Printing date 02/17/2015 Reviewed on 02/17/2015

1 Identification

- · Product identifier
- · Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters
- · Article number: 39101-LV disc, 39104-LV disc
- · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Coating
- · 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.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

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





GHS02

2 GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

toluene

Carbon black

· Hazard statements

H225 Highly flammable liquid and vapor.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

(Contd. on page 2)



#### Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

(Contd. of page 1)

H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

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

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves / eye protection / face protection. P240 Ground/bond container and receiving equipment.

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

with water/shower.

P405 Store locked up.

P403+P235 Store in a well-ventilated place. Keep cool.

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

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



Health = 0Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



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

## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Mixture: consisting of the following components.

Weight percentages

· Dangerous	· Dangerous components:			
540-88-5	tert-butyl acetate	70 - 100%		
108-88-3	toluene	1.5 - 5%		
	NJ TSRN: 8009285004 Polyester Plasticizer	1.5 - 5%		
1333-86-4	Carbon black	1.5 - 5%		
110-82-7	cyclohexane	≤1%		

## 4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.

(Contd. on page 3)

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Printing date 02/17/2015 Reviewed on 02/17/2015

Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

(Contd. of page 2)

- · 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 No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

## 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 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.

- · 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.

(Contd. on page 4)

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Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

(Contd. of page 3)

 $\cdot$  *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 th	hat reauire	monitoring	at the workplace:
Components	W CLIL CLIICCE	rathes in	iai i cquii c	month of the	at the workplace.

#### 540-88-5 tert-butyl acetate

PEL Long-term value: 950 mg/m³, 200 ppm REL Long-term value: 950 mg/m³, 200 ppm

TLV Long-term value: 950 mg/m³, 200 ppm

#### 108-88-3 toluene

PEL Long-term value: 200 ppm

Ceiling limit value: 300; 500\* ppm

\*10-min peak per 8-hr shift

REL Short-term value: 560 mg/m³, 150 ppm

Long-term value: 375 mg/m³, 100 ppm

TLV Long-term value: 75 mg/m³, 20 ppm

BEI

#### 1333-86-4 Carbon black

PEL Long-term value: 3.5 mg/m<sup>3</sup>

REL Long-term value: 3.5\* mg/m³

\*0.1 in presence of PAHs;See Pocket Guide Apps.A+C

TLV Long-term value: 3\* mg/m³ \*inhalable fraction

#### 110-82-7 cyclohexane

PEL Long-term value: 1050 mg/m³, 300 ppm

REL Long-term value: 1050 mg/m<sup>3</sup>, 300 ppm

TLV Long-term value: 344 mg/m<sup>3</sup>, 100 ppm

#### · Ingredients with biological limit values:

#### 108-88-3 toluene

#### BEI 0.02 mg/L

Medium: blood

Time: prior to last shift of workweek

Parameter: Toluene

0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene

0.3 mg/g creatinine Medium: urine Time: end of shift

Parameter: o-Cresol with hydrolysis (background)

(Contd. on page 5)



Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

(Contd. of page 4)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · 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 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.

· Eye protection:



Tightly sealed goggles

O DI						
U Phi	VOICAL	and	$\boldsymbol{c}$	nomical	l properi	100
	TI I I I I I		$\boldsymbol{v}$			44 W

· 1	nform	atio	n on	basic	physical	and	chemical	properties

· General Information

· Appearance:

Form: Liquid

Color: According to product specification

Odor: Characteristic
 Odour threshold: Not determined.
 pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 110 °C

· Flash point: -4 °C

· Flammability (solid, gaseous): Not applicable.

• Ignition temperature: 535 °C

• Decomposition temperature: Not determined.

• Auto igniting: Product is not selfigniting.

• Danger of explosion: In use, may form flammable/explosive vapour-air mixture.

