

# SAFETY DATA SHEET

## A00178 BRDWLK VANDAL RMVR BWK351A 20n16

Version 1.0

Revision Date 04/24/2015

Print Date 10/14/2015

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A00178 BRDWLK VANDAL RMVR BWK351A 20n16

Material number : 000000000001041285

#### Manufacturer or supplier's details

Company :

Address :

Telephone :

#### Emergency telephone numbers

For SDS Information :

For a Medical Emergency :

For a Transportation  
Emergency :

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	colourless
Odour	aromatic

#### GHS Classification

Flammable aerosols : Category 1  
Gases under pressure : Liquefied gas  
Skin irritation : Category 2  
Eye irritation : Category 2A  
Reproductive toxicity : Category 2  
Specific target organ toxicity -  
single exposure : Category 3 (Central nervous system)  
Specific target organ toxicity -  
repeated exposure : Category 2  
(Inhalation)

#### GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.  
H280 Contains gas under pressure; may explode if heated.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H361 Suspected of damaging fertility or the unborn child.

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H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

### Precautionary statements

#### : **Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection/ face protection.

P280 Wear protective gloves.

P281 Use personal protective equipment as required.

#### **Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

#### **Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

#### **Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

### Potential Health Effects

#### Carcinogenicity:

##### IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

##### ACGIH

Confirmed animal carcinogen with unknown relevance to humans

##### OSHA

2-butoxyethanol

111-76-2

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

##### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical Name	CAS-No.	Concentration [%]
acetone	67-64-1	>= 50 - < 70
toluene	108-88-3	>= 10 - < 20
propane	74-98-6	>= 5 - < 10
2-butoxyethanol	111-76-2	>= 5 - < 10
butanone	78-93-3	>= 5 - < 10
butane	106-97-8	>= 5 - < 10

### SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
- In case of skin contact : In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Wash clothing before reuse.  
Call a physician if irritation develops or persists.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
Remove contact lenses.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>)  
Foam  
Dry chemical  
Water
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Smoke

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- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Use a water spray to cool fully closed containers. Standard procedure for chemical fires.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Sweep up or vacuum up spillage and collect in suitable container for disposal.

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### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Dispose of rinse water in accordance with local and national regulations.  
Do not breathe vapours or spray mist.  
Always replace cap after use.
- Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.  
No smoking.  
Observe label precautions.  
Keep in a cool, well-ventilated place.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Strong oxidizing agents  
Do not store near acids.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
acetone	67-64-1	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		TWA	250 ppm 590 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m <sup>3</sup>	OSHA Z-1
		TWA	750 ppm 1,800 mg/m <sup>3</sup>	OSHA P0
		STEL	1,000 ppm 2,400 mg/m <sup>3</sup>	OSHA P0
toluene	108-88-3	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m <sup>3</sup>	NIOSH REL
		ST	150 ppm 560 mg/m <sup>3</sup>	NIOSH REL
		TWA	200 ppm	OSHA Z-2
		CEIL	300 ppm	OSHA Z-2
		Peak	500 ppm	OSHA Z-2
		TWA	100 ppm 375 mg/m <sup>3</sup>	OSHA P0
		STEL	150 ppm 560 mg/m <sup>3</sup>	OSHA P0
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	OSHA P0
		TWA	20 ppm	ACGIH
2-butoxyethanol	111-76-2	TWA	5 ppm 24 mg/m <sup>3</sup>	NIOSH REL
		TWA	50 ppm 240 mg/m <sup>3</sup>	OSHA Z-1
		TWA	25 ppm 120 mg/m <sup>3</sup>	OSHA P0
		TWA	200 ppm	ACGIH
butanone	78-93-3	STEL	300 ppm	ACGIH
		TWA	200 ppm 590 mg/m <sup>3</sup>	NIOSH REL
		ST	300 ppm 885 mg/m <sup>3</sup>	NIOSH REL
		TWA	200 ppm 590 mg/m <sup>3</sup>	OSHA Z-1
		TWA	200 ppm 590 mg/m <sup>3</sup>	OSHA P0
		STEL	300 ppm 885 mg/m <sup>3</sup>	OSHA P0

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butane	106-97-8	TWA	800 ppm 1,900 mg/m <sup>3</sup>	NIOSH REL
		TWA	800 ppm 1,900 mg/m <sup>3</sup>	OSHA P0

### Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-PROPANONE	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	50 mg/l	ACGIH BEI
METHYLBENZENE	108-88-3	Toluene	In blood	Prior to last shift of workweek	0.02 mg/l	ACGIH BEI
METHYLBENZENE		Toluene	Urine	End of shift (As soon as possible after exposure ceases)	0.03 mg/l	ACGIH BEI
METHYLBENZENE		o-Cresol	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/g	ACGIH BEI
Remarks: Creatinine						
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200 mg/g	ACGIH BEI
Remarks: Creatinine						
2-BUTANONE	78-93-3	MEK	Urine	End of shift (As soon as possible after exposure ceases)	2 mg/l	ACGIH BEI

### Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.  
Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

