SAFETY DATA SHEET

Prepared according to USA OSHA Hazcom 2012 / Canada WHMIS 2015

Date Prepared : 01/26/2017
SDS No : XSM11002 Part A Small Panel Adhesive_ENG
Date Revised : 08/21/2017
Revision No : 1

XSM11002 Part A SMALL PANEL ADHESIVE, Metal and Aluminum

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: XSM11002 Part A SMALL PANEL ADHESIVE, Metal and Aluminum
Product Description: Part A Epoxy Adhesive, 103.5 ml / 3.5 fl oz US, Work Time: 13 - 20 min
General Use: Epoxy adhesive
Product Stock/Code: XSM11002 / 110002 (Kit: 207 ml / 7.0 fl oz US)
Chemical Family: Epoxy / époxy
Molecular Formula: Mixture / Mélange

Manufacturer / Supplier
Dominion Sure Seal Ltd.
6175 Danville Road, Mississauga
Ontario, Canada L5T 2H7
Fax: 905-670-5174
www.dominionsureseal.com
Customer Service: 905-670-5411

Emergency Telephone Numbers (24 hour)
CANUTEC : (613) 996-6666
CHEMTREC : (800) 424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

The classification and label elements stated below were prepared in accordance with the USA OSHA Hazard Communication Standard (29 CFR 1910.1200; Hazcom 2012) and the Canadian WHMIS regulations (Hazardous Products Regulations; WHMIS 2015). This information may be different from the actual product label information for labels that are regulated by other agencies.

Health hazards:

Eye Irritation, Category 2A
Skin Irritation, Category 2
Skin Sensitizer, Category 1
Reproductive Toxicity, Category 1B

Physical hazards:

Not classified

Label elements

Hazardous components for labelling:
Epoxy resin, Alkyl (C12-14) glycidyl ether and Benzyl butyl phthalate

Exclamation mark

Health hazard

Signal Word: DANGER

Hazard statement(s)

H319: Causes serious eye irritation.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H360: May damage the unborn child. Suspected of damaging fertility.

Precautionary statement(s)

Prevention:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing vapours.
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves and eye protection.
P272: Contaminated work clothing should not be allowed out of the workplace.

Response:

P308+P313: IF exposed or concerned: Get medical advice/ attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container in accordance with applicable local, regional and/or national regulations.

Hazards Not Otherwise Classified: No data available.

Emergency Overview

Immediate concerns: Causes serious eye irritation. Causes skin irritation. May cause sensitization by skin contact. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. May damage the unborn child. Suspected of damaging fertility.

Comments: See sections 9 and 10 for more detailed information on physicochemical effects.
See section 11 for more detailed information on health effects.
See sections 12 for more detailed information on environmental effects.

The actual container label may not include the above label elements. The labeling shown above applies to products used solely for industrial / professional use.

Consumer products should be labeled in accordance with the Canadian Consumer Chemicals and Containers Regulations and US Consumer Product Safety Commission regulations. Consumer product labeling takes precedence over Canadian WHMIS 2015 and OSHA Hazcom 2012 Hazard Communication labeling.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS number
Bisphenol A / epichlorohydrin epoxy resin	50 - 52	25085-99-8 (25068-38-6)

Epoxy phenol novolac resin	12.5 - 13.5	28064-14-4
Alkyl (C12-14) glycidyl ether	9 - 10	68609-97-2
Benzyl butyl phthalate	4 - 5.5	85-68-7
Bisphenol A / epichlorohydrin polymer, epoxy terminated	4 - 5	25036-25-3
Iron oxide (non-hazardous ingredient)	1.5 - 2.5	1317-61-9

Comments: There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the product and hence require reporting in this section.

4. FIRST AID MEASURES

Eye Contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention, if irritation persists.

Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists. Remove contaminated clothing and wash before reuse.

Ingestion: Do not induce vomiting. Rinse mouth with water. Give 1 to 2 glasses of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use. If you experience eye watering, headaches or dizziness, increase fresh air or leave the area.

Signs and Symptoms of Overexposure

Eye Contact: Contact causes serious eye irritation. Symptoms may include pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

Skin Contact: Causes skin irritation. Prolonged contact with this product can cause reddening, swelling, rash scaling or blistering. In those who have developed skin sensitization, these symptoms can develop as a result of contact with very small amount of the liquid material.

