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· Produc	et identifier
	name: <u>AT-8040 Part A</u> nt identified uses of the substance or mixture. Adhesive
• Manuf Weld M 63 Epp	of the supplier of the safety data sheet acturer/Supplier: Iount System ing Road nd, NH 03077
• Emerge ChemT	ation department: Environment protection department. ency telephone number: Trec: Day or Night within USA and Canada: 1-800-424-9300. e USA and Canada: +1 703-527-3887 (collect calls accepted)
Hazar	rd(s) identification
Classif	ication of the substance or mixture
	GHS02 Flame
Flam. 1	Liq. 2 H225 Highly flammable liquid and vapor.
	GHS08 Health hazard
Carc. 1	A H350 May cause cancer.
	GHS05 Corrosion
Eye Da	um. 1 H318 Causes serious eye damage.
	GHS07
Skin Se	rit. 2 H315 Causes skin irritation. ns. 1 H317 May cause an allergic skin reaction. SE 3 H335 May cause respiratory irritation.
GHS la	el ements a bel elements The product is classified and labeled according to the Globally Harmonized System (GHS l pictograms
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	(Contd. of page 1)
· Signal word Danger	
· Hazard statements	
Highly flammable liquid and vapor.	
Causes skin irritation.	
Causes serious eye damage.	
May cause an allergic skin reaction.	
May cause cancer.	
May cause respiratory irritation.	
Precautionary statements	
Obtain special instructions before use.	
Do not handle until all safety precautions have been read and understood.	
Keep away from heat/sparks/open flames/hot surfaces No smoking.	
Ground/bond container and receiving equipment.	
Use explosion-proof electrical/ventilating/lighting/equipment.	
Use only non-sparking tools.	
Take precautionary measures against static discharge.	
Avoid breathing dust/fume/gas/mist/vapors/spray	
Wash thoroughly after handling.	
Use only outdoors or in a well-ventilated area.	
Contaminated work clothing must not be allowed out of the workplace.	
Wear protective gloves/protective clothing/eye protection/face protection.	
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower	
<i>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</i>	•
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and a	easy to do
Continue rinsing.	usy to uo.
Immediately call a poison center/doctor.	
IF exposed or concerned: Get medical advice/attention.	
Specific treatment (see on this label).	
Take off contaminated clothing and wash it before reuse.	
If skin irritation or rash occurs: Get medical advice/attention.	
Wash contaminated clothing before reuse.	
In case of fire: Use for extinction: CO2, powder or water spray.	
Store in a well-ventilated place. Keep container tightly closed.	
Store in a well-ventilated place. Keep cool.	
Store locked up.	
Dispose of contents/container in accordance with local/regional/national/international regulation	2.6
· Classification system:	.
· NFPA ratings (scale 0 - 4)	
· WET A Tutings (scale 0 - 4)	
Health = 2	
Fire = 3	
2 Reactivity = 0	
· HMIS-ratings (scale 0 - 4)	
HEALTH 2 $Health = 2$	
FIRE 3 $Fire = 3$	
PHYSICAL HAZARD O Physical Hazard = 0	
· Other hazards	

- Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

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Chemical characterization: Mixtures Description: Mixture			
· Hazardous	components:		
80-62-6	methyl methacrylate	25-50%	
14808-60-7	Quartz (SiO2)	25-50%	
79-41-4	methacrylic acid	2.5-10%	
110-16-7	maleic acid	2.5-10%	
128-37-0	2,6-di-tert-butyl-p-cresol	2.5-10%	
150-76-5	mequinol	2.5-10%	
107-21-1	ethanediol	2.5-10%	
80-15-9	α,α -dimethylbenzyl hydroperoxide	<i>≤</i> 1%	
98-82-8	cumene	<i>≤</i> 0.09%	

4 First-aid measures

· Description of first aid measures

• After inhalation:

- Supply fresh air and to be sure call for a doctor.
- In case of unconsciousness place patient stably in side position for transportation.
- *After skin contact: Immediately wash with water and soap and rinse thoroughly.*
- If skin becomes irritated seek medical attention.
- After eye contact: Rinse opened eye for 20 minutes under running water. Call a Doctor immediately.
- · After swallowing:

Rinse mouth with water.

Do not induce vomiting; immediately call for medical help.

- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 *Fire-fighting measures*

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

- Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters

Firefighters use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

· Protective equipment: Protective clothing and respiratory protective device.

