

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND PREPARATION INFORMATION

Manufacturer: Dominion Sure Seal Ltd.
 6175 Danville Road, Mississauga, Ontario
 Canada, L5T 2H7
 (905)670-5411
 U.S.A. 1-800-265-0790
 Emergency telephone numbers: Dominion Sure Seal (8 AM TO 4 PM EST)
 (905)670-5411
 CANUTEC (24 HR)
 (613) 996 – 6666
 Product Name: XPSA Plastic Adhesive Weld Kit – Component XPAB
 Component Stock: XPAB – 9.5 ml (0.32 fl oz U.S.)
 Component Code: 402502
 Synonyms: Not Applicable
 Chemical Family: Cyanoacrylate Ester
 Molecular Formula: Mixture
 Product Use: Cyanoacrylate Adhesive
 Prepared by: Regulatory Department
 Preparation Date: March 13, 2014

2. HAZARDOUS INGREDIENTS

Hazardous Ingredients	CAS Number	Wt. %	TLV	LD/50, mg/kg Route, Species	LC/50 Route, Species
Ethyl-2-Cyanoacrylate	7085-85-0	80 – 90	0.2 ppm	> 5 ml/kg (oral-rat)	N/A
Isopropyl-2-Cyanoacrylate	10586-17-1	5 – 10	Not Established	N/A	N/A
Hydroquinone	123-31-9	≤ 0.5	2 mg/m ³	285-367(oral;rat) 245;350 (oral;mouse) 200 (oral; rbt) 5970 (dermal; MAM)	N/A

2. HAZARDOUS INGREDIENTS (CONTINUED)

The other components of this product are not considered hazardous under applicable U.S. OSHA and/or Canadian WHMIS regulations.

NON-Hazardous Ingredients	CAS Number	Wt. %	TLV	LD/50 Route, Species	LC/50 Route, Species
Poly(methyl methacrylate)	9011-14-7	5 - 10	N/AP	N/AP	N/AP

3. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear
Odour	Sharp, Irritating
Odour Threshold	Not Available
Boiling Point (Deg.C)	54 to 56 @ 3mm Hg
Melting/Freezing Point (Deg. C)	Not Available
Vapour Density (Air = 1)	> 1
Specific Gravity (Estimate)	1.06 – 1.08
Vapour Pressure (mm Hg)	< 0.2
Evaporation Rate, n-Butyl Acetate = 1	> 1
pH	Not Applicable
Solubility in Water	Negligible (polymerizes)

4. FIRE AND EXPLOSION HAZARD

Flammability:	Yes
If Yes, Under Which Conditions:	Excessive heat, sparks and open flame.
Flammability Limits in Air (%):	Not available
Flash Point (TCC deg.C)	> 81
Autoignition Temperature (Deg. C):	Not available
Hazardous Combustion Products:	Carbon monoxide, Carbon dioxide, Nitrogen oxides and cyanides.
Sensitivity to Mechanical Impact:	Not expected to be sensitive to mechanical impact.
Rate of Burning:	Not available.
Explosive Power:	Not available.
Sensitivity to Static Discharge:	Not expected to be sensitive to static discharge.
Extinguishing Media:	Carbon dioxide, dry chemicals, foam, water fog. Use water to keep fire-exposed containers cool.

5. REACTIVITY DATA

Chemical Stability:	Yes, under recommended storage and handling conditions.
Compatibility with Other Substances:	No, rapid polymerization will occur in the presence of water, amines, alkalis and alcohols.
Hazardous Products of Decomposition:	Carbon monoxide, carbon dioxide, nitrogen oxides and cyanides.
Hazardous Polymerisation:	Polymerized by contact with water, alcohols, amines and alkalis.