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Hand protection Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	: Safety glasses Ensure that eyewash stations and safety showers are close to the workstation location.
Skin and body protection	: impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a liquefied gas
Colour	: colourless
Odour	: aromatic
Odour Threshold	: no data available
pH	: no data available
Melting point/freezing point	: no data available
Boiling point	: no data available
Flash point	: not applicable
Evaporation rate	: no data available
Flammability (solid, gas)	: Extremely flammable aerosol.
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Density	: 0.810 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: partly soluble
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: not determined
Thermal decomposition	: no data available
Heat of combustion	: 35.04 kJ/g

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air. No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Acids Oxidizing agents
Hazardous decomposition products	: Carbon monoxide Carbon dioxide (CO <sub>2</sub> )

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## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Product:

Acute oral toxicity	: Acute toxicity estimate : 4,978 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 10 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method

#### Components:

##### **acetone:**

Acute oral toxicity	: LD50 rat: 5,800 mg/kg
Acute inhalation toxicity	: LC50 rat: 132 mg/l Exposure time: 3 h  LC50 rat: 50.1 mg/l
Acute dermal toxicity	: LD50 guinea pig: > 7,426 mg/kg  LD50 rabbit: > 7,426 mg/kg

##### **propane:**

Acute inhalation toxicity	: LC50 mouse: 1,237 mg/l
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Exposure time: 2 h

LC50 rat: 658 mg/l  
Exposure time: 4 h

LC50 rat: 1,355 mg/l

### **butanone:**

Acute oral toxicity : LD50 Oral rat: 2,737 mg/kg

Acute inhalation toxicity : LC50 mouse: 32,000 mg/l  
Exposure time: 4 h

LC50 : 38,000 mg/l

Acute dermal toxicity : LD50 Dermal rabbit: 6,480 mg/kg

### **butane:**

Acute inhalation toxicity : LC50 mouse: 1,237 mg/l  
Exposure time: 2 h

LC50 rat: 1,355 mg/l

### **Skin corrosion/irritation**

#### **Product:**

Remarks: May cause skin irritation in susceptible persons.

### **Serious eye damage/eye irritation**

#### **Product:**

Remarks: Eye irritation

### **Respiratory or skin sensitisation**

no data available

### **Germ cell mutagenicity**

no data available

### **Carcinogenicity**

no data available

### **Reproductive toxicity**

no data available

**acetone:**

**toluene:**

**propane:**

**2-butoxyethanol:**

**butanone:**

**butane:**

### **STOT - single exposure**

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no data available

### STOT - repeated exposure

no data available

### Aspiration toxicity

no data available

### Further information

#### Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

no data available

### Persistence and degradability

no data available

### Bioaccumulative potential

#### Product:

Partition coefficient: n-octanol/water : Remarks: no data available

#### Components:

##### **toluene :**

Partition coefficient: n-octanol/water : Pow: 2.73

##### **butanone :**

Partition coefficient: n-octanol/water : log Pow: 0.29

##### **butane :**

Partition coefficient: n-octanol/water : Pow: 2.89

### Mobility in soil

no data available

### Other adverse effects

no data available

#### Product:

Regulation

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

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Additional ecological information : no data available

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

- Waste from residues : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Dispose of in accordance with local regulations.
- Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

### SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):  
ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):  
UN1950, AEROSOLS, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air):  
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air):  
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada):  
UN1950, AEROSOLS, 2.1, - Limited quantity

### SECTION 15. REGULATORY INFORMATION

#### EPCRA - Emergency Planning and Community Right-to-Know Act

#### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
toluene	108-88-3	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

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This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Sudden Release of Pressure Hazard  
Acute Health Hazard  
Chronic Health Hazard  
Fire Hazard

**SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:  
toluene 108-88-3 17 %

**California Prop 65** WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.  
toluene 108-88-3

### The components of this product are reported in the following inventories:

**TSCA** On TSCA Inventory  
**DSL** All components of this product are on the Canadian DSL.  
**AICS** On the inventory, or in compliance with the inventory  
**NZIoC** Not in compliance with the inventory  
**PICCS** On the inventory, or in compliance with the inventory  
**IECSC** On the inventory, or in compliance with the inventory

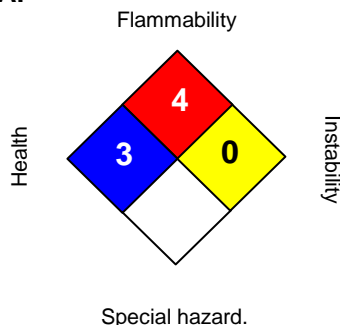
### Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

## SECTION 16. OTHER INFORMATION

### Further information

#### NFPA:



#### HMIS III:

<b>HEALTH</b>	<b>3*</b>
<b>FLAMMABILITY</b>	<b>4</b>
<b>PHYSICAL HAZARD</b>	<b>2</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

OSHA GHS Label Information:

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Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements

: **Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/ face protection. Wear protective gloves. Use personal protective equipment as required. **Response:** IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. **Storage:** Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. **Disposal:** Dispose of contents/container in accordance with local regulation.

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