

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

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

RK 1500 Adhesive

Material number 105631 Page: 1 of 10

1. Product and company identification

Product identifier

Trade name: RK 1500 Adhesive

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 information:

Product-Safety-Department

Telephone: +49(0)251 / 9322 - 0, Email: msds@weicon.de

Emergency phone number

EMERGENCY CONTACT - USA (24h): Tel: ++1 202 464 2554

Transport:

TRANSPORT EMERGENCY CONTACT - USA (24h): Tel: ++1 202 464 2554

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid

Form: viscous Color: pink

Odor: ester-like

Classification: Flammable Liquid - Category 2; Skin Corrosion - Category 1A; Eye Damage -

Category 1; Sensitization - skin - Category 1;

Specific Target Organ Toxicity (Single Exposure) - Category 3;

Hazard symbols:







Signal word: Danger

Hazard statements: Highly flammable liquid and vapor.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction. May cause respiratory irritation.



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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

Relevant ingredients:

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

4. First aid measures

Take off immediately all contaminated clothing and wash it before reuse. First aider: General information:

Pay attention to self-protection!

Move victim to fresh air; if necessary, provide artificial respiration or oxygen. In case of inhalation:

Immediately get medical attention.

After contact with skin, take off immediately all contaminated clothing, and wash Following skin contact:

immediately with plenty of water and soap. Immediately get medical attention.



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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.

Drink large quantities of water. Never give anything by mouth to an unconscious person.

Immediately get medical attention.

Most important symptoms/effects, 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

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 range:

> 50 °F (c.c.)

Auto-ignition temperature: $806~^{\circ}F$

Suitable extinguishing media:

Water fog, foam, dry chemical powder, sand, carbon dioxide

Extinguishing media which must not be used for safety reasons:

High power water jet

Specific hazards 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 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 precautions:

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).



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

7. Handling and storage

Handling

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:

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 35.6 °F and 46.4 °F.

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	USA: ACGIH: STEL	410 mg/m³; 100 ppm
	·	USA: ACGIH: TWA USA: NIOSH: TWA USA: OSHA: TWA	205 mg/m³; 50 ppm 410 mg/m³; 100 ppm 410 mg/m³; 100 ppm
79-41-4	Methacrylic acid	USA: ACGIH: TWA USA: NIOSH: TWA	70 mg/m³; 20 ppm 70 mg/m³; 20 ppm (May be absorbed through the skin.)

Engineering controls

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.



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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 considerations:

Odor:

pH value:

Odor threshold:

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: Physical state at 68 °F and 101.3 kPa: liquid

Form: viscous Color: pink ester-like not determined not determined

Flammability: Highly flammable liquid and vapor.

Explosion limits: LEL (Lower Explosion Limit): 2.10 Vol-%

UEL (Upper Explosive Limit): 12.50 Vol-%

Vapor pressure: at 68 °F: <= 3800 Pa

Vapor density: at 68 °F: 1

Density: at 68 °F: approx. 1 g/mL
Water solubility: partially soluble <= 16 g/L

Partition coefficient: n-octanol/water: not determined

Auto-ignition temperature: 806 °F
Thermal decomposition: > 392 °F

Viscosity, dynamic: at 73.4 °F: 3000 - 5000 mPa*s

Viscosity, kinematic: not determined

Explosive properties: Vapors may form explosive mixtures with air.

Ignition temperature: 806 °F

10. Stability and reactivity

Reactivity: Highly flammable liquid and vapor.

Vapors may form explosive mixtures with air.



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Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions

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

Thermal decomposition: > 392 °F

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 -

Category 1A = Causes severe skin burns and eye damage.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Sensitization - skin -

Category 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) - Category 3 = May cause respiratory irritation.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

Other information: 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



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12. Ecological information

Ecotoxicity

Aquatic toxicity: 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):

0 % by weight = 0 g/L

General information: 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

Identification number:

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.

14. Transport information

USA: Department of Transportation (DOT)

Proper shipping name: UN 2924, flammable liquids, corrosive, n.o.s.

(Methyl methacrylate, Methacrylic acid)

Hazard class or Division:

Packing Group:

Labels:

Symbols:

G

Special provisions: IB2, T11, TP2, TP27

Packaging – Exceptions: 150
Packaging – Non-bulk: 202
Packaging – Bulk: 243
Quantity limitations – Passenger aircraft / rail:

Quantity limitations – Cargo only: 5 L

Vessel stowage – Location: B

Vessel stowage – Other: 40







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Sea transport (IMDG)

UN 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

Packing Group:

EmS: F-E, S-C
Special provisions: 274
Limited quantities: 1 L
Excepted quantities: E2
Contaminated packaging - Instructions: P001
Contaminated packaging - Provisions: IBC - Instructions: IBC02
IBC - 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 membranes.

Marine pollutant: no Segregation group: none

Air transport (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

Packing Group:

Hazard label: Flamm. liquid & Corrosive

Excepted Quantity Code: E2

Passenger and Cargo Aircraft: Ltd.Qty.:

Passenger and Cargo Aircraft:

Pack.Instr. Y340 - Max. Net Qty/Pkg. 0.5 L

Pack.Instr. 352 - Max. Net Qty/Pkg. 1 L

Pack.Instr. 363 - Max. Net Qty/Pkg. 5 L

 $\begin{array}{lll} \mbox{Special provisions:} & \mbox{A3} \\ \mbox{Emergency Response Guide-Code (ERG):} & \mbox{3CH} \end{array}$



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15. Regulatory information

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

WEICON

SAFETY DATA SHEET

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National regulations - U.S. State Regulations

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

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

HEALTH

FLAMMABILITY

PHYSICAL HAZARD

3

1

X

absorption.

National regulations - Great Britain

Hazchem-Code: •3WE

Methacrylic acid:

16. Other information

Text for labeling: Contains 30 - 60 % Methyl methacrylate, 7 - 10 % Methacrylic acid, < 3 %

2,2'-[(4-Methylphenyl)imino]bisethanol, < 3 % 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate. Safety data sheet available on request.

Hazard rating systems: NFPA Hazard Rating:

3 1

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

Reason of change: Changes in section 1: General revision

Date of first version: Feb/1/2016

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.