according to WHMIS 2015 and ANSI Z400.1-2010

# **RK 1500 Adhesive**

Material number 105631

Revision date: 5/Aug/2016 Version: 2 Language: en-CA,US Date of print: 11/Aug/2016

Page:

1 of 10

# 1. Product and company identification

#### **Product identifier**

ШЕ

Trade name: RK 1500 Adhesive

Ε

Π

Π

### Relevant identified uses of the substance or mixture and uses advised against

General use: Resin for 2 component adhesive. Reserved for industrial and professional use.

#### Details of the supplier of the safety data sheet

Company name:	WEICON Inc.
Street/POB-No.:	20 Steckle Place, Unit 20
Postal Code, city:	Kitchener, Ontario N2E 2C3, CA
WWW:	www.weicon.ca
E-mail:	info@weicon.ca
Telephone:	+1-519-896-5252
Telefax:	+1-519-896-5254
Dept. responsible for infor	mation:
	Product-Safety-Department
	Telephone: +49(0)251 / 9322 - 0, Email: msds@weicon.de

### **Emergency phone number**

EMERGENCY CONTACT – Canada (24h): Tel: ++1 866 928 0789 (Toll free) Transport: TRANSPORT EMERGENCY CONTACT - Canada (24h): Tel: ++1 866 928 0789 (Toll free)

## 2. Hazards identification

### **Emergency overview**

Appearance:	Physical state at 20 °C and 101.3 kPa: liquid Form: viscous
Odor:	Color: pink ester-like
Classification:	Flammable Liquid 2; Skin Corrosion 1A; Eye Damage 1; Sensitization - skin 1; Specific Target Organ Toxicity (Single Exposure) 3;
Hazard symbols:	
0. 1 1	

Signal word: Hazard statements: **Danger** Highly flammable liquid and vapor. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation.

Revision date:5/Aug/2016Version:2Language:en-CA,USDate of print:11/Aug/2016

Page:



RK 1500 Adhesive

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

Take action to prevent static discharges. Avoid breathing vapors/spray. Wear protective gloves/protective clothing/eye protection. IF ON SKIN: Wash with plenty of water/soap. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see ' First aid ' on this label). Wash contaminated clothing before reuse. In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction. Dispose of contents/container to hazardous or special waste collection point.

#### **Regulatory status**

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

#### Hazards not otherwise classified

Potentially explosive mixtures may form if adequate ventilation is not provided. Higher doses may have a narcotic effect. see section 11: Toxicological information

# 3. Composition / Information on ingredients

CAS No.	Designation	Content	Classification
CAS 80-62-6	Methyl methacrylate	30 - 60 %	Flammable Liquid 2. Skin Irritation 2. Sensitization - skin 1. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 79-41-4	Methacrylic acid	7 - 10 %	Acute Toxicity 4 (oral). Acute Toxicity 3 (dermal). Acute Toxicity 4 (inhalative). Skin Corrosion 1A. Eye Damage 1. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 3077-12-1	2,2'-[(4- Methylphenyl)imino] bisethanol	< 3 %	Acute Toxicity 4 (oral). Eye Damage 1.
CAS 52628-03-2	2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate	< 3 %	Skin Corrosion 1B.

4. First aid measures	
General information:	Take off immediately all contaminated clothing and wash it before reuse. First aider: Pay attention to self-protection!
In case of inhalation:	Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Immediately get medical attention.
Following skin contact:	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Immediately get medical attention.

according to WHMIS 2015 and ANSI Z400.1-2010



Page:

3 of 10

After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Seek the attention of an ophthalmologist immediately.
After swallowing:	Do not induce vomiting. Rinse mouth with water.

Do not induce vomiting. Rinse mouth with water. Drink large quantities of water. Never give anything by mouth to an unconscious person. Immediately get medical attention.

### Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Respiratory complaints, Cough, vomiting.