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6 Appidantal val

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	tive equipment. Keep unprotected persons away. uate ventilation	
	tal precautions: Do not allow to enter sewers/ surface or ground wate	er.
Methods and	d material for containment and cleaning up:	
	liquid-binding material (sand, diatomite, acid binders, universal binder	
	ontaminated material as waste in accordance with federal state and low uate ventilation.	cal regulations.
	other sections	
	7 for information on safe handling.	
	8 for information on personal protection equipment.	
	13 for disposal information. ction Criteria for Chemicals	
PAC-1:		
	methyl methacrylate	17 ppm
	Quartz (SiO2)	0.075 mg/m
	methacrylic acid	6.7 ppm
110-16-7	maleic acid	$2.1 mg/m^3$
150-76-5	mequinol	15 mg/m ³
107-21-1	ethanediol	30 ppm
80-15-9	α,α -dimethylbenzyl hydroperoxide	0.15 ppm
98-82-8	cumene	50 ppm
108-05-4	vinyl acetate	6.7 ppm
64-19-7	acetic acid	5 ppm
PAC-2:		
80-62-6	methyl methacrylate	120 ppm
	Quartz (SiO2)	33 mg/m
	methacrylic acid	61 ppm
	maleic acid	23 mg/m
150-76-5	*	49 mg/m
	ethanediol	150 ppm
	α,α -dimethylbenzyl hydroperoxide	1.6 ppm
98-82-8		300 ppm
	vinyl acetate	36 ppm
	acetic acid	35 ppm
PAC-3:		
	methyl methacrylate	570 ppm
	Quartz (SiO2)	200 mg/m
	methacrylic acid	220 ppm
	maleic acid	140 mg/m
150-76-5	*	320 mg/m
	ethanediol	900 ppm
	<i>α</i> , <i>α</i> -dimethylbenzyl hydroperoxide	9.7 ppm

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		(Contd. of page 4)
98-82-8	cumene	730 ppm
108-05-4	vinyl acetate	180 ppm
64-19-7	acetic acid	250 ppm

7 Handling and storage

· Handling:

- · Precautions for safe handling
- Open and handle receptacle with care.
- Prevent formation of aerosols.
- Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires: No special measures required.
- \cdot Conditions for safe storage, including any incompatibilities
- · Storage:
- *Requirements to be met by storerooms and receptacles:* Store in a cool location away from direct heat.
- Information about storage in one common storage facility: Store away from oxidizing agents. Store as flammable liquid.
- Further information about storage conditions: Protect from heat and direct sunlight. Protect from contamination. Storage temperature =<38C Keep receptacle tightly sealed.
 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

· Control parameters

· Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

80-62	-6 methyl methacrylate
PEL	Long-term value: 410 mg/m³, 100 ppm
REL	Long-term value: 410 mg/m³, 100 ppm
TLV	Short-term value: 410 mg/m³, 100 ppm Long-term value: 205 mg/m³, 50 ppm DSEN
14808	-60-7 Quartz (SiO2)
PEL	see Quartz listing
REL	Long-term value: 0.05* mg/m³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m³ *as respirable fraction
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79-41-	4 methacrylic acid (Contd. of page
REL	Long-term value: 70 mg/m ³ , 20 ppm
	Skin
TLV	Long-term value: 70 mg/m ³ , 20 ppm
128-37	-0 2,6-di-tert-butyl-p-cresol
REL	Long-term value: 10 mg/m ³
TLV	Long-term value: 2* mg/m ³
	*as inhalable fraction and vapor
150-76	-5 mequinol
REL	Long-term value: 5 mg/m ³
TLV	Long-term value: 5 mg/m ³
107-21	-1 ethanediol
TLV	Short-term value: 10** mg/m ³ , 50* ppm
	Long-term value: 25* ppm
	*vapor fraction: **inh. fraction, aerosol only
	9 a,a -dimethylbenzyl hydroperoxide
WEEL	Long-term value: 6 mg/m ³ , 1 ppm
	Skin
	8 cumene
PEL	Long-term value: 245 mg/m ³ , 50 ppm Skin
REL	Long-term value: 245 mg/m³, 50 ppm Skin
TLV	Long-term value: (246) NIC-0.5 mg/m³, (50) NIC-0.1 ppm NIC-A2
Additio	nal information: The lists that were valid during the creation were used as basis.
Exposi	ure controls
	al protective equipment (see listings below)
	al protective and hygienic measures:
	way from foodstuffs, beverages and feed.
	iately remove all soiled and contaminated clothing. nands before breaks and at the end of work.
	contact with the eyes and skin.
	ing equipment:
Use ap	proved respiratory protection equipment when airborne exposure is excessive. Consult the respirator
v	acturer to determine the appropriate type of equipment for a given application. Observe respirator use
	ions specified by the manufacturer.
Protect	tion of hands:
m	
	Protective gloves
Mis-	
Materi	ove material has to be impermeable and resistant to the product/ the substance/ the preparation. Tal of gloves
Materi Nitrile The set	

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 \cdot 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.

· Eye protection:



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Tightly sealed goggles

Use full face shield over protective eye wear when there is a risk of a splash. • **Body protection:** Protective work clothing

Information on basic physical and che	mical properties	
General Information		
Appearance:		
Form:	Paste	
Color:	white - Yellow-brown	
Odor:	Characteristic	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point:	Undetermined.	
Boiling point:	101 °C (213.8 °F)	
Flash point:	10 °C (50 °F)	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	430 °C (806 °F)	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Flammable limits:		
Lower:	2.1 Vol %	
Upper:	12.5 Vol %	
Vapor pressure at 20 $^{\circ}C$ (68 $^{\circ}F$):	47 hPa (35.3 mm Hg)	
Specific gravity at 20 °C (68 °F):	1.38246-1.49957 g/cm ³ (11.53663-12.51391 lbs/gal)	
Relative density	Not determined.	
Vapor density	>1 at 20C	
Evaporation rate	3	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/water)	Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	

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· Solvent content:
Organic solvents:

Not determined

Solids content: • Other information Not available.

