

Article Number 111 Revision Number 2 Revision Date 01/23/2015

| Section 1. Identification

Product identifier

• Trade name: Royal Edge Water Cut-Off Mastic

• Product Code: WCO

• Relevant identified uses of the substance or mixture: Construction: Sealing Compound

Details of the supplier of the safety data sheet Manufacturer/Supplier

Roofing Products International, Inc.

57460 Dewitt St.

Elkhart, IN 46517-1078 Telephone: 1-574-293-9096

Information Department: Technical Services Department

Emergency telephone number

Chemtrec United States 1(800) 424-9300 International 703-527-3887

Section 2. Hazard(s) Identification

EU/EEC

According to EU Directive 1272/2008 (CLP)/REACH 1907/2006 (amended by 453/2010 According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

Classification of the substance or mixture

• CLP Flammable Liquids 2 -H225

Skin Irritation 2 - H315

Hazardous to the aquatic environment Chronic 2-411

• **DSD/DPD** Flammable

Dangerous to the Environment (N)

R11, R51/53

Label Elements

• CLP

DANGER



Hazard statements H225 - Highly flammable liquid and vapour

H441 - Toxic to aquatic life with long lasing effects

Precautionary statements

• **Prevention** P210 - Keep away from heat, sparks, open flames and/or hot surfaces. Do not smoke.

P264 - Wash thoroughly after handling. P273 - Avoid release into environment.

P280 -Wear protective gloves/protective clothing/eye protection/face protection.

P243 - Take precautionary measures against static discharge.

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

P235 - Keep container tightly closed and in cool area.

• **Response** P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P321 - Specific treatment, see supplemental first aid information. P362 - Take off contaminated clothing and wash before reuse.

P391 - Collect spillage

• Storage/Disposal P403+P235 Store in a well-ventilated area. Keep product cool.

P501 - Dispose of content and/or container in accordance with local, regional,

natiional, and/or international regulations.

(Contd. on page 2)

Article Number 111 Revision Number 2 Page 2/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

(Contd. of page 1)

• DSD/DPD





• **Risk phrases** R11 - Highly Flammable.

R51/53 - Toxic to aquatic organisms, may cause long term adverse effects

in the aquatic environment.

Other Hazards

• CLP According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

• **DSD/DPD** According to European Directive 1999/45/EC this preparation is considered dangerous.

UN GHS

According to Third Revised Edition Classification of the substance or mixture

• UN GHS Flammable Liquids 2 - H225 Skin Irritation 2 - H315

Eye Irritation 2 - H319

Label elements

• UN GHS

DANGER





Hazard statements Highly flammable liquid and vapour-H225

Causes skin irritation - H315 Causes serious eye irritation -H319

Precautionary statements

• **Prevention** P210 - Keep away from heat, sparks, open flames and/or hot surfaces. Do not smoke.

P233 - Keep container tightly closed.

P235 - Keep product cool.

P240 - Ground and/or bond container and receiving equipment.

P241 - Use explosion-proof electrical, ventilation and/or lighting equipment.

P243 - Take precautionary measures against static discharge.

P264 - Wash thoroughly after handling.

P280 - Wear protective gloves and eye/face protection.

• **Response** P370+P378 - In case of fire: Use appropriate media for extinction.

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P362 - Take off contaminated clothing and wash before re-use. P332+P313 - If skin irritation occurs: Get medical advice/attention.

P321 - Specific treatment (see supplemental first aid instruction on this label). P302+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to remove. Continue rinsing. P337+P212 - If eye irritation persists: Get medical advice/attention.

• *Storage/Disposal* P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of content and/or container in accordance with local,

regional, national, and/or international regulations.

Other hazards

• UN GHS According to the Globally Harmonized System for Classification and

Labeling (GHS) the product is considered hazardous.