Ingestion: Substance may be harmful if swallowed. May cause irritation. Symptoms of ingestion may include abdominal pain, nausea, vomiting and diarrhea.

Inhalation: At room temperature, exposure to vapor is minimal due to low volatility.

Notes to Physician: No data available.

Additional Information: No data available.

5. FIRE FIGHTING MEASURES

Flammable Properties: Will burn if involved in a fire.

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material. Use an extinguishing agent suitable for the surrounding fire.

Hazardous Combustion Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Fire Fighting Procedures: Containers can build up pressure if exposed to heat (fire).

Fire Fighting Equipment: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

Sensitivity to Static Discharge: Product is not sensitive to static discharge.

Sensitivity to Mechanical Impact: Product is not sensitive to mechanical impact.

6. ACCIDENTAL RELEASE MEASURES

Small Spill: Ensure adequate ventilation. Cover spill area with suitable absorbent material (e.g., sand, earth, sawdust, vermiculite, Oil-Dri, Kitty Litter, etc.). Sweep up material being careful not to raise dust. Place in an appropriate disposal container and seal tightly. Avoid contact with eyes, skin, and clothing.

Environmental Precautions

Water Spill: Do not flush to sewer.

Land Spill: Avoid runoff into storm sewers and ditches which lead to waterways.

Special Protective Equipment: Clean up spills immediately, observing precautions in Protective Equipment section 8.

7. HANDLING AND STORAGE

General Procedures: Ensure thorough ventilation of stores and work areas.

Handling: Do not use in the presence of open flame or spark. Wear recommended personal protective equipment. Avoid contact with eyes, skin, and clothing. After handling, always wash hands thoroughly with soap and water.

Storage: Store away from heat, sparks, open flames, strong oxidizing agents and direct sunlight. Protect from physical damage. Keep containers tightly closed, when not in use. Store in a cool place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

OSHA / WHMIS 2015 HAZARDOUS COMPONENTS				
	Occupational Exposure Limits			
Chemical Name	**Type**		**ppm**	**mg/m³**
Bisphenol A / epichlorohydrin epoxy resin	**USA OEL**	**-**	-- [1]	-- [1]
Epoxy phenol novolac resin	**USA OEL**		-- [1]	-- [1]
Alkyl (C12-14) glycidyl ether	**USA OEL**	**-**	-- [1]	-- [1]
Benzyl butyl phthalate	**USA OEL**	**-**	[1]	[1]
	EU OEL	**TWA**	-- [2]	3 [2]
		STEL	-- [2]	5 [2]
Bisphenol A / epichlorohydrin polymer, epoxy terminated	**USA OEL**	**-**	-- [1]	-- [1]
Iron oxide (non-hazardous ingredient)	**USA OEL**	**-**	-- [1]	-- [1]

Footnotes:
1. This material does not have established exposure limits in the USA under OSHA, NIOSH, ACGIH.
2. Austria, Denmark, Sweden

Engineering Controls: Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

Eyes and Face: Wear safety glasses with side shields (or goggles). Contact lenses should not be worn when working with this product. Eye wash fountains should be readily available to areas of use and handling.

Skin Contact: Wear chemical resistant gloves.

Respiratory: Generally not required. Wear respiratory protection if ventilation is inadequate.

Protective Clothing: Wear protective clothing as necessary to prevent contact.

Work Hygienic Practices: Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Liquid
Odor	: Mild
Odor Threshold	: No data available.
Appearance	: Viscous thixotropic paste
Color	: Black
pH	: No data available.
% Volatiles	: < 1.25% w/w
Flash Point and Method	: > 100°C (212°F) Closed Cup
Flammable Limits	: No data available.
Autoignition Temperature	: No data available.
Vapor Pressure	: No data available.
Vapor Density	: No data available.
Boiling Point	: No data available.
Freezing Point	: No data available.
Solubility in Water	: Practically insoluble
Evaporation Rate (n-butyl acetate = 1)	: < 1
Density	: 0.85±0.05g/ml at 20°C
Viscosity	: 75000 to 150000 cps at 25°C
VOC Content	: < 10 g/l (< 1.25% w/w)
Oxidizing Properties	: None