(Contd. on page 6)

USA



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Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

		(Contd. of page
Explosion limits:		
Lower:	1.2 Vol %	
Upper:	7.0 Vol %	
Vapor pressure at 20 °C:	41 hPa	
Density at 20 °C:	0.95 g/cm³	
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/	water): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	83.8 %	
VOC content:	5.0 %	
	47.9 g/l / 0.40 lb/gl	
Solids content:	25.5 %	
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:

· LD/LC50	· LD/LC50 values that are relevant for classification:					
108-88-3 t	108-88-3 toluene					
Oral	LD50	5000 mg/kg (rat)				
Dermal	<i>LD50</i>	12124 mg/kg (rabbit)				
Inhalative LC50/4 h 5320 mg/l (mouse)		5320 mg/l (mouse)				
110-82-7 c	110-82-7 cyclohexane					
Oral	LD50	12705 mg/kg (rat)				

- · Primary irritant effect:
- · on the skin: No irritant effect.

(Contd. on page 7)



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Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

(Contd. of page 6)

- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories

3
2B
3

## 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:

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.

USA

(Contd. on page 8)

SEM

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Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

(Contd. of page 7)

17N7 N 1		
UN-Number DOT, ADR, IMDG, IATA	UN1263	
UN proper shipping name		
DOT	Paint	
ADR	1263 Paint, special provision 640D	
IMDG, IATA	PAINT	
Transport hazard class(es)		
DOT		
Class Label	3 Flammable liquids 3	
ADR, IMDG, IATA		
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-E	
Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	II of Not applicable.	
Transport/Additional information:		
DOT		
Quantity limitations	On passenger aircraft/rail: 5 L	
-	On cargo aircraft only: 60 L	
Remarks	ORM-D 49CFR 173.150,156,306	
ADR		
Excepted quantities (EQ)	Code: E2	
	Maximum net quantity per inner packaging: 30 ml	
	Maximum net quantity per outer packaging: 500 ml	
IMDG		<b>-</b>
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	



Printing date 02/17/2015 Reviewed on 02/17/2015

Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

(Contd. of page 8)

· UN "Model Regulation": UN1263, Paint, special provision 640D, 3, II

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara

Strict						
· Section 355 (ex	· Section 355 (extremely hazardous substances):					
None of the ing	redient is listed.					
· Section 313 (Sp	pecific toxic chemical listings):					
108-88-3 tolue	ne					
110-82-7 cyclo						
67-63-0 propo	an-2-ol					
· TSCA (Toxic S	Substances Control Act):					
540-88-5 ter	rt-butyl acetate					
108-88-3 tol	luene					
1333-86-4 Ca						
110-82-7 cyc	clohexane					
67-63-0 pro	opan-2-ol					

· Proposition 65

1333-86-4 Carbon black

25068-38-6 bisphenolA(chloro)oxirane polymer

25068-38-6 bisphenolA(chloro)oxirane polymer

· Chemicals known to cause reproductive toxicity for females:

108-88-3 toluene

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

108-88-3 toluene

· Cancerogenity categories

	· EPA (Envi	ronmental Protection Agency)	
	108-88-3 t	toluene	II
	110-82-7 c	cyclohexane	I
	· TLV (Thre	shold Limit Value established by ACGIH)	
	108-88-3	toluene	A4
	1333-86-4	Carbon black	A4
ı	67-63-0	propag-2-ol	$A \mathcal{A}$

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

1333-86-4 Carbon black

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

(Contd. on page 10)



Printing date 02/17/2015 Reviewed on 02/17/2015

Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

(Contd. of page 9)

#### · Hazard pictograms





GHS02

311502 G11500

- · Signal word Danger
- · Hazard-determining components of labeling:

toluene

Carbon black

· Hazard statements

H225 Highly flammable liquid and vapor.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

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

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves / eye protection / face protection.
P240 Ground/bond container and receiving equipment.

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

with water/shower.

P405 Store locked up.

P403+P235 Store in a well-ventilated place. Keep cool.

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 02/17/2015 / 1
- · 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

(Contd. on page 11)

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## Trade name: 39101-LV & 39104-LV TPO-Direct Low VOC Bumper Coaters

(Contd. of page 10)

Flam. Liq. 2: Flammable liquids, Hazard Category 2 Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 2: Reproductive toxicity, Hazard Category 2 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

\* Data compared to the previous version altered.