(Contd. on page 3)

Article Number 111 Revision Number 2 Page 3/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

United States (US)

(Contd. of page 2)

According to OSHA 29 CFR 1910.1200 HCS

• OSHA HCS 2012 Under United States Res

Under United States Regulations (29 CFR 1910.1200 - Hazard Communication

Standard), this product is considered hazardous.

Classification of the substance or mixture

• OSHA HCS 1994 Flammable Liquid

Flammable /Combustibl Class IB

Irritant

Target Organ Effect - Central Nervous System (CNS)

Label elements

• OSHA HCS 1994 Not required.

Other Hazards

OSHA HCS 1994 Under United States Regulations (29 cgr 1910.1200 -Hazard Communication

Standard), this product is considered hazardous.

Canada

• According to WHMIS

Classification of the substance or mixture

WHMIS Flammable Liquids - B2

Other Toxic Effects - D2A Other Toxic Effects - D2B

Label elements

WHMIS Flammable Liquids - B2

Other Toxic Effects - D2A Other Toxic Effects - D2B





Other hazards

WHMIS In Canada, the product mentioned above is considered hazardous under

the Workplace Hazardous Materials Information System (WHMIS).

Other information NFPA



Health = 2 Fire = 3Reactivity = 0

See Section 12 for Ecological Information.

Section 3. Composition/Information on Ingredients

Substances Material does not meet the criteria of a substance accord to United Nations

Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Material does not meet the criteria of a substance in accordance with Regulation

(EC) No 1272/2008

(Contd. on page 4)

Article Number 111 Revision Number 2 Page 4/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

Mixtures			(Contd.	of page 3)	
1/20000100			Hazardous	s Components	
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comment
Heptane	CAS: 142-82-5 EC Number: 205-563-8 UN: UN1206	14%	Inhalation-Rat LC50 103 g/m 4 Hours	UN GHS: Eye Irrit. 2, Skin Irrti. 2, STOT SE3, Aquatic Acute 3 EU DSD/DPD: Annex I: F; R11Xi, R38 N; R50-53 Xnl R65 R67 EU CLP: Annex VI-Flam. Liq. 2; Asp. Tox 1; Skin Irrit. 2, STOT SE 3; Aquatic Acute 1; Aquatic Acute 1	NDA
Arien	CAS:64742-16-1 EINECS: 265-116-8	-10%	NDA	EU DSD/DPD: Data Lacking UN GHS: Data Lacking EU CLP: Data Lacking	NDA
Ethylene	CAS:74-85-1 EC Number: 200 815-3 UN: UN 1038, UN1962	-4%	NDA	EU DSD/DPD: Annex I: F+; R12 R67 EU CLP: Annex VI Flam. Gas1, Press Gas, STOT SE 3 UN GHS: Eye Irrit. 2	NDA
Kaolin	CAS:1332-58-7	<3%	NDA	UN GHS: STOT RE 2 EU DSD/DPD: Self Classified - Xn; R48/20 EU CLP: Self Classified - STOT RE 2	NDA .
Limestone	CAS: 1317-65-3 EC Number: 215-279-6	<3%	NDA	UN GHS: NDA EU DSD/DPD: NDA EU CLP: NDA	NDA
Propene	CAS: 115-7-1 EC Number: 204-062-1	<3%	NDA	UN GHS: Flam. Gas 1, Press, Gas EU DSD/DPD: Annex I - F+; R12 EU CLP: Annex VI - Flam. Gas 1, Press. Gas	NDA
Methane, 2,2'-bis (6-t-butyl-p-cresyl)-	CAS: 119-47-1 EC Number: 204-327-1	<0.1%	Ingestion/Oral-Rat LD50 4880 mg/kg	UN GHS: NDA EU DSD/DPD: NDA EU CLP: NDA	NDA
Carbon Black	CAS: 1333-86-4 EC Number: 215-609-9	<0.03%	Ingestion/Oral-Rat LD50 >15400 mg/kg Skin-Rabbit LD50 >3 g/kg	UN GHS: Flam. Gas 1, Press, Gas EU DSD/DPD: Annex I - F+; R12 EU CLP: Annex VI - Flam. Gas 1, Press. Gas	NDA

| Section 4. First-Aid Measures

• Inhalation First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, move person to fresh air.

ana as recommenaea. Ij signs/symptoms aevetop, move person to fresn a. Administer oxygen if breathing is difficult. Give artificial respiration

if victim is not breathing. If signs/symptoms continue, get medical attention.