Comments:

VOC Compliance Statement

VOC Content:	< 15 g/l (0.125 lb/gal) Part A + B as applied
Density, as applied:	0.80 to 0.90 g/ml
Total Volatiles:	< 1.8 % w/w, Part A + Part B as applied
Exempt Content:	0 % w/w; 0 % v/v
VOC Regulation:	SCAQMD Rule 1168 -Adhesives & Sealants - California
Coating Category:	Adhesive, All Other Adhesives

The product VOC content meets the 250 g/l limit for Adhesive, All Other Adhesives. The product also meets the small container exemption in the various Adhesives and Sealants district rules - packaged in ≤ 475 ml (16 fl oz) cartridges. California compliant.

VOC Regulation:	CARB, OTC – Consumer Product Regulations
Coating Category:	General Purpose Adhesive

This product VOC content meets the 10% w/w limit for the General Purpose Adhesive category under the CARB, OTC Consumer Products Regulations. 50 State compliant.

10. STABILITY AND REACTIVITY

Reactive Hazard **:** No

Hazardous Polymerization: Not expected to occur.

Stability: Stable.

Conditions to Avoid: Keep away from flames and incompatible materials. Keep away from flames and any object that sparks.

Possibility of Hazardous Reactions: No data available.

Hazardous Decomposition Products: Carbon Monoxide and other toxic vapors.

Incompatible Materials: Oxidizing materials.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	Oral LD_{50} mg/kg(rat)	Dermal LD_{50} mg/kg(rabbit)	Inhalation LC_{50} mg/l
Bisphenol A / epichlorohydrin epoxy resin	11,400 > 15,000	> 22,800	No data available.
Epoxy phenol novolac resin	> 2,000	> 2000	No data available.
Alkyl (C12-14) glycidyl ether	17,100, 19,200	> 4500	No data available.
Benzyl butyl phthalate	2330	> 10,000	No data available.
Bisphenol A / epichlorohydrin polymer, epoxy terminated	> 15,000	23,000	No data available.
Iron oxide (non-hazardous ingredient)	No data available.	No data available.	No data available.

Acute Toxicity - Dermal LD_{50}: Based on available ingredient data, the classification criteria for Acute Dermal Toxicity are not met for this mixture. The calculated ATE is >2000 mg/kg.

Acute Toxicity - Oral LD_{50}: Based on available ingredient data, the classification criteria for Acute Oral Toxicity are not met for this mixture. The calculated ATE is >2000 mg/kg.

Acute Toxicity - Inhalation LC_{50}: The mixture is not classified due to lack of data. At room temperature, exposure to vapor is minimal due to low volatility. An estimate based on component information. Not classified.

Notes: < 5% of the mixture consists of an ingredient or ingredients of unknown acute toxicity.
No additional toxicology information is available for this product itself. (See Component Toxicity Information).

Skin Irritation / Corrosion: Contains: Epoxy resin. Causes skin irritation. The mixture is classified as: Skin Irritant, category 2, based on summation of ingredient data (>10% ingredients classified as skin irritant, category 2). Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash.

Eye Irritation / Serious Eye Damage: Contains: Epoxy resin. Contact causes serious eye irritation. The mixture is classified as: Eye Irritant, category 2, based on summation of ingredient data (>10% ingredients classified as eye irritant, category 2). Symptoms may include pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

Respiratory / Skin Sensitizer: Contains: Epoxy resin. May cause sensitization by skin contact. The mixture is classified as: Skin Sensitizer, category 1 based on ingredient data (≥ 0.1% ingredients classified as a skin sensitizer, category 1 or sub-category 1A or ≥ 1.0% ingredients classified as a skin sensitizer, sub-category 1B). Prolonged contact with this product can cause reddening, swelling, rash scaling or blistering. In those who have developed skin sensitization, these symptoms can develop as a result of contact with very small amount of the liquid material.

Based on available data, the classification criteria for respiratory sensitization are not met for this mixture (< 0.1% ingredients classified as a respiratory sensitizer, category 1 or sub-category 1A and < 1.0% ingredients classified as a respiratory sensitizer, sub-category 1B).