#### 1 Identification

- · Product identifier
- · Trade name: 39101-LV; 39104-LV Flexible Bumper Coater
- · Article number: 39101-LV, 39104-LV
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Coating
- · 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.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

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







GHS02

GHS07

GHS08

· Signal word Danger

(Contd. on page 2)



Trade name: 39101-LV; 39104-LV Flexible Bumper Coater

(Contd. of page 1)

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

acetone

toluene

Carbon black

4-chloro-alpha, alpha, alpha-trifluorotoluene

#### · Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.

#### · Precautionary statements

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

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

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

*P280* Wear protective gloves / eye protection / face protection.

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.

*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 = 1 Fire = 3Reactivity = 0

#### · HMIS-ratings (scale 0 - 4)



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

#### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

*Mixture: consisting of the following components.* 

Weight percentages

(Contd. on page 3)



Trade name: 39101-LV; 39104-LV Flexible Bumper Coater

		(Contd. of page 2)
· Dangerous	components:	
67-64-1	acetone	30 - 40%
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	13 - 30%
108-88-3	toluene	5 - 7%
37244-96-5	NEPHELINE SYENITE	1.5 - 5%
	NJ TSRN: 8009285004 Polyester Plasticizer	1.5 - 5%
1333-86-4	Carbon black	1.5 - 5%
108-65-6	2-methoxy-1-methylethyl acetate	1.5 - 5%
2807-30-9	2-(propyloxy)ethanol	1.5 - 5%
67-56-1	methanol	≤1%

## 4 First-aid measures

- · Description of first aid measures
- · After inhalation: 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 eve 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 No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: 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).

Dispose contaminated material as waste according to item 13.

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.

(Contd. on page 4)



Trade name: 39101-LV; 39104-LV Flexible Bumper Coater

(Contd. of page 3)

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.

- · 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

Comp	onents with limit values that require monitoring at the workplace:
67-64	1 acetone
PEL	Long-term value: 2400 mg/m³, 1000 ppm
REL	Long-term value: 590 mg/m³, 250 ppm
TLV	Short-term value: (1782) NIC-1187 mg/m³, (750) NIC-500 ppm Long-term value: (1188) NIC-594 mg/m³, (500) NIC-250 ppm BEI
108-8	8-3 toluene
PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm
TLV	Long-term value: 75 mg/m³, 20 ppm BEI
1333-	86-4 Carbon black
PEL	Long-term value: 3.5 mg/m³
REL	Long-term value: 3.5* mg/m³ *0.1 in presence of PAHs;See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m³ *inhalable fraction

(Contd. on page 5)

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

Trade name: 39101-LV; 39104-LV Flexible Bumper Coater

100 /	(Contd. of page
	5-6 2-methoxy-1-methylethyl acetate
	L Long-term value: 50 ppm
	-1 methanol
PEL	Long-term value: 260 mg/m³, 200 ppm
REL	Short-term value: 325 mg/m³, 250 ppm
	Long-term value: 260 mg/m³, 200 ppm
	Skin
TLV	Short-term value: 328 mg/m³, 250 ppm
	Long-term value: 262 mg/m³, 200 ppm
	Skin; BEI
	dients with biological limit values:
67-64	-1 acetone
	50 mg/L
	Medium: urine
	Time: end of shift
	Parameter: Acetone (nonspecific)
	8-3 toluene
	0.02~mg/L
	Medium: blood
	Time: prior to last shift of workweek
1	Parameter: Toluene
10	0.03 mg/L
	Medium: urine
2	Time: end of shift
l	Parameter: Toluene
1	0.3 mg/g creatinine
	Medium: urine
2	Time: end of shift
Ì	Parameter: o-Cresol with hydrolysis (background)
67-56	-1 methanol
BEI .	15 mg/L
Ì	Medium: urine
	Time: end of shift
Ì	Parameter: Methanol (background, nonspecific)

- · 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.

(Contd. on page 6)

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#### · 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.