• Skin Remove material from skin with waterless hand cleaners followed by washing with soap

and water. If signs/symptoms develop, get medical attention.

• Eye First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If contact with material occurs flush eyes with water. If signs/symptoms develop, get medical attention.

• Ingestion First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.

Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

• Note to physician

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat victim symptomatically and supportively.

(Contd. on page 5)

Article Number 111 Revision Number 2 Page 5/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

(Contd. of page 4)

* Section 5. Fire-Fighting Measures

Extinguishing media

• Suitable Extinguishing Media: SMALL FIRES: Water spray, alcohol-resistant foam, dry chemical, (CO2)

LARGE FIRES: Water spray, fog or alocohol-resistant foam.

• Unsuitable Extinguishing Media: Water may be ineffective, but should be used to keep fire exposed

containers cool.

Special hazards arising from the substance or mixture

• Unusual Fire and Explosion

HIGHLY FLAMMABLE: Will easily be ignited by heat, sparks, or flames. Containers may explode when heated.

ands.

Containers may explode when neated.

Vapors may form explosive mixtures with air.

Hazards:

Vapor explosion hazard indoors, outdoors, and in sewers or enclosed areas. Most vapors are heavier than air and may spread (flow) along the ground

and collect in low or confined areas.

Vapors may travel to an ignition source and flash back to source.

Run-off may cause a fire or explosion in sewers.

• Hazardous Combustion Products:

Carbon dioxide, carbon monoxide, aldehydes, acrid smoke and irritating

fumes.

Advice for firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Structural firefighters' protective clothing will only provide limited protection. It is not effective in spill situations where direct contact with the substance is possible.

Wear positive pressure self-contained breathing apparatus (SCBA).

Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Run-off from fire control may cause pollution.

LARGE FIRES: Dike fire contol water for later disposal.

* Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

• Personal Precautions Do not touch damaged container or spilled material unless wearing

appropriate protective clothing. Stay upwind. Ventilate enclosed

areas.

• Emergency Procedures No emergency procedures are expected to be necessary if material is

used under ordinary conditions as as recommended. Use normal clean

up procedures.

Environmental precautions Avoid run-off to waterways and sewers.

Methods and material for containment and cleaning up

• Containment/Clean-up Measures: Stop and contain leak if you can do it without risk.

Absorb or cover with dry earth, sand or other non-combustible

material and transfer to proper containers.

Use clean non-fparking tools to collect absorbed material.
All equipment used when hadling the rpoduct must be grounded.
A vapor suppressing foam may be used to reduce vapors.

Reference to other sections

Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

* Section 7. Handling and Storage

Precautions for safe handling

(Contd. on page 6)

Revision Number 2 Page 6/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

(Contd. of page 5)

• Handling

Article Number 111

Keep away from heat, sparks, and flame. DO NOT SMOKE.

Keep containers closed.

Vapors of this material are heavier than air and will collect in low areas. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar actions near

containers.

Static electricity may accumulate and create a fire or explosive hazard.

Take precautionary measures against static charges. Bond and ground all transfer containers and equipment.

Use only with adequate ventilation. Do not breathe (dust, vapor or

spray mist). Ground all fixed equipment.

Conditions for safe storage, including any incompatibilities

• Storage

Store in a cool, dry well ventilated area. Keep away from all sources of ignition.

Do Not Smoke. Keep away from incompatible materials.

Keep containers closed when not in use.

• Specific end uses

Refer to Section 1.2 - Relevant identified uses.