#### Information to physician

C

Π

Ε

Treat symptomatically. Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

5. Fire fighting measures		
Flash point/flash point ra		
	> 10 °C (c.c.)	
Auto-ignition temperature	∞ 430 °C	
Suitable extinguishing me		
	Water fog, foam, extinguishing powder, sand, carbon dioxide	
Extinguishing media whic	th must not be used for safety reasons: High power water jet	
Specific hazard	Is arising from the chemical	
	Highly flammable liquid and vapor. Vapors form explosive mixtures with air. Risk of bursting/explosion. Hazardous vapors may form during fires. In case of fire may be liberated: Phosphorus oxides, nitrogen oxides (NOx), carbon monoxide and carbon dioxide	
Protective equipment and	d precautions for firefighters: Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing. In case of fire and/or explosion do not breathe fumes.	
Additional information:	Cool exposed containers with water spray. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.	

	6. Accidental release measures
Personal precautions:	Provide adequate ventilation. In case of leakage, eliminate all ignition sources. Avoid contact with skin and eyes. Wear appropriate protective equipment. Keep unprotected people away. Use a breathing protection against vapors/aerosol. Do not breathe vapor or spray.
Environmental precaution	IS:
	Do not allow to enter into ground-water, surface water or drains. Do not allow to enter into soil/subsoil. In case of release, notify competent authorities.
Methods for clean-up:	Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Beware of reignition. Use only explosion-proof equipment. Thoroughly clean surrounding area. In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

according to WHMIS 2015 and ANSI Z400.1-2010

# **RK 1500 Adhesive**

Material number 105631

4 of 10

Additional information: Use explosion-proof equipment and non-sparking tools/utensils.

# 7. Handling and storage

### Handling

Ε

Advices on safe handling: Provide good ventilation and/or an exhaust system in the work area. Handle and open container with care. Do not breathe vapor or spray.

Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.

Wear appropriate protective equipment. Take off immediately all contaminated clothing and wash it before reuse.

Avoid contact with skin and eyes. When using do not eat, drink or smoke. Wash hands before breaks and after work.

Precautions against fire and explosion:

E

Π

Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking.

Use only explosion-protected equipment/instruments. Do not weld.

In partially filled containers explosive mixtures may form.

### Storage

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from light and heat. Store at temperatures between 2 °C and 8 °C.
Store containers in upright position. Explosion protection required.
Handle empty containers with care. Incineration may cause explosion.
Hints on joint storage:
Do not store together with combustible or self-igniting materials or any highly flammable solids.
Do not store together with reducing agents, strong oxidizing agents or salts of heavy metals.
Keep away from food, drink and animal feedingstuffs.

# 8. Exposure controls / personal protection

#### Exposure guidelines Occupational exposure limit values

CAS No.	Designation	Туре	Limit value
80-62-6	Methyl methacrylate	Canada, Alberta: OEL 15 min	410 mg/m³; 100 ppm
	,	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, Québec: VEMP USA: ACGIH: STEL USA: ACGIH: TWA USA: NIOSH: TWA USA: OSHA: TWA	205 mg/m <sup>3</sup> ; 50 ppm 100 mg/m <sup>3</sup> ; 50 ppm 205 mg/m <sup>3</sup> ; 50 ppm 410 mg/m <sup>3</sup> ; 100 ppm 205 mg/m <sup>3</sup> ; 50 ppm 410 mg/m <sup>3</sup> ; 100 ppm 410 mg/m <sup>3</sup> ; 100 ppm
79-41-4	Methacrylic acid	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, Québec: VEMP USA: ACGIH: TWA USA: NIOSH: TWA	70 mg/m³; 20 ppm 20 ppm 70 mg/m³; 20 ppm 70 mg/m³; 20 ppm 70 mg/m³; 20 ppm (May be absorbed through the skin.)

Page:



according to WHMIS 2015 and ANSI Z400.1-2010

RK 1500 Adhesive

Page:

5 of 10

### **Engineering controls**

ШЕ

C

**D N** 

Provide for good ventilation or exhaust system or work with completely self-contained equipment. Explosion protection required. See also information in chapter 7, section storage.