· Eye protection:



Tightly sealed goggles

O DI	1 1	1		
9 Physical	i ana c	:nemicai	pro	perties

T C	, .	1 . 1	1 1		
<ul> <li>Information</li> </ul>	on basic i	pnvsicai	ana ci	nemicai	properties

· General Information

· Appearance:

Form: Liquid

Color: According to product specification

· Odor: Characteristic · Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 40 °C

· Flash point: -18 °C

Not applicable. · Flammability (solid, gaseous):

465 °C · Ignition temperature:

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: In use, may form flammable/explosive vapour-air mixture.

· Explosion limits:

2.6 Vol % Lower: Upper: 13.0 Vol %

(Contd. on page 7)



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	(Contd. of	page
· Vapor pressure at 20 °C:	233 hPa	
Density at 20 °C:	$1.02 \ g/cm^3$	
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/w	ater): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	74.8 %	
VOC content:	10.4 %	
	342.5 g/l / 2.86 lb/gl	
Solids content:	25.3 %	
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:

· LD/LC50	values that	t are relevant for classification:
108-88-3 t	oluene	
Oral	LD50	5000 mg/kg (rat)
Dermal	<i>LD50</i>	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

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· Carcinogenic categories

Carcinoge	na categories	
· IARC (Inte	ernational Agency for Research on Cancer)	
108-88-3	toluene	3
1333-86-4	Carbon black	2B
· NTP (Natio	onal Toxicology Program)	
None of the	e ingredients is listed.	
· OSHA-Ca	(Occupational Safety & Health Administration)	·
68911-87-5	5 ALKYL QUATERNARY AMMONIUM MONTMORILLONITE	

## 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.
- 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.

- · 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	UN1263
· UN proper shipping name	
$\cdot DOT$	Paint
· <i>ADR</i>	1263 Paint, special provision 640D
· IMDG, IATA	PAINT

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(Contd. of page 8) · Transport hazard class(es)  $\cdot DOT$ · Class 3 Flammable liquids · Label · ADR, IMDG, IATA · 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-E· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: · Quantity limitations On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L · Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml · IMDG · 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 UN1263, Paint, special provision 640D, 3, II · UN "Model Regulation":

USA

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Sara		
	5 (extremely hazardous substances):	
	ingredient is listed.	_
	3 (Specific toxic chemical listings):	
	ACRYLIC RESIN	
108-88-3 t		
67-56-1 n		_
	cic Substances Control Act):	
	acetone	
	4-chloro-alpha,alpha,alpha-trifluorotoluene	
	toluene	
	Carbon black	_
	2-methoxy-1-methylethyl acetate	
	2-(propyloxy)ethanol	_
	ALKYL QUATERNARY AMMONIUM MONTMORILLONITE  methanol	
	metnanoi  Amines, N-tallow alkyltrimethylenedi-	
	water, distilled, conductivity or of similar purity	_
Proposition	· · · ·	_
-	known to cause cancer:	_
	Carbon black	_
		_
	known to cause reproductive toxicity for females:	_
108-88-3 t		_
	known to cause reproductive toxicity for males:	
None of the	ingredients is listed.	
Chemicals	known to cause developmental toxicity:	
108-88-3 t	oluene	
67-56-1 n	nethanol	
	nity categories	
	ronmental Protection Agency)	
67-64-1 a		
108-88-3 t	oluene	
TLV (Thre.	shold Limit Value established by ACGIH)	
67-64-1	acetone	A
108-88-3		A
1333-86-4	Carbon black	A
NIOSH-Ca	(National Institute for Occupational Safety and Health)	
	Carbon black	_

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







GHS02

GHS07

#### · Signal word Danger

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

acetone

toluene

Carbon black

4-chloro-alpha, alpha, alpha-trifluoro to luene

#### · Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure. H373

#### · Precautionary statements

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

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

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 *Wear protective gloves / eye protection / face protection.* 

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.

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

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### Trade name: 39101-LV; 39104-LV Flexible Bumper Coater

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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 Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Carc. 2: Carcinogenicity, Hazard Category 2 Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

\* \* Data compared to the previous version altered.