* Section 8. Exposure Controls/Personal Protection

			Exposure Lin	its/Guidelines		
	Result	ACGIH	Canada Alberta	Canada British Columbia	Canada Manitoba	Canada New Brunswick
Carbon Black	TWAs	3.5 mg/m3 TWA	3.5 mg/m3 TWA	Not established	3.5 mg/m3 TWA	3.5 mg/m3 TWA
(1333-86-4)	STELs				Not established	Not established
Kaolin (1332-58-7)	TWAs	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)	2 mg/m3 TWA (respirable)	Not established	2 mg/m3 TWA (particulate matter containing no asbetos and <1% crystalline silica, inspirable dust)	2 g/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)
Limestone (1317-65-3)	TWAs	Not established	10 mg/m3 TWA	Not established	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)
	STELs	Not established	Not established	20 mg/m3 STEL	Not established	10 mg/m3 TWA (particulate matter containing no asbestos and < 1% crystalline silica, inspirable dust)
Propene (115-07-1)	TWAs	500 ppm TWA	500 ppm TWA; 860 mg/m3 TWA	Not established	500 ppm TWA	Not established
Ethylene (74-85-1)	TWAs	200ppm TWA	200 ppm TWA; 229 mg/m3 TWA	Not established	200 ppm TWA	200 ppm TWA
Heptane (142-82-5)	STELs	500 ppm STEL	500 ppm STEL 2050 mg/m3 STEL	500 ppm STEL	500 ppm STEL	500 ppm STEL; 2050 mg/m3 STEL
	TWAs	400 ppm TWA	400 ppm TWA; 1640 mg/m3 TWA	Not established	400 ppm TWA	400 ppm TWA; 1640 mg/m3 TWA
		Expos	ure Limits/Guid	elines Continue	ed	
	Result	Canada Nothwest Territories	Canada Nova Scotia	Canada Ontario	Canada Quebec	Canada Saskatchewan

(Contd. on page 7)

Revision Number 2

Page 7/20

Article Number 111

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

	1	1	(Contd. 0,	puge 0) 		
Carbon Black (1333-86-4)	TWAs STELs	3.5 mg/m3 TWA	3.5 mg/m3 TWA	Not established	3.5 mg/m3 TWA Not established	3.5 mg/m3 TWA Not established
(1333-80-4) Kaolin (1332-58-7)	TWAs	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)	2 mg/m3 TWA (respirable)	Not established	2 mg/m3 TWA (particulate matter containing no asbetos and <1% crystalline silica, inspirable dust)	2 g/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)
Limestone (1317-65-3)	TWAs	Not established	10 mg/m3 TWA	Not established	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)	2 mg/m3 TWA (particulate matter containing no asbeste and <1% crystalline silica, inspirable dust
	STELs	Not established	Not established	20 mg/m3 STEL	Not established	10 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)
Propene (115-07-1)	TWAs	500 ppm TWA	500 ppm TWA; 860 mg/m3 TWA	Not established	500 ppm TWA	Not established
Ethylene (74-85-1)	TWAs	200ppm TWA	200 ppm TWA; 229 mg/m3 TWA	Not established	200 ppm TWA	200 ppm TWA
Heptane (142-82-5)	STELs	500 ppm STEL	500 ppm STEL 2050 mg/m3 STEL	500 ppm STEL	500 ppm STEL	500 ppm STEL; 2050 mg/m3 STEL
	TWAs	400 ppm TWA	400 ppm TWA; 1640 mg/m3 TWA	Not established	400 ppm TWA	400 ppm TWA; 1640 mg/m3 TWA
		Ехра	osure Limits/Gu	idelines Contin	ued	
	Result	Canada Nothwest Territories	Canada Nova Scotia	Canada Ontario	Canada Quebec	Canada Saskatchewan
Carbon Black	TWAs	3.5 mg/m3 TWA	3.5 mg/m3 TWA	3.5 mg/m3 TWAEV	3.5 mg/m3 TWAEV	3.5 mg/m3 TWA
(1333-86-4)	STELs	7 mg/m3 STEL	Not established	Not established	Not established	Not established
Kaolin (1332-58-7)	TWAs	5 mg/m3 TWA (resirable mass); 10 mg/m3 TWA (total mass)	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	2 mg/m3 TWAEV (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)	5mg/m3 TWAEV (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)	2mg/m3 (respirable fraction,
Limestone (1317-65-3	TWAs	5 mg/m3 TWA (resirable mass); 10 mg/m3 TWA (total mass)	Not established	Not established	10mg/m3 TWAEV (particulate matter containing no asbestos and <1% crystalline silica, inspirable dust)	10 mg/m3 TWA
	STELs	Not established	Not established	Not established	Not established	Not established
Propene (115-07-1)	TWAs	Not established	500 PPM TWA	500 PPM TWAEV	Not established	Not established
Ethylene (74-85-1)	TWAs	Not established	200 ppm TWA	200 ppm TWAEV	Not established	200 ppm TWA
	STELs	500 ppm STEL;	500 ppm STEL	500 ppm STEV; 2045 mg/m3 STEV	500 ppm STEV; 2050 mg/m3 STEV	Not established
Heptane (142-82-5)	SILLS	2049 mg/m3 STEL		2043 mg/m3 S1EV	20008/ 212/	

