

## **SECTION 1: PRODUCT & COMPANY IDENTIFICATION**

PRODUCT NAME: | TRI-BUILT® EPDM/TPO Bonding Adhesive

ARTICLE NUMBER: SDS192
PRODUCT TYPE: Adhesive
PRODUCT USE: Adhesive

MANUFACTURER: Royal Adhesives & Sealants, LLC ADDRESS: 201 W. Washington Street

South Bend, IN 46628

PHONE: 574-246-5000

USA / CANADA: (800) 424-9300

EMERGENCY PHONE: OUTSIDE USA AND CANADA 1-703-527-3887

EFFECTIVE DATE: 03/14/2021

DISTRIBUTED BY: Beacon Sales Acquisition, Inc.

ADDRESS: 505 Huntmar Park Drive, Suite 300 Herndon, VA 20170

PHONE: 571-323-3939
INTERNET: www.becn.com

## 2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

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



## GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1A H350 May cause 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.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

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

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# TRABUILT

#### TRI-BUILT® EPDM/TPO BONDING ADHESIVE

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#### · Hazard pictograms







GHS02

GHS07

GHS08

## · Signal word Danger

#### · Hazard statements

Highly flammable liquid and vapor.

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

#### · 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.

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

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Rinse mouth.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

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 regulations.

(Contd. on page 3)



(Contd. of page 2)

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



· 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

· Hazardous d	•	
108-88-3		25-50%
64741-84-0	Naphtha (petroleum), solvent-refined light	25-50%
67-64-1	acetone	5-20%
	Formaldehyde. polymer with 4-(1, 1-dimethylethyl)phenol	2.5-10%
	magnesium oxide	≤2.5%
1314-13-2	zinc oxide	≤1%

## 4 First-aid measures

- · Description of first aid measures
- · After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

Call a doctor immediately.

Overexposure, remove to fresh air and seek medical attention.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for 20 minutes under running water. If eye becomes irritated, obtain medical treatment. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Seek medical treatment.
- · 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.

HCA

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## 5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

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

CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents:

Water

Water and water with full jet

- 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.

Protective clothing and respiratory protective device.

## 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Prevent seepage into sewage system, workpits and cellars.

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).

Dispose of contaminated material as waste in accordance with federal state and local regulations.

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.

· Protective Action Criteria for Chemicals

<i>PAC-1:</i>		
108-88-3	toluene	67 ppm
67-64-1	acetone	200 ppm
1309-48-4	magnesium oxide	30 mg/m
1314-13-2	zinc oxide	10 mg/m
PAC-2:		
108-88-3	toluene	560 ppm
67-64-1	acetone	3200* ppn
1309-48-4	magnesium oxide	120 mg/m³
1314-13-2	zinc oxide	15 mg/m³
· PAC-3:		
108-88-3	toluene	3700* ppm
		(Contd. on page

- USA



67-64-	acetone	(Contd. of page 4)   5700* ppm
	magnesium oxide	$730 \text{ mg/m}^3$
1314-13-2	zinc oxide	$2,500 \text{ mg/m}^3$

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Prevent formation of aerosols.

Open and handle receptacle with care.

· Information about protection against explosions and fires:

Keep container closed when not in use.

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 away from direct heat.
- 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.

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 other constituents have no known exposure limits.

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	
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: 1187 mg/m³, 500 ppm Long-term value: 594 mg/m³, 250 ppm BEI	
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## TRI-BUILT® EPDM/TPO BONDING ADHESIVE

1309.	-48-4 magnesium oxide	(Contd. of p
	Long-term value: 15* mg/m³	
	fume; *total particulate	
,	Long-term value: 10* mg/m³	
	*as inhalable fraction	
	-13-2 zinc oxide	
PEL	Long-term value: 15* 5** mg/m³	
	*total dust **respirable fraction and fume	
REL	Short-term value: 10** mg/m³	
	Long-term value: 5 mg/m <sup>3</sup>	
	Ceiling limit value: 15* mg/m³	
	*dust only **fume	
	Short-term value: 10* mg/m³	
	Long-term value: 2* mg/m³	
	*as respirable fraction	
	edients with biological limit values:	
108-8	88-3 toluene	
	0.02~mg/L	
	Medium: blood	
	Time: prior to last shift of workweek	
1	Parameter: Toluene	
ا ا	0.03~mg/L	
	Medium: urine	
	Time: end of shift	
Ĭ	Parameter: Toluene	
	0.3 mg/g creatinine	
	Medium: urine Time: end of shift	
	Parameter: o-Cresol with hydrolysis (background)	
	4-1 acetone	
_	50 mg/L	
	Medium: urine	
	Time: end of shift	
İ	Parameter: Acetone (nonspecific)	
Addit	tional Occupational Exposure Limit Values for possible hazards during processing:	
110-5	54-3 n-hexane	
PEL	Long-term value: 1800 mg/m³, 500 ppm	
	Long-term value: 180 mg/m³, 50 ppm	
	Long-term value: 176 mg/m³, 50 ppm	
	Skin; BEI	
110-8	82-7 cyclohexane	
PEL	Long-term value: 1050 mg/m³, 300 ppm	
REL	Long-term value: 1050 mg/m³, 300 ppm	
	Long-term value: 344 mg/m³, 100 ppm	
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142-82-5 heptane

PEL Long-term value: 2000 mg/m³, 500 ppm

REL Long-term value: 350 mg/m³, 85 ppm

Ceiling limit value: 1800\* mg/m³, 440\* ppm

\*15-min

TLV Short-term value: 2050 mg/m³, 500 ppm Long-term value: 1640 mg/m³, 400 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment (see listings below)
- · 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.