Germ Cell Mutagenicity: Based on available data, the classification criteria for Germ Cell Mutagenicity are not met for this mixture (< 0.1% ingredients classified as Germ Cell Mutagen, category 1A or 1B and < 1.0% ingredients classified as Germ Cell Mutagen, category 2).

Carcinogenicity

Chemical Name	NTP status	IARC status	OSHA status	Other
Bisphenol A / epichlorohydrin epoxy resin	--	--	--	--
Epoxy phenol novolac resin	--	--	--	--
Alkyl (C12-14) glycidyl ether	--	--	--	--
Benzyl butyl phthalate	--	3	--	--
Bisphenol A / epichlorohydrin polymer, epoxy terminated	--	--	--	--
Iron oxide (non-hazardous ingredient)	--	--	--	--

Notes: Based on available data, the classification criteria for Carcinogenicity are not met for this mixture (< 0.1% ingredients classified as a Carcinogen, category 1 or 2).

Reproductive Toxicity: Contains: Benzyl butyl phthalate. May cause adverse reproductive effects. May damage the unborn child. Suspected of damaging fertility. The mixture is classified as: Reproductive Toxicity, category 1 based on ingredient data using the applicable cut-off/concentration limits (≥ 0.1% ingredients classified as Reproductive Toxicity, category 1A or 1B).

Specific Target Organ Toxicity - Single Exposure: Based on available data, the classification criteria for Specific Target Organ Toxicity - Single Exposure are not met for this mixture (< 1.0% ingredients classified as Specific Target Organ Toxicity - Single Exposure, category 1 or 2 and < 20% summation of all ingredients classified as Specific Target Organ Toxicity - Single Exposure, category 3).

Specific Target Organ Toxicity - Repeated Exposure: Based on available data, the classification criteria for Specific Target Organ Toxicity - Repeated Exposure are not met for this mixture (< 1.0% ingredients classified as Specific Target Organ Toxicity - Repeated Exposure, category 1 or 2). Prolonged skin contact may cause reddening, swelling, rash, scaling, blistering, and in some cases, skin sensitization.

Aspiration Hazard: Based on available data, the classification criteria for Aspiration Hazard are not met for this mixture (< 10% ingredients classified as an Aspiration Hazard, category 1 and/or mixture viscosity > 20.5 mm^2/s at 40 °C).

12. ECOLOGICAL INFORMATION

Environmental Data: No data available.

Ecotoxicological Information: No data available.

Bioaccumulation/Accumulation: No data available.

Distribution: No data available.

Aquatic Toxicity (Acute): No data available.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Disposal Method: Comply with applicable local, state or international regulations concerning solid or hazardous waste disposal and/or container disposal. Do not discharge substance/product into sewer system.

Product Disposal: Empty containers retain product residue; observe all precautions for product. Decontaminate

containers prior to disposal.

14. TRANSPORT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical Name : Benzyl Butyl Phthalate and Epoxy Resin

Primary Hazard Class/Division: 9

UN/NA Number : 3082

Packing Group : III

Marine Pollutant : Yes

Other Shipping Information:
These Regulations do not apply to the handling, offering for transport or transporting of less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle.

Air (ICAO/IATA)

Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical Name : Benzyl Butyl Phthalate and Epoxy Resin

UN/NA Number : 3082

Primary Hazard Class/Division: 9

Packing Group : III

Subsidiary Risk : None

Vessel (IMO/IMDG)

Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical Name : Benzyl Butyl Phthalate and Epoxy Resin

UN/NA Number : 3082

Primary Hazard Class/Division: 9

Packing Group : III

Marine Pollutant : Yes

Label : None

Note: With an inner packaging < 5.0 L, this product may be shipped as a Limited Quantity.

Canadian Transportation of Dangerous Goods Regulations

Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical Name : Benzyl Butyl Phthalate and Epoxy Resin

UN/NA Number : 3082

Primary Hazard Class/Division: 9

Packing Group : III

Label : None

TDG Note:

These Regulations do not apply to the handling, offering for transport or transporting of less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle.