(Contd. on page 8)

Article Number 111 Revision Number 2 Page 8/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

			(Contd. o	f page 7)				
Propene (115-07-1)	TWAs	Not established	500 PPM TWA	500 PPM TWAEV	Not establ	lished	Not established	
Ethylene (74-85-1)	TWAs	Not established	200 ppm TWA	200 ppm TWAEV	Not established 200 ppm		200 ppm TWA	
Heptane (142-82-5)	STELs	500 ppm STEL; 2049 mg/m3 STEL	500 ppm STEL	500 ppm STEV; 2045 mg/m3 STEV	500 ppm S 2050 mg/n		Not established	
	TWAs	400 ppm TWA; 1640 mg/m3 TWA	400 ppm TWA	400 ppm TWAEV; 1635 mg/m3 TWAEV		400 ppm TWAEV; 40 1640 mg/m3 TWAEV		
		Expos	ure Limits/Gu	idelines Continue	d			
	Result	NIOSH			Result	OSH A	IA	
Carbon Black (1333-86-4)	TWAs	3.5 mg/m3 TWA; 0.1 mg/m3 TWA (carbon) black in presence of polycyclic aromatic hydrocarbons, as PAI		Carbon Black (1333-86-4)	TWAs	3.5 mg/r		
Kaolin		10 mg/m3 TWA (total	_	Heptane (142-82-5)	TWAs	1.1	500 ppm TWA; 2000 mg/m3 TWA	
(1332-58-7)	TWAs	dust); 5 mg/m3 TWA (respirable dust)		Kaolin (1332-58-7)	TWAs	15 mg/m 5 mg/m 3	13 TWA (total dust) 3 TWA	
Limestone	TWAs	10 mg/m3 TWA (total dust); 5 mg/m3 TWA		(1332 30 7)		_	ble fraction)	
(1317-65-3)		(respirable dust)	_	Limestone		13 TWA (total dust)		
Propene (115-07-1)	TWAs	Not established		(1317-65-3)		5 mg/m3 (respira	ble fraction)	
Heptane (142-82-5)	TWAs	85 ppm TWA; 350 mg/m3 TWA						
	CCeilings	440 ppm Ceiling (15 min); 1800 mg/m3 CCeiling (15 min)						

Exposure controls

• Engineering Measures/Controls

MAKs

Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

• Personal Protective Equipment

In San January

Protective gloves

• Respiratory No respiratory protection is required under normal conditions of use.

• Eye/Face Under normal conditions of use, eye protection is not required.

• Skin/Body Wear appropriate gloves.

Follow best practice for site cleanup and disposal of waste.