6. TOXICOLOGICAL PROPERTIES

Route of Entry:	
Skin Contact:	Yes
Skin Absorption:	Yes
Eye Contact:	Yes
Inhalation:	Yes
Ingestion:	Yes
Effects of Exposure:	Cyanoacrylate. CAUTION. Bonds skin and eyelids instantly. High vapor concentrations are irritating to the eyes, nose, throat and respiratory tract. Contact with the eye will cause moderate to severe irritation and will cause excessive tearing. Contact with the skin will cause irritation. Cyanoacrylates generate heat during the cure process and, in rare instances, a large amount of spilled adhesive can burn the skin. Ingestion is unlikely. Cyanoacrylates are almost impossible to swallow because they solidify in the mouth. There is a danger of cumulative effects due to repeated exposure to a toxic material.
Carcinogenicity of material:	There is limited evidence of a carcinogenic effect for hydroquinone.
Reproductive effects:	No information is available and no adverse reproductive effects are anticipated.
Teratogenicity:	No information is available and no adverse teratogenic effects are anticipated.
Mutagenicity:	No information is available and no adverse mutagenic effects are anticipated.
Sensitization of the material:	Material is not expected to be a skin or respiratory sensitizer.

7. PREVENTIVE MEASURES

Eye Protection:	Chemical safety goggles/glasses with side shields is the minimum requirement. Maintain an eye wash fountain in work area.
Skin Protection:	Wear nitrile/polyethylene gloves.
Respiratory Protection:	Generally not required with good local exhaust ventilation. Otherwise, wear a NIOSH/MSHA approved half-face organic vapour respirator if exposure exceeds occupational limits.
Engineering Controls:	Use with adequate ventilation. Good general or local exhaust ventilation is recommended if used indoors on a continuous basis.
Leak/Spill Clean-Up Procedures:	Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified above. Use vermiculite, sand or earth to contain/absorb liquid product. Flood area slowly with water to polymerise, then collect product for disposal. Do not use combustible materials such as sawdust as an absorbent. Notify applicable government authority if release is reportable or could adversely affect the environment.
Storage Instructions:	Store away from heat and direct sunlight to maximize shelf life. Keep away from heat, sparks, and open flames. Store in a cool, dry, well-ventilated area. Protect against physical damage. Keep containers tightly closed when not in use.
Handling Instructions:	Use only in a well-ventilated area. Avoid breathing vapors. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

8. FIRST AID MEASURES

Eye Contact:
In case of eye contact, immediately flush eyes with running water for a minimum of 15 minutes. Hold eyelids open during flushing. If eyelids are bonded closed, wash thoroughly with warm water then cover the eye with a wet pad. Do not force the eye open. It may be necessary to apply a gauze patch. The eye will open without further action, typically in one to two days. Seek immediate medical attention.

Skin Contact:
Remove excess adhesive. Do not pull skin apart. Soak in warm, soapy water. The adhesive will come loose from the skin in several hours. Dried adhesive does not present a health hazard even when bonded to the skin. Seek medical attention.

Inhalation:
If affected by inhalation of vapour, move to fresh air. Get medical attention if symptoms persist.

Ingestion:

It is almost impossible to swallow cyanoacrylate. The adhesive solidifies and adheres in the mouth. If lips are accidentally stuck together apply lots of warm water and encourage maximum wetting and pressure from saliva inside the mouth. Do not try to pull the lips apart with direct opposing action. Saliva will lift the adhesive in one to two days.

9. TRANSPORT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name : Combustible Liquid, N.O.S. (Cyanoacrylate Ester)
Primary Hazard Class/Division: Comb liq
UN/NA Number : 1993
Packing Group : III
Other Shipping Information:
 This product is unrestricted under 450 litres.

Air (ICAO/IATA)

Shipping Name : Aviation Regulated Liquid, N.O.S. (Cyanoacrylate Ester)
UN/NA Number : 3334
Primary Hazard Class/Division: 3
Packing Group : III
Subsidiary Risk : N/A
Other Shipping Information:
 This product is unrestricted under 500 mL.