### Personal protection equipment (PPE)

Eye/face protection	Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.
Skin protection	Flame retardant, antistatic and chemical resistant protective clothing.
	Protective gloves according to OSHA Standard - 29 CFR: 1910.138. Glove material: Butyl caoutchouc (butyl rubber), ethylene vinyl alcohol laminate (EVAL) Layer thickness: 0.7 mm Breakthrough time: >480 min
	Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Respiratory protection:	Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
	The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.
General hygiene consider	ations:
	Use non-sparking tools. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
	Do not breathe vapor or spray. Avoid contact with skin and eyes. Work place should be equipped with a shower and an eye rinsing apparatus. Take off immediately all contaminated clothing and wash it before reuse. When using do not eat, drink or smoke. Wash hands before breaks and after work.

# 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance: Odor: Odor threshold:	Physical state at 20 °C and 101.3 kPa: liquid Form: viscous Color: pink ester-like not determined
pH value:	not determined
Melting point/freezing point:	not determined
Initial boiling point and boiling range:	> 100 °C
Flash point/flash point range:	> 10 °C (c.c.)
Evaporation rate:	No data available
Flammability: Explosion limits:	Highly flammable liquid and vapor. LEL (Lower Explosion Limit): 2.10 Vol-% UEL (Upper Explosive Limit): 12.50 Vol-%
Vapor pressure:	at 20 °C: <= 3800 Pa
Vapor density:	at 20 °C: 1
Density:	at 20 °C: approx. 1 g/mL
Water solubility:	partially soluble <= 16 g/L
Partition coefficient: n-octanol/water:	not determined
Auto-ignition temperature:	430 °C
Thermal decomposition:	> 200 °C
Viscosity, dynamic:	at 23 °C: 3000 - 5000 mPa*s
Viscosity, kinematic:	not determined



according to WHMIS 2015 and ANSI Z400.1-2010

## **RK 1500 Adhesive**

Material number 105631

Revision date: 5/Aug/2016 Version: 2 Language: en-CA,US Date of print: 11/Aug/2016

Page:

6 of 10

Explosive properties: Ignition temperature: Vapors may form explosive mixtures with air. 430 °C

	10. Stability and reactivity		
Reactivity:	Highly flammable liquid and vapor. Vapors may form explosive mixtures with air.		
Chemical stability:	Stable under recommended storage conditions.		
Possibility of hazardous re	Pactions Polymerization along with heat production. Do not expose to high temperature. Danger of bursting and explosion.		
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect against direct sunlight.		
Incompatible materials:	Reducing agent, strong oxidizing agents, salts of heavy metals.		
Hazardous decomposition	products: Hazardous vapors may form during fires. In case of fire may be liberated: Phosphorus oxides, nitrogen oxides (NOx), carbon monoxide and carbon dioxide > 200 °C		

# 11. Toxicological information

### Toxicological tests

Toxicological effects:	The statements are derived from the properties of the single components. No toxicological data is available for the product as such.
	Acute toxicity (oral): Based on available data, the classification criteria are not met.
	Acute toxicity (dermal): Based on available data, the classification criteria are not met.
	Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
	Skin corrosion/irritation, eye damage/irritation: Skin Corrosion 1A = Causes severe skin burns and eye damage.
	Sensitisation to the respiratory tract: Lack of data.
	Skin sensitisation: Sensitization - skin 1 = May cause an allergic skin reaction.
	Germ cell mutagenicity/Genotoxicity: Lack of data.
	Carcinogenicity: Lack of data.
	Reproductive toxicity: Lack of data.
	Effects on or via lactation: Lack of data.
	Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) 3 = May cause respiratory irritation.
	Specific target organ toxicity (repeated exposure): Lack of data.
	Aspiration hazard: Lack of data.

according to WHMIS 2015 and ANSI Z400.1-2010

## **RK 1500 Adhesive**

Material number 105631

Page:

7 of 10

Information about Methyl methacrylate: LD50 Rat, oral: 7900-9400 mg/kg LD50 Rabbit, dermal: >5000 mg/kg LD50 Rat, inhalative, vapor: 29,8 mg/L/4h Information about Methacrylic acid: LD50 Rat, oral: 1320-2260 mg/kg LD50 Rabbit, dermal: 500-1000 mg/kg LD50 Rat, inhalative, vapor: 7.1 mg/L/4h For carcinogenic effects: Information about Methyl methacrylate: IARC Rating: Group 3 OSHA Carcinogen: not listed NTP Rating: not listed