NNot established

Environmental Exposure Controls

Key to abbreviations

 $ACGIH = American \ Conference \ of \ Governmental \ Industrial \ Hygiene$

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

STEV = Short Term Exposure Value

TWAEV = Time-Weighted Average Exposure Value Time-Weighted Averages are based on 8h/day, 40h/

week TWA exposures

(Contd. on page 9)

Article Number 111

Revision Number 2

Revision Date 01/23/2015

Trade Name: Royal Edge Water Cut-Off Mastic

(Contd. of page 8)

* Section 9. Physical and Chemical Properties

Information on Physical and Chemical Properties

	Material D	escription	
Physical Form	Paste	Appearance/Description	Grey paste with mild odor
Color	Grey	Odor	Mild solvent odor
Odor Threshold	No data available	Aerosol Type	No data available
Taste	No available data	Particulate type	No data available
Particulate size	No available data	Physical and Chemical Properties	No data available
	General F	Properties	
Boiling Point	200 F 93.3333 C	Melting Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	1.33 Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	No data available	Explosive Properties	No data available
Oxidizing Properties	No data available	Density	No data available
	Volat	tility	
Vapor Pressure	45 mmHg (torr)	Vapor Density	3.4 Air=1
Evaporation Rate	4.5 n-Butyl Acetate=1	VOC (Wt.)	No data available
VOC (Vol.)	No data available	Volatiles (Wt.)	No data available
Volatiles (Vol.)	25.5%		
	Flamm	ability	
Flash Point	14 F(-10 C) TCC (Tagliabue Closed Cup)	Self-Accelerating Decomposition Temperature (SADT)	No data available
LEL	1 %	Autoignition	Not relevant
Flammability (solid, gas)	No data available	UEL	7%
Flame Extension	No data available	Heat of Combustion	No data available
Flame Height	No data available	Burning Time	No data available
Flame Duration	No data available	Ignmition Distance	No data available
	Environ	ımental	
Half Life	1 %	Octanol/Water partition coefficient	Not relevant
Coefficient of water/oil Distribution	No data available	Bioaccumulation Factor	No data available
Chemical Oxygen Demand	No data available	Biochemical Oxygen Demand	
Degradation	No data available	BOD/BOD5	No data available
Bioconcentration Factor	No data available	Persistence	No data available

Other Information

No additional physical and chemical parameters noted.

* Section 10. Stability and Reactivity

Reactivity

• Chemical stability

No dangerous reaction known under conditions of normal use.

• Possibility of hazardous reactions

(Contd. on page 10)

Page 9/20

Article Number 111 Revision Number 2 Page 10/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

(Contd. of page 9)

Stable under normal temperatures and pressures. Hazardous polymerization will not occur.

• Conditions to avoid

Avoid flames, sparks, and other sources of ignition. Keep away from excess heat and other incompatible materials.

• Incompatible materials

Acids, alkalies, strong oxidizers

• Hazardous decomposition products

Hazardous decompostion will not occur.