Vessel (IMO/IMDG)

Shipping Name : Not Regulated
UN/NA Number : N/A
Primary Hazard Class/Division: N/A
Packing Group : N/A
Marine Pollutant : N/A
Label : N/A
Note: N/A

Canadian Transportation of Dangerous Goods Regulations

Shipping Name : Not Regulated
UN/NA Number : N/A
Primary Hazard Class/Division: N/A
Packing Group : N/A
TDG Note: N/A

10. REGULATORY INFORMATION

U.S. Federal Regulations

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 Hazard Category:

Irritant –skin and eyes; Combustible; target organ effects reported.

Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA) Hazardous Substances:

Chemical Name	CAS Number	Reportable Quantity (RQ)
Hydroquinone	123-31-9	100

CAA, Section 112 Hazardous Air Pollutants:

Chemical Name	CAS Number	Concentration
Hydroquinone	123-31-9	0.5%

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA (EPCRA) Section 311/312 (40 CFR 370) Hazard Categories:

Immediate Hazard: Yes
 Delayed Hazard: No
 Fire Hazard: No
 Pressure Hazard: No
 Reactivity Hazard: Yes

This product contains the following extremely hazardous substance(s) subject to the reporting requirements of SARA (EPCRA) Section 302:

Chemical Name	CAS Number	Concentration
Hydroquinone	123-31-9	0.5%

This product contains the following toxic chemical(s) subject to reporting requirements of SARA (EPCRA) Section 313 (40 CFR 372)

Chemical Name	CAS Number	Concentration
Hydroquinone	123-31-9	0.5%

State Regulations

California: This product contains the following chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Component	CAS Number	Maximum %
None	N/A	N/A

International Regulations

Canadian Workplace Hazardous Materials Information System (WHMIS):

B3, D2B

Canadian Environmental Protection Act (DSL): All of the components of this product are included on the Canadian Domestic Substances list (DSL).

European Inventory of Existing Chemicals (EINECS): All of the components of this product are included on EINECS.

11. OTHER INFORMATION

VOC Compliance Statement:

VOC Content – Total Material: < 20 g/l (1.0 lbs/gal); < 2% by weight

Test Method: SCAQMD Method 316B

Density: 1.06 – 1.08 g/ml

Exempt Content: 0 % by weight (0 % by volume)

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. **This MSDS is valid for three years.**

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. Dominion Sure Seal assumes no responsibility 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 the material.

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3. PRODUCT AND PREPARATION INFORMATION

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U.S.A. 1-800-265-0790

Emergency telephone numbers: Dominion Sure Seal (8 AM TO 4 PM EST)
(905)670-5411
CANUTEC (24 HR)
(613) 996 – 6666

Product Name: XPSA Plastic Adhesive Weld Kit – Component XPAA
Component Stock: XPAA – 59 ml (2 fl oz US)
Component Code: 402501
Synonyms: Not Applicable
Chemical Family: Organic
Molecular Formula: Mixture
Product Use: Activator/Accelerator for Cyanoacrylate Adhesive
Prepared by: Regulatory Department
Preparation Date: March 12, 2014

4. HAZARDOUS INGREDIENTS

Hazardous Ingredients	CAS Number	Wt. %	TLV	LD/50 Route, Species	LC/50 Route, Species
N,N-Dimethyl toluidine	99-97-8	10 – 20	Not Established	1,650 mg/kg (oral-rat) 212 mg/kg (Ipr-Mus-mouse)	1,400 mg/m ³ (rat, 4h)
Acetone	67-64-1	80 – 100	500 ppm	5.25 to 8.40 g/kg (oral) >15.7 g/kg (dermal-rbt)	50,100mg/m ³ (rat, 8h)

The other components of this product are not considered hazardous under applicable U.S. OSHA and/or Canadian WHMIS regulations.

4. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear to light yellow
Odour	Ketone
Odour Threshold	Not Available
Boiling Point (Deg.C)	56 (Acetone)
Melting/Freezing Point (Deg. C)	Not Available
Vapour Density (Air = 1)	> 1
Specific Gravity (Estimate)	0.81
Vapour Pressure (mm Hg)	Not Available
Evaporation Rate, n-Butyl Acetate = 1	> 1
pH	Not Applicable
Solubility in Water	Partial

5. FIRE AND EXPLOSION HAZARD

Flammability:	Yes
If Yes, Under Which Conditions:	Excessive heat, sparks and open flame.
Flammability Limits in Air (%):	2.5 – 12.8
Flash Point (TCC deg.C)	-18
Autoignition Temperature (Deg. C):	465
Hazardous Combustion Products:	Carbon monoxide, Carbon dioxide, Nitrogen oxides.
Sensitivity to Mechanical Impact:	Not available. Not expected to be sensitive to mechanical impact.
Rate of Burning:	Not available.
Explosive Power:	Not available.
Sensitivity to Static Discharge:	Not available. Expected to be sensitive to static discharge when vapours in air are between the flammability limits.
Extinguishing Media:	Carbon dioxide, dry chemicals, foam, water fog. In case of a large fire cool containers with water jet in order to prevent pressure build up, autoignition or explosion.

5. REACTIVITY DATA

Chemical Stability:	Yes, under normal conditions.
Compatibility with Other Substances:	No, with strong oxidizing agents, hydrogen peroxide, strong acids.
Hazardous Products of Decomposition:	Carbon monoxide, carbon dioxide, nitrogen oxides.
Hazardous Polymerisation:	Will not occur.

6. TOXICOLOGICAL PROPERTIES

Route of Entry:

Skin Contact:	Yes
Skin Absorption:	Yes
Eye Contact:	Yes
Inhalation:	Yes
Ingestion:	Yes

Effects of Exposure:

Prolonged exposure to high vapor concentrations may be harmful or fatal. High vapor concentrations may also cause central nervous system effects including labored breathing, dizziness, drowsiness, and headache. High vapor concentrations are irritating to the eyes, nose, throat and respiratory tract. Contact with the eye will cause moderate to severe irritation. Product may be harmful if absorbed through the skin. Skin exposure may also cause defatting of the skin resulting in irritation, itching, dryness and cracking of the skin. Prolonged and repeated skin contact may lead to dermatitis. Product may be harmful if swallowed and is a pulmonary aspiration hazard. After ingestion, product may enter lungs and cause damage. There is a danger of cumulative effects due to repeated exposure to a toxic material.

Carcinogenicity of material:

No information is available and no adverse carcinogenic effects are anticipated.

Reproductive effects:

No information is available and no adverse reproductive effects are anticipated.

Teratogenicity:

No information is available and no adverse teratogenic effects are anticipated.

Mutagenicity:

No information is available and no adverse mutagenic effects are anticipated.

Sensitization of the material:

Material is not expected to be a skin or respiratory sensitizer.

8. PREVENTIVE MEASURES

Eye Protection:

Chemical safety goggles with side shields is the minimum requirement. Maintain an eye wash fountain in work area.

Skin Protection:

Wear chemical resistant gloves.

Respiratory Protection:

Wear a NIOSH/MSHA approved half-face organic vapour respirator if exposure exceeds occupational limits (Acetone: 500 ppm).

Engineering Controls:

Use with adequate ventilation. Exhaust ventilation is recommended if used indoors on a continuous basis.

Leak/Spill Clean-Up Procedures: Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified above. Collect product for disposal. Use vermiculite, sand or earth to contain/absorb spilled liquid. Do not use combustible materials such as sawdust as an absorbent. Notify applicable government authority if release is reportable or could adversely affect the environment.

Storage Instructions: Keep away from heat, sparks, and open flames. Store in a cool, dry, well-ventilated area. Protect against physical damage. Keep containers closed when not in use.

Handling Instructions: Use only in a well-ventilated area. Avoid breathing vapors or mists. Avoid contact with this material. Wash thoroughly after handling.

