



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 05/04/2010

Reviewed on 12/15/2009

1 Identification of substance

- **Product details**
- **Trade name:** ALT R304 Resin
- **Article number:** 172-730-026u
- **Application of the substance / the preparation** Coating
- **Manufacturer/Supplier:**
ALT Global, LLC
3 Edison Place,
Fairfield, NJ 07004 USA
Tel: 973-287-6158
Fax: 973-287-6159
- **Information department:** Tel.: 973-287-6158
- **Emergency information:**
For Chemical Emergency
Spill Leak Fire Exposure or Accident
Call CHEMTREC Day or Night

DOMESTIC NORTH AMERIKA 800-424-9300
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

80-62-6	methyl methacrylate	25-50%
103-11-7	2-ethylhexyl acrylate	10-25%
38668-48-3	1,1'-(p-tolylimino)dipropan-2-ol	<1%

3 Hazards identification

- **Hazard description:**



Irritant
Highly flammable

- **Information pertaining to particular dangers for man and environment:**
The product has to be labelled due to the calculation procedure of international guidelines.
Highly flammable.
Irritating to respiratory system and skin.
May cause sensitisation by skin contact.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 2

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· HMIS-ratings (scale 0 - 4)

HEALTH	2	Health = 2
FIRE	3	Fire = 3
REACTIVITY	2	Reactivity = 2

4 First aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Take affected persons into fresh air and keep quiet.
Seek medical treatment in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Can form explosive gas-air mixtures.
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
Dispose contaminated material as waste according to item 13.
- **Additional information:** See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Open and handle receptacle with care.
Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
Highly volatile, flammable constituents are released during processing.
Fumes can combine with air to form an explosive mixture.
Keep ignition sources away - Do not smoke.

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Protect against electrostatic charges.

- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

80-62-6 methyl methacrylate

PEL	410 mg/m ³ , 100 ppm
REL	410 mg/m ³ , 100 ppm
TLV	Short-term value: 410 mg/m ³ , 100 ppm Long-term value: 205 mg/m ³ , 50 ppm
SEN	

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**
Butyl rubber, BR
- **Not suitable are gloves made of the following materials:** Leather gloves

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· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

· General Information

Form: Fluid
 Color: Grey
 Odor: Ester-like

· Change in condition

Melting point/Melting range: Undetermined.
 Boiling point/Boiling range: 101°C (214°F)

· Flash point: 10°C (50°F)

· Ignition temperature: 245°C (473°F)

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits:

Lower: 0.8 Vol %
 Upper: 12.5 Vol %

· Vapor pressure at 20°C (68°F): 47 hPa (35 mm Hg)

· Density at 20°C (68°F): 1.0 g/cm³

· Solubility in / Miscibility with

Water: Insoluble.

· Viscosity:

Kinematic at 20°C (68°F): 120 s (ISO 6mm)

· Solvent content:

Organic solvents: 0.0 %
 VOC content: 0.2 g/l / 0.00 lb/gl

· Solids content: 48 %

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Dangerous reactions

Exothermic reaction.

Reacts with oxidizing agents.

Reacts with peroxides and other radical forming substances.

· Dangerous products of decomposition: Carbon monoxide

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11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

12 Ecological information

- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**



- **Hazard class:** 3
- **Identification number:** UN1263
- **Packing group:** III
- **Proper shipping name (technical name):** PAINT
- **Label:** 3

- **Land transport ADR/RID (cross-border):**



- **ADR/RID class:** 3 Flammable liquids
- **Danger code (Kemler):** 33
- **UN-Number:** 1263
- **Packaging group:** III
- **Label:** 3

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· **Description of goods:** 1263 PAINT

· **Maritime transport IMDG:**



· **IMDG Class:** 3
 · **UN Number:** 1263
 · **Label:** 3
 · **Packaging group:** III
 · **EMS Number:** F-E,S-E
 · **Marine pollutant:** No
 · **Propper shipping name:** PAINT

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 3
 · **UN/ID Number:** 1263
 · **Label:** 3
 · **Packaging group:** III
 · **Propper shipping name:** PAINT

15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

80-62-6 methyl methacrylate

· **TSCA (Toxic Substances Control Act):**

80-62-6	methyl methacrylate
103-11-7	2-ethylhexyl acrylate
13463-67-7	titanium dioxide
14808-60-7	Quartz (SiO ₂)
8002-74-2	Paraffin waxes and Hydrocarbon waxes
38668-48-3	1,1'-(p-tolylimino)dipropan-2-ol
1317-61-9	triiron tetraoxide
20344-49-4	iron hydroxide oxide
7631-86-9	silicon dioxide, chemically prepared
21645-51-2	aluminium hydroxide
1309-37-1	diiron trioxide
128-37-0	2,6-di-tert-butyl-p-cresol
108-65-6	2-methoxy-1-methylethyl acetate
1314-23-4	zirconium dioxide
	Silan, dichlordimethyl-, Reaktionsprodukte mit Siliciumdioxid

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· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

80-62-6	methyl methacrylate	E;NL
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· **IARC (International Agency for Research on Cancer)**

80-62-6	methyl methacrylate	3
103-11-7	2-ethylhexyl acrylate	3
13463-67-7	titanium dioxide	3
14808-60-7	Quartz (SiO ₂)	1
7631-86-9	silicon dioxide, chemically prepared	3
1309-37-1	diiron trioxide	3
128-37-0	2,6-di-tert-butyl-p-cresol	3

· **NTP (National Toxicology Program)**

14808-60-7	Quartz (SiO ₂)	K
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· **TLV (Threshold Limit Value established by ACGIH)**

80-62-6	methyl methacrylate	A4
13463-67-7	titanium dioxide	A4
14808-60-7	Quartz (SiO ₂)	A2
1309-37-1	diiron trioxide	A4
128-37-0	2,6-di-tert-butyl-p-cresol	A4
1314-23-4	zirconium dioxide	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

13463-67-7	titanium dioxide
14808-60-7	Quartz (SiO ₂)

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Irritant
Highly flammable

· **Hazard-determining components of labelling:**

methyl methacrylate
2-ethylhexyl acrylate

· **Risk phrases:**

Highly flammable.
Irritating to respiratory system and skin.
May cause sensitisation by skin contact.

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· Safety phrases:

Keep away from sources of ignition - No smoking.

Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

Avoid contact with skin and eyes.

Wear suitable gloves.

This material and its container must be disposed of as hazardous waste.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Division product safety

· Contact: Division product safety

· * Data compared to the previous version altered.

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