Store protective clothing separately

## Breathing equipment:

Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.

· Protection of hands:



Protective gloves

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

Nitrile rubber, NBR

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

The exact break through time has to be found out by the manufacturer of the protective gloves and hax to be observed.

#### Eve protection:

Safety glasses with side shields.



Tightly sealed goggles

· **Body protection:** Protective work clothing

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Information on basic physical and c	chemical properties
General Information	
Appearance: Form:	Liquid
Form: Color:	Liquia Yellow
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point:	Undetermined.
Boiling point:	98 °C (208.4 °F)
Flash point:	-18 °C (-0.4 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	240.0 °C (464 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
Flammable limits:	
Lower:	1.2 Vol %
Upper:	13.0 Vol %
Vapor pressure at 20 °C (68 °F):	233.0 hPa (174.8 mm Hg)
Specific gravity:	0.839
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wate	er): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	78.0 %
Solids content:	22.0 %



(Contd. of page 8)

Other information	VOC = 5.17 LBS/GAL WEIGHT PER GALLON = 6.98 LBS
	NOTICE THIS PRODUCT DOES NOT COMPLY WITH THE REQUIREMENT OF RULE 1168 OF CALIFORNIA'S SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT - 637 G/L SCAQMD RULE 1168 METHOD

## 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.
- · Incompatible materials: Strong oxidizers, acids, and bases.
- · Hazardous decomposition products:

Oxides of carbon, nitrogen and hydrocarbons, hydrogen chloride (thermal degradation products).

## 11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:

· LD/LC30	values tnat	are relevant for classification:
108-88-3 t	oluene	
Oral	LD50	5,000 mg/kg (rat)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	5,320 mg/l (mouse)

## Primary irritant effect:

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

Causes serious eye irritation.

Vapors may be irritating to the eyes.

Irritating effect.

- · Sensitization: No sensitizing effects known.
- Additional toxicological information:

May cause reproductive harm.

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

· Carcinogenic categories

· 1	IARC (Inte	rnational Agency for Research on Cancer)	
	108-88-3	toluene	3
9	9010-98-4	Polychloroprene Polymer	3
9	9003-55-8	1,3-butadiene-styrene block polymer	3
· ]	NTP (Natio	onal Toxicology Program)	

None of the ingredients is listed.

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(Contd. of page 9)

· 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: Very toxic for fish
- · Remark: Toxic for fish and other aquatic organisms
- · Additional ecological information:
- · General notes:

At present there are no ecotoxicological assessments.

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.

Also poisonous for fish and plankton in water bodies.

Very toxic for 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.

Must be specially treated adhering to official regulations.

Disposal must be made according to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information
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· UN-Number

· **DOT, IMDG, IATA** UN1133

· UN proper shipping name

· **DOT**, **IMDG**, **IATA** ADHESIVES

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USA ·

# TRABUILT

#### TRI-BUILT® EPDM/TPO BONDING ADHESIVE

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· Transport hazard class(es)

 $\cdot DOT$ 



3 Flammable liquids · Class · Label

· IMDG



· Class 3 Flammable liquids

· Label

 $\cdot$  IATA



· Class 3 Flammable liquids · Label

· Packing group

· DOT, IMDG, IATA II

· Environmental hazards: Product contains environmentally hazardous substances: Naphtha (petroleum), solvent-refined light

· Marine pollutant: Yes (DOT)

Symbol (fish and tree) · Special marking (ADR): Symbol (fish and tree)

· Special precautions for user Warning: Flammable liquids

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

 $\cdot DOT$ 

· Remarks: Special marking with the symbol (fish and tree).

· UN "Model Regulation": UN1133, ADHESIVES, 3, II

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

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67-64-1 aceton								
1309-48-4 magne								
MAK (German M		place Concent	tration)					
None of the ingred		concent						
NIOSH-Ca (Natio		v Occupation	al Safoto d	and Haal	lth)			
None of the ingred		т Оссиринова	ui Sujety l	mu 11eal				



(Contd. of page 12)

- · National regulations:
- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 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:

Global Regulatory Department.

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- · Creation Date: 05/17/2017
- Date of preparation / last revision 10/10/2019 / 5
- · 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)

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

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Muta. 1B: Germ cell mutagenicity - Category 1B

Carc. 1A: Carcinogenicity - Category 1A

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard - Category 1