### 1 Identification

- · Product identifier
- · Trade name: 39537 Weld Bond Adhesive
- · Article number: 39537
- Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Assembly adhesive
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

SEM Products Inc. 1685 Overview Drive Rock Hill, SC 29730 803 207 8225

· Information department:

cust\_care@semproducts.com : SEM Products,Inc. 1685 Overview Dr. Rock Hill, SC 29730 : phone 1-800-831-1122, M - TH 7am - 4pm EDT

· Emergency telephone number: CHEMTREC 1-800-424-9300

## 2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- · Label elements
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

  (Contd. on page 2)

\_\_ IIC /

Trade name: 39537 Weld Bond Adhesive

(Contd. of page 1)

#### · Hazard pictograms









GHS05

GHS07

### · Signal word Danger

#### · Hazard-determining components of labeling:

methyl methacrylate

PHOSPHATE ESTER OF 2-HYDROXYETHYL METHACRYLATE

2-hydroxyethyl methacrylate

ACRYLONITRILE/BUTADIENE RESIN

#### · Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

#### · Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P241 *Use explosion-proof electrical/ventilating/lighting/equipment.* 

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor. P321 *Specific treatment (see on this label).* 

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

#### · Classification system:

#### · NFPA ratings (scale 0 - 4)



Health = 1Fire = 3Reactivity = 0

## · HMIS-ratings (scale 0 - 4)



Health = 1Fire = 3

Reactivity = 0

#### · Other hazards

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



Trade name: 39537 Weld Bond Adhesive

(Contd. of page 2)

## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Mixture: consisting of the following components.

Weight percentages

· Dangerous components:		
80-62-6	methyl methacrylate	40 - 60%
9003-56-9	ACRYLONITRILE/BUTADIENE RESIN	13 - 30%
	2-hydroxyethyl methacrylate	1.5 - 5%
97-88-1	n-butyl methacrylate	1.5 - 5%
79-41-4	methacrylic acid	1-1.5%
7646-85-7	zinc chloride	1-1.5%
52628-03-2	PHOSPHATE ESTER OF 2-HYDROXYETHYL METHACRYLATE	1-1.5%
56-23-5	carbon tetrachloride	≤1%

## 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.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · 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, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

(Contd. on page 4)



Trade name: 39537 Weld Bond Adhesive

(Contd. of page 3)

· Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 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 re	eauire monitoring	at the workplace:
-------------------------	----------------	-------------------	-------------------

#### 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 (SEN) NIC-DSEN

## 79-41-4 methacrylic acid

REL Long-term value: 70 mg/m³, 20 ppm

Skin

TLV Long-term value: 70 mg/m<sup>3</sup>, 20 ppm

(Contd. on page 5)



Trade name: 39537 Weld Bond Adhesive

(Contd. of page 4) 7646-85-7 zinc chloride PEL Long-term value: 1 mg/m<sup>3</sup> Fume *REL* Short-term value: 2 mg/m<sup>3</sup> Long-term value: 1 mg/m<sup>3</sup> TLV Short-term value: 2 mg/m<sup>3</sup> Long-term value: 1 mg/m<sup>3</sup> fume 56-23-5 carbon tetrachloride PEL Long-term value: 10 ppm Ceiling limit value: 25; 200\* ppm \*5-min peak in any 3 hrs REL Short-term value: 12.6\* mg/m³, 2\* ppm \*60-min; See Pocket Guide App. A TLV Short-term value: 63 mg/m<sup>3</sup>, 10 ppm Long-term value: 31 mg/m³, 5 ppm Skin

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

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:

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

#### · 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 6)



Printing date 04/02/2015 Reviewed on 04/02/2015

Trade name: 39537 Weld Bond Adhesive

(Contd. of page 5)

· Eye protection:



Tightly sealed goggles

Information on basic physical and	chemical properties
General Information	• •
Appearance:	
Form:	Liquid
Color:	According to product specification Characteristic
Odor: Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	101 °C
Flash point:	10 °C
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	430 °C
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	In use, may form flammable/explosive vapour-air mixture.
Explosion limits:	
Lower:	2.1 Vol %
Upper:	12.5 Vol %
Vapor pressure at 20 °C:	47 hPa
Density at 20 °C:	$0.99 \ g/cm^3$
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wat	t <b>er):</b> Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	0.1 %
VOC content:	0.1 %

 $(Contd.\ on\ page\ 7)$ 

(Contd. of page 6)

## Safety Data Sheet acc. to OSHA HCS



Printing date 04/02/2015 Reviewed on 04/02/2015

Trade name: 39537 Weld Bond Adhesive

Solids content: 96.1 %

• *Other information* No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

Acute	Acute toxicity.		
· LD/LC5	· LD/LC50 values that are relevant for classification:		
80-62-6	80-62-6 methyl methacrylate		
Oral	LD50	7872 mg/kg (rat)	
7646-85	-7 zinc	chloride	
Oral	LD50	350 mg/kg (rat)	
56-23-5	56-23-5 carbon tetrachloride		
		2350 mg/kg (rat)	
Dermal	LD50	5070 mg/kg (rat)	

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: 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

· Carcinogenic categories

80-62-6 methyl methacrylate	3
	5
56-23-5 carbon tetrachloride	2B
1333-86-4 Carbon black	2 <i>B</i>
· NTP (National Toxicology Program)	
56-23-5 carbon tetrachloride	R

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

USA



Trade name: 39537 Weld Bond Adhesive

(Contd. of page 7)

\*

## 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
- $\cdot \textit{Additional ecological information:}$
- · 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.