## **12. Ecological information**

#### Ecotoxicity

Aquatic toxicity:

Ε

Other information:

С

0 | N

Fish toxicity: LC50: > 79 mg/L/96 h Algae toxicity: IC50: > 110 mg/L/ 72 h Daphnia toxicity: Daphnia magna (Big water flea), EC50: 49 mg/L/ 48 h (Methyl methacrylate).

#### Mobility in soil

No data available

#### Persistence and degradability

Further details: Biodegradation: < 94 %/14d. Readily degradable.

#### Additional ecological information

Volatile organic compounds (VOC):

General information: 0 % by weight = 0 g/L Do not allow to enter into ground-water, surface water or drains. Do not allow uncontrolled discharge of product into the environment.

## **13. Disposal considerations**

#### Product

Recommendation: Dispose of waste according to applicable legislation.

### Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself. Handle empty containers with care. Incineration may cause explosion.

according to WHMIS 2015 and ANSI Z400.1-2010

## **RK 1500 Adhesive**

1 C O N

ШE

	RK 1500 AGNESIVE Material number 105631	Page:	8 of 10
	14. Transport information		
USA: Department of Transpo	-		
Identification number:	UN2924	ANK I	
Proper shipping name:	UN 2924, flammable liquids, corrosive, n.o.s. (Methyl methacrylate, Methacrylic acid)	$\langle \underline{} \rangle$	
Hazard class or Division:	3	3	
Packing Group:			
_abels:	3, 8	$\square$	
Symbols:	G		
Special provisions:	IB2, T11, TP2, TP27		
Packaging – Exceptions:	150	8	
Packaging – Non-bulk:	202		
Packaging – Bulk:	243		
Quantity limitations – Passenger aircraft / ra			
	1 L		
Quantity limitations – Cargo only:	5 L		
Vessel stowage – Location:	В		
Vessel stowage – Other:	40		
Canada: Transportation of D	angerous Goods (TDG)		
UN Number:	UN2924		
Shipping name:	UN 2924, FLAMMABLE LIQUID, CORROSIVE, N.	0.S.	
11 3	(Methyl methacrylate, Methacrylic acid)	••••	
TDG class:	3 (8)		
Packing group:			
Special provisions:	16		
Explosive limit and limited quantity index:	1 L		
Passenger carrying road or rail index:	1 L		
Sea transport (IMDG)			
UN number:	UN 2924		
	UN 2924, FLAMMABLE LIQUID, CORROSIVE, N.	0.6	
Proper shipping name:	(Methyl methacrylate, Methacrylic acid)	0.0.	
Class or division, Subsidary risk:	Class 3, Subrisk 8		
Packing Group:			
EmS:	н F-E, S-C		
Special provisions:	274		
Limited quantities:	1L		
Excepted quantities:	E2		
Contaminated packaging - Instructions:	P001		
Contaminated packaging - Provisions:	-		
BC - Instructions:	IBC02		
BC - Provisions:	-		
Tank instructions - IMO:	-		
Tank instructions - UN:	T11		
Tank instructions - Provisions:	TP2, TP27		
Stowage and handling:	Category B. SW2		
Properties and observations:	Causes burns to skin, eyes and mucous membrane	20	
Marine pollutant:	no		
Segregation group:	none		
printed by WEICON		with Quali	svs SUMDA



according to WHMIS 2015 and ANSI Z400.1-2010

Material number 105631

Revision date: 5/Aug/2016 Version: 2 en-CA,US Language: Date of print: 11/Aug/2016

Page:

9 of 10

Air	trans	port (	(IATA)