15. REGULATORY INFORMATION

UNITED STATES

SARA Section 311/312 Hazard Categories

311/312 Health Hazards: Eye Irritation, Reproductive Toxicity, Skin Irritation, Skin Sensitization

311/312 Physical Hazards: None

Fire Hazard : No
Sudden Release of Pressure : No
Reactive Hazard : No
Product Acute Toxicity : Yes
Product Chronic Toxicity : Yes

EPCRA Section 313 Toxic Chemicals:

This product does not contain any listed toxic chemicals that exceed the threshold reporting levels established by SARA Title III, Section 313.

EPCRA Section 313 Toxic Chemicals

Chemical Name	Wt.%	CAS number
Benzyl butyl phthalate	4 - 5.5	85-68-7

EPCRA Section 302 Extremely Hazardous Substances

EPCRA Status:
This product contains no listed extremely hazardous substances that are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substances and Reportable Quantities (RQ)

CERCLA Status:
This product contains no CERCLA listed hazardous substances.

Chemical Name	Wt.%	RQ
Benzyl butyl phthalate	4 - 5.5	100

TSCA (The Toxic Substances Control Act)

TSCA Status:
All components are included or are otherwise exempt from inclusion on this inventory.

CAA 112(b) - Hazardous Air Pollutants

CAA 112(r) - List of Substances for Accidental Release Prevention:

This product contains no chemicals subject to CAA 112(b) or CAA 112(r).

California Proposition 65

Chemical Name	Wt.%	Listed
Benzyl butyl phthalate	4 - 5.5	Developmental Toxicity

OSHA Hazard Communication Standard (29 CFR 1910.1200):

OSHA Status: Hazardous Product (See Section 2 for details).
This product has been classified in accordance with the hazard criteria of the USA OSHA Hazard

Communication Standard (29CFR 1910.1200) and the Safety Data Sheet contains all the information required by the OSHA Hazard Communication Standard (HazCom 2012).

CANADA

WHMIS Hazard Symbol and Classification

See Section 2 for details.

WHMIS Regulatory Status:
This product has been classified in accordance with the hazard criteria of the Canadian Hazardous Products Regulations and the Safety Data Sheet contains all the information required by the Hazardous Products Regulations (WHMIS 2015).

WHMIS Classification:
WHMIS 2015 (Canada) Status: Hazardous Product (See Section 2 for details).

CEPA - National Pollutant Release Inventory (NPRI):
This product contains no chemicals subject to CEPA - NPRI.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL):
All components are included or are otherwise exempt from inclusion on this inventory.

Comments VOC Content -- See section 9.

16. OTHER INFORMATION

Reason for Issue: NEW

Approved By: Jim Gordon **Title:** R&D Chemist / Chemiste de R&D

Prepared By : Regulatory Compliance / Conformité réglementaire **Date Revised:** 08/21/2017

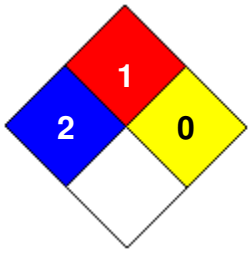
Information Contact: 905-670-5411

Revision Summary: This MSDS replaces the 01/26/2017 MSDS. Revised: **Section 15:** 311/312 Physical Hazards, 311/312 Health Hazards.

HMIS RATING

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		E

NFPA CODES



NFPA 30 / 30B Storage Classification: Combustible Liquid IIIB

Manufacturer Supplemental Notes: None

Data Sources: Not Available

Additional SDS Information:
N/AV Not Available
N/AP Not Applicable
ND Not yet determined
ACGIH American Conference of Governmental Industrial Hygienists
CAA The Clean Air Act
CCCR The Consumer Chemicals and Containers Regulations
CEPA The Canadian Environmental Protection Act
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
EPCRA The Emergency Planning and Community Right-To-Know Act

IARC International Agency for Research on Cancer
MSHA Mine Safety and Health Administration
NIOSH National Institute for Occupational Safety and Health
NTP National Toxicology Program
OSHA The Occupational Safety and Health Administration
SARA The Superfund Amendments and Reauthorization Act
WHMIS Workplace Hazardous Materials Information System

General Statements: No data available.

Comments: None

Manufacturer Disclaimer: The information contained herein is based on data considered accurate. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. No responsibility is assumed for personal injury or property damage to vendees or users or third parties, caused by the material. Such vendees or users assume all risks with the use of this material.