Harmful to aquatic organisms

- · 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
- · 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

- · UN-Number
- · DOT, ADR, IMDG, IATA UN1133
- · UN proper shipping name
- $\cdot$  **DOT** Adhesives
- · ADR 1133 Adhesives, special provision 640D

· IMDG, IATA ADHESIVES

- · Transport hazard class(es)
- $\cdot DOT$



Class 3 Flammable liquids

(Contd. on page 9)

SEM

Printing date 04/02/2015 Reviewed on 04/02/2015

Trade name: 39537 Weld Bond Adhesive

	(Contd. of pag
Label	3
ADR, IMDG, IATA	
^	
3	
Class	3 Flammable liquids
Label	3
Packing group	
DOT, ADR, IMDG, IATA	II
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
EMS Number:	F-E,S-D
Transport in bulk according to Annex I	v
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 5 L
	On cargo aircraft only: 60 L
ADR	C-1 F2
Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per unter packaging: 500 ml  Maximum net quantity per outer packaging: 500 ml
IMDG	The same parameters and the same parameters and the same parameters are same parameters are same parameters and the same parameters are sa
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E2
· · · · · · · · · · · · · · · · ·	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN1133, Adhesives, special provision 640D, 3, II

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- $\cdot \textit{Sara}$
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

80-62-6 methyl methacrylate

7646-85-7 zinc chloride

56-23-5 carbon tetrachloride

· TSCA (Toxic Substances Control Act):

80-62-6 methyl methacrylate

(Contd. on page 10)



Trade name: 39537 Weld Bond Adhesive

		(Contd. of page
9003-56-9	ACRYLONITRILE/BUTADIENE RESIN	\ 10
868-77-9	2-hydroxyethyl methacrylate	
97-88-1	n-butyl methacrylate	
	methacrylic acid	
7646-85-7	zinc chloride	
120-56-9	TRIETHYLENEGLYCOL DIBENZOATE	
27138-31-4	BENZOIC ACID ESTER	
52628-03-2	PHOSPHATE ESTER OF 2-HYDROXYETHYL METHACRYLATE	
	carbon tetrachloride	
	Carbon black	
Proposition	65	
	cnown to cause cancer:	
	ACRYLONITRILE/BUTADIENE RESIN	
	carbon tetrachloride	
1333-86-4	Carbon black	
Chemicals k	nown to cause reproductive toxicity for females:	
None of the	ingredients is listed.	
Chemicals k	nown to cause reproductive toxicity for males:	
None of the	ingredients is listed.	
Chemicals k	nown to cause developmental toxicity:	
None of the	ingredients is listed.	
Cancerogen	ity categories	
EPA (Envir	onmental Protection Agency)	
	nethyl methacrylate	E, NL
7646-85-7	zinc chloride	D, I,
56-23-5 d	carbon tetrachloride	L
TLV (Thres	hold Limit Value established by ACGIH)	
80-62-6	nethyl methacrylate	A
56-23-5	carbon tetrachloride	A
1333-86-4	Carbon black	A
NIOSH-Ca	(National Institute for Occupational Safety and Health)	
56-23-5	carbon tetrachloride	
1222 06 4	0 1 11 1	

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms

1333-86-4 Carbon black









011502 011

GHS05 GHS

GHS07 GHS

· Signal word Danger

(Contd. on page 11)

SEM

Printing date 04/02/2015 Reviewed on 04/02/2015

Trade name: 39537 Weld Bond Adhesive

(Contd. of page 10)

#### · Hazard-determining components of labeling:

methyl methacrylate

PHOSPHATE ESTER OF 2-HYDROXYETHYL METHACRYLATE

2-hydroxyethyl methacrylate

ACRYLONITRILE/BUTADIENE RESIN

#### · Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

#### · Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor. P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

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

## 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 SDS: Environment protection department.
- · Contact: Steve Gaver (sgaver@semproducts.com)
- · Date of preparation / last revision 04/02/2015 / 3
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

(Contd. on page 12)

Printing date 04/02/2015 Reviewed on 04/02/2015

Trade name: 39537 Weld Bond Adhesive

(Contd. of page 11)

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Carc. 2: Carcinogenicity, Hazard Category 2 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

\* Data compared to the previous version altered.