UN/ID number: UN 2924 Proper shipping name: UN 2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Methyl methacrylate, Methacrylic acid) Class or division, Subsidary risk: Class 3, Subrisk 8 Ш Packing Group: Hazard label: Flamm. liquid & Corrosive Excepted Quantity Code: E2 Pack.Instr. Y340 - Max. Net Qty/Pkg. 0.5 L Passenger and Cargo Aircraft: Ltd.Qty.: Passenger and Cargo Aircraft: Pack.Instr. 352 - Max. Net Qty/Pkg. 1 L Cargo Aircraft only: Pack.Instr. 363 - Max. Net Qty/Pkg. 5 L A3 Special provisions: Emergency Response Guide-Code (ERG): 3CH

# 15. Regulatory information

## National regulations - Canada

No data available

### National regulations - U.S. Federal Regulations

Methyl methacrylate:	TSCA Inventory: listed; EPA flags T TSCA HPVC: not listed TSCA: listed - Flags: T Carcinogen Status: IARC Rating: Group 3 OSHA Carcinogen: not listed NTP Rating: not listed Clean Air Act: Hazardous Air Pollutants: Code XOV SOCMI Chemical: yes Clean Water Act: Hazardous Substances: RQ 1000 lbs. Other Environmental Laws: CERCLA: RQ 1000 lbs. RCRA Hazardous Wastes: Code U162 RCRA Groundwater Monitoring: Methods 8015, 8240 / PQL 2, 5 SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Sta NIOSH Recommendations: Occupational Health Guideline: 0426
Methacrylic acid:	TSCA Inventory: listed TSCA HPVC: not listed TSCA: listed Clean Air Act: SOCMI Chemical: yes NIOSH Recommendations: Occupational Health Guideline: 0386*
2,2'-[(4-Methylphenyl)imino]bisethanol:	TSCA Inventory: listed TSCA HPVC: not listed TSCA: listed
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate:	TSCA Inventory: listed TSCA HPVC: not listed TSCA: listed

according to WHMIS 2015 and ANSI Z400.1-2010

**RK 1500 Adhesive** 

Material number 105631

**D N** 

C

Е

Ш

Page:

10 of 10

National regulations - U.S. State Regulations	5
Methyl methacrylate:	Delaware Air Quality Management List: DRQ: 1000 - RQ State: Federal Regulations Apply Idaho Air Pollutant List: Title 585; AAC: 20,5 - EL: 27,3 - OEL: 410 - Title 586: - Massachusetts Haz. Substance Codes: 2,4,5,6 F8 F9 Main: HAP - 2000 Minnesota Haz. Substance: Codes: AO - Ratings: 3.79 - Status: Air Pollutant. Title III. TRI. New Jersey RTK Hazardous Substance: DOT: 1247 - Sub No.: 1277 New York List of Hazardous Substances: RQ-Air: 1000 - RQ-Land: 1 No Note Associated with this chemical Pennsylvania Haz. Substance Code: E Washington Air Contaminant: TWA: 100 ppm = 410 mg
Methacrylic acid:	Idaho Air Pollutant List: Title 585 AAC: 3.5 EL: 4.67 WEL: 70 - Title 586 - Massachusetts Haz. Substance codes: 4,5,6 Minnesota Haz. Substance: Codes: A Ratings: - Pennsylvania Haz. Substance code: - Washington Air Contaminant: TWA: 20 ppm - 70 mg Skin: Protective measures should be taken to prevent or reduce skin absorption.

Text for labeling:	Contains 30 - 60 % Methyl methacrylate, 7 - 10 % Methacrylic 2,2'-[(4-Methylphenyl)imino]bisethanol, < 3 % 2-Propenoic acid 2-hydroxyethyl ester, phosphate. Safety data sheet available c	d, 2-methyl-,
Hazard rating systems:	NFPA Hazard Rating: Health: 3 (Serious) Fire: 3 (Serious) Reactivity: 1 (Slight)	' 
	HMIS Version III Rating: Health: 3 (Serious) Flammability: 3 (Serious) Physical Hazard: 1 (Slight) Personal Protection: X = Consult your supervisor	HEALTH FLAMMABILITY PHYSICAL HAZARD
Reason of change: Date of first version:	Changes in section 1: General revision 1/Feb/2016	

### Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.