8. FIRST AID MEASURES

Eye Contact:

In case of eye contact, immediately flush eyes with running water for a minimum of 15 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention immediately.

Skin Contact:

For skin, wash thoroughly with soap and water. If irritation develops, get medical attention.

Inhalation:

If affected by inhalation of vapour or spray mist, move to fresh air. Get medical attention if breathing is difficult.

Ingestion:

Aspiration hazard. If swallowed, do not induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Rinse mouth with water. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.

12. TRANSPORT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name : Flammable Liquid, Toxic, N.O.S. (Acetone, Dimethyltoluidine)

Primary Hazard Class/Division: 3 (6.1)

UN/NA Number : 1992

Packing Group : II

Other Shipping Information:

With an inner packaging < 100 ml(3.38 fl oz) and an outer packaging < 30 kg(66 lb), this component may be shipped as a limited quantity as per DOT 173.150 (b).

Air (ICAO/IATA)

Shipping Name : Flammable Liquid, Toxic, N.O.S. (Acetone, Dimethyltoluidine)
UN/NA Number : 1992
Primary Hazard Class/Division: 3
Packing Group : II
Subsidiary Risk : 6.1 (PG III)
Label : Flammable Liquids; Toxic Substances

Vessel (IMO/IMDG)

Shipping Name : Flammable Liquid, Toxic, N.O.S. (Acetone, Dimethyltoluidine)
UN/NA Number : 1992
Primary Hazard Class/Division: 3 (6.1)
Packing Group : II
Marine Pollutant : None
Label : None (see Note)

Note: With an inner packaging < 1.0 L, this product may be shipped as a Limited Quantity.

Canadian Transportation of Dangerous Goods Regulations

Shipping Name : Flammable Liquid, Toxic, N.O.S. (Acetone, Dimethyltoluidine)
UN/NA Number : 1992
Primary Hazard Class/Division: 3 (6.1)
Packing Group : II
TDG Note:

With an inner packaging < 1.0 L, this component may be renamed "Consumer Commodity" or "Limited Quantity" as per TDG Section 1.17.

13. REGULATORY INFORMATION

U.S. Federal Regulations

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 Hazard Category:

Irritant – eyes; Flammable; Toxic – inhalation; target organ effects reported.

Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA) Hazardous Substances:

Chemical Name	CAS Number	Reportable Quantity (RQ)
Acetone	67-64-1	5000

CAA, Section 112 Hazardous Air Pollutants:

Chemical Name	CAS Number	Concentration
None	N/A	N/A

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA (EPCRA) Section 311/312 (40 CFR 370) Hazard Categories:

Immediate Hazard: Yes
 Delayed Hazard: Yes
 Fire Hazard: Yes
 Pressure Hazard: No
 Reactivity Hazard: No

This product contains the following extremely hazardous substance(s) subject to the reporting requirements of SARA (EPCRA) Section 302:

Chemical Name	CAS Number	Concentration
None	N/A	N/A

This product contains the following toxic chemical(s) subject to reporting requirements of SARA (EPCRA) Section 313 (40 CFR 372)

Chemical Name	CAS Number	Concentration
None	N/A	N/A

State Regulations

California: This product contains the following chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Component	CAS Number	Maximum %
None	N/A	N/A

International Regulations

Canadian Workplace Hazardous Materials Information System (WHMIS):

B2, D1B, D2B

Canadian Environmental Protection Act (DSL): All of the components of this product are included on the Canadian Domestic Substances list (DSL).

European Inventory of Existing Chemicals (EINECS): All of the components of this product are included on EINECS.

14. OTHER INFORMATION

VOC Compliance Statement:

VOC Content – Total Material: 121 g/l (1.0 lb/gal); 15% by weight
Density: 0.81 g/ml
Volatiles Content: 100 % by weight
Exempt Content: 85 % by weight (87 % by volume)

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. **This MSDS is valid for three years.**

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. Dominion Sure Seal assumes no responsibility 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 the material.