LD50 (Rodent - rat, Oral) : >5000 mg/kg, Toxic effects : Gastrointestinal - hypermotility, diarrhea.

0064742-52-5 MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY NAPHTHENIC

LD50 (Rodent - rat, Oral) : >5000 mg/kg, Toxic effects : Details of toxic effects not reported other than lethal dose value.

LD50 (Rodent - rabbit, Administration onto the skin) : >2000 mg/kg, Toxic effects : Details of toxic effects not reported other than lethal dose value.

Potential Health Effects - Miscellaneous

0008052-42-4 BITUMENS

Is an IARC carcinogen. Occupational exposures to straight-run bitumens and their emissions during road paving are possibly carcinogenic to humans (Group 2B)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and Degradability

No data available.

Bio-accumulative Potential

No data available.

0064742-52-5 MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY NAPHTHENIC

Contains constituents with the potential to bioaccumulate.

Mobility in Soil

No data available.

0064742-52-5 MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY NAPHTHENIC

Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information

UN/NA #: Not regulated
Proper Shipping Name: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable

IMDG Information

UN/NA #: Not regulated
Proper Shipping Name: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable
Marine Pollutant: No data available

IATA Information

UN/NA #: Not regulated
Proper Shipping Name: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0008052-42-4	BITUMENS	0.0% - 75%	SARA312,IARCCarcinogen,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0064742-93-4	Asphalt, oxidized	0.0% - 75%	SARA312,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0068955-27-1	Distillates (petroleum), petroleum residues vacuum	0.0% - 75%	SARA312,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0064741-56-6	VACUUM RESIDUES (PETROLEUM)	0.0% - 75%	SARA312,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0064742-52-5	MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY NAPHTHENIC	5% - 10%	SARA312,VOC,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS

SECTION 16) OTHER INFORMATION

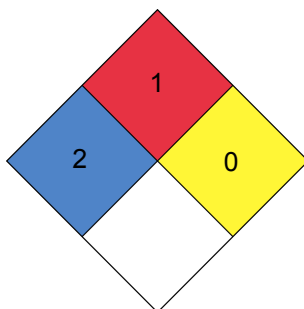
Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- ESE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

HMIS

Health	* 2
FLAMMABILITY	1
Physical Hazard	0
Personal Protection	C

NFPA



(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks

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