VOC content: < 50 grams/liter [mixed]

10 Stability and reactivity

• *Reactivity* No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No further information is available.
- Conditions to avoid

Heat, flames, sparks.

Avoid radical forming substances [peroxides].

• Incompatible materials:

Reacts with oxidizing agents. Reacts with amines. Reacts with acids. Reacts with bases.

reducing agents.

• *Hazardous decomposition products: Carbon monoxide and carbon dioxide*

Nitrogen oxides

Hydrogen cyanide (prussic acid)

Isocyanate Hydrocarbons

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

79-41-4 methacrylic acid

Oral LD50 1,332 mg/kg (mouse)

Dermal LD50 500 mg/kg (rabbit)

· Primary irritant effect:

• on the skin: Irritant to skin and mucous membranes.

• on the eye: Causes serious eye damage

· Sensitization: Skin Contact - Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (Inter	rnational Agency for Research on Cancer)	
80-62-6	methyl methacrylate	3
14808-60-7	Quartz (SiO2)	1
128-37-0	2,6-di-tert-butyl-p-cresol	3
	(Con	td. on page 9)

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98-82-8	
108-05-4	vinyl acetate

· NTP (National Toxicology Program)

14808-60-7 Quartz (SiO2)

98-82-8 cumene

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes: At present there are no ecotoxicological assessments.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- \cdot **Recommendation:** Must be specially treated adhering to official regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number · DOT, IMDG, IATA	UN1133	
· UN proper shipping name		
$\cdot DOT$	Adhesives	
· IMDG, IATA	ADHESIVES	
· DOT		
· Class	3 Flammable liquids	

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	(Contd. of page
· Label	3
· IMDG, IATA	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, IMDG, IATA	11
Environmental hazards:	Product contains environmentally hazardous substances: 2,6-di-ter butyl-p-cresol
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F- E , S - D
· Stowage Category	В
• Transport in bulk according to Annex	II of
MARPOL73/78 and the IBC Code	Not applicable.
· UN ''Model Regulation'':	UN 1133 ADHESIVES, 3, II

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

• Section 355 (e.	xtremely hazardous	substances):
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108-05-4 vinyl acetate

· Section 313 (Specific toxic chemical listings):

80-62-6 methyl methacrylate

107-21-1 ethanediol

80-15-9 α, α -dimethylbenzyl hydroperoxide

98-82-8 cumene

108-05-4 vinyl acetate

• TSCA (Toxic Substances Control Act):

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

· Proposition 65

· Chemicals known to cause cancer:

98-82-8 cumene

· 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:

107-21-1 ethanediol

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	ada Dosmestic Substance List	
All compone requirement	ents of this product are on the DSL(Canada Domestic Substance list) or a	are exempt from DSL
-	Right-to-Know List:	
-	nts are listed.	
	Special Hazardous Substance List:	
-	methyl methacrylate	F3, R2
	Quartz (SiO2)	CA
	methacrylic acid	<i>CO, F2, R</i>
	α, α -dimethylbenzyl hydroperoxide	F2, R4
	cumene	F3, R1
	vinyl acetate	CA, F3, R
	acetic acid	<i>CO</i> , <i>F</i> 2
· Pennsvlvan	ia Right-to-Know List:	
	nts are listed.	
Pennsylvan	ia Special Hazardous Substance List:	
80-62-6 m	methyl methacrylate	
110-16-7 m		
107-21-1 et	ethanediol	
80-15-9 α	α,α -dimethylbenzyl hydroperoxide	
98-82-8 ci	umene	j
108-05-4 vi	vinyl acetate	
64-19-7 a	cetic acid	1
· Cancerogen	iity categories	
· EPA (Envir	onmental Protection Agency)	
80-62-6 me	thyl methacrylate	E, NL
98-82-8 cu	nene	D, CBI
• TLV (Thres	hold Limit Value established by ACGIH)	I
80-62-6	methyl methacrylate	A
14808-60-7	Quartz (SiO2)	A
128-37-0	2,6-di-tert-butyl-p-cresol	A
107-21-1	1 ethanediol	
108-05-4	vinyl acetate	
· MAK (Gern	an Maximum Workplace Concentration)	
14808-60-7	Quartz (SiO2)	1
128-37-0	2,6-di-tert-butyl-p-cresol	
108-05-4	vinyl acetate	34
· NIOSH-Ca	(National Institute for Occupational Safety and Health)	
14808-60-7	Quartz (SiO2)	

• Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.

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· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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16 Other information

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Royal Adhesives & Sealants makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Royal Adhesives & Sealants or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

• Department issuing SDS: Environment protection department.

· Creation Date: 04/04/2018

· Date of preparation / last revision 04/04/2018 / 3

• Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit **REL:** Recommended Exposure Limit Flam. Liq. 2: Flammable liquids – Category 2 Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Skin Sens. 1: Skin sensitisation – Category 1 Carc. 1A: Carcinogenicity - Category 1A STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

USA -