* Section 11. Toxicological Information

Component Name	CAS	Data
Heptane (14%)	142-82-5	Acute Toxicity: ihi-rat LC50: 103 gm/m3/4Hl ihl-rat TCLo: 400 ppm/6H/28D-l
Ethylene(<4%)	74-85-1	Acute Toxicity: ihl-rat TLCo: 1000ppm/2H
Kaolin (>3%)	1332-58-7	Acute Toxicity: ihl-rat TCLo: 300 mg/m3/12W-1 Reproductive: orl-rat TCLo: 370 gm/kg (37 pre/1-22D preg)
Limestone (>3%)	1317-65-3	Acute Toxicity: ihl-rat TCLo: 84 mg/m3/4H/40W-I
Propene (>3%)	115-07-1	Acute Toxicity: ihl-rat GLCo: 5000 ppm/6H/2Y-I Mutagen: slt-rat-ihl 200 ppm/4W/6H Tumorigen/Carcinogen: ihl-rat TCLo: 154500 mg/kg/103W-C
Methane, 2,2"-bis(6-t-butyl-p-cresyl)-(<0.1%)	119-47-1	Acute Toxicity: orl-rat TDLo:420 mg/kg/14D-I Irritation: eye-rbt 100 mg/24H MOD Reproductive: orl-rat TDLo:2946.3 mg/kg (61D male)
Carbon Black (<0.03%)	1333-86-4	Acute Toxicity: orl-rat LD50:>15400 mg/kg; ihl-rat TCLo:50 mg/m3/6H/90D-1; skn-rbt LD50:>3gm/kg Tumorigen/Carcinogen: ihl-rat TCLo: 11600 ug/m3/13H/2Y-I
GHS Properties	•	Classification
Acute toxicity		EU/CLP • Data Lacking UN/GHS• Data Lacking
Aspiration Hazard		EU/CLP • Data Lacking UN GHS • Data Lacking
Carcinogenicity		EU/CLP • Classification criteria not met UN GSH • Classification criteria not met
Germ Cell Mutagenicity		EU/CLP • Data Lacking UN GHS • Data Lacking
Skin corrosion/Irritation		EU/CLP • Skin Irritation 2 UN GHS • Skin Irritation 2
Skin sensitization		EU/CLP • Data Lacking UN GHS • Data Lacking
STOT-RE		EU/CLP • Classification criteria not met UN GHS • Classification criteria not met
STOT-SE		EU/CLP • Classification criteria not met UN GHS • Classification criteria not met
Toxicity for Reproduction		EU/CLP • Data Lacking UN GHS • Data Lacking
		(Contd. on page 11)

Article Number 111 Revision Number 2 Page 11/20

Trade Name: Royal Edge Water Cut-Off Mastic

Revision Date 01/23/2015

	(Contd. of page 10)
Respiratory sensitization	EU/CLP • Data Lacking UN GHS • Data Lacking
Serious eye damage/Irritation	EU/CLP • Classification criteria not met UN GHS • Eye Irritation 2

• Target Organs

Central Nervous System (CNS)

• Routes of entry/exposure

Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

• Acute (Immediate)

May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death. May cause respiratory irritation.

• Chronic (Delayed)

Under normal conditions of use, no health effects are expected.

Skin

• Acute (Immediate)

Causes skin irritation. May cause an allergic skin reaction.

• Chronic (Delayed)

Repeated or prolonged skin contact may cause dermatitis, and drying

of the skin.

Eye

Acute (Immediate)

Causes serious eve irritation.

• Chronic (Delayed)

No data available.

Ingestion

• Acute (Immediate)

Under normal conditions of use, no health effects are expected.

• Chronic (Delayed)

No data available.

• Carcinogenic Effects

Although this material does contain several components that are either carcinogens or potential carcinogens the material as a whole is not classified as a carcinogen according to regulatory guidelines. The carbon black is encapsulated within the matrix of this material and no exposure is expected. The isoprene and formaldehyde components are both in this material at low enough concentrations that this material is not classified as a carcinogen per agency guidelines.

Carcinogenic Effects				
	CAS	IARC		
Carbon Black	1333-86-4	Group 2B-Possible Carcinogen		

Key to abbreviations

 $L\tilde{C} = Lethal Concentration$

LD = Lethal Dose

MLD = Mild

MOD = Moderate

SEV = Severe

TC = Toxic Concentration

 $TD = Toxic\ Dose$

Section 12. Ecological Information

Toxicity

Wate	er Cut-Off Mastic				
Dosage	Species	Duration	Results	Exposure Conditions	Comments
= 50 mg/L	Water Flea: Daphnia Magna	48 Hour(s)	EC50	NDA	Heptane

Persistence and degradability

No further material data available.

(Contd. on page 12)

Article Number 111 Revision Number 2 Page 12/20

(Contd. of page 11)

Trade Name: Royal Edge Water Cut-Off Mastic

Revision Date 01/23/2015

• Bioaccumulative potential:

Material data lacking.

• Mobility in soil:

No further relevant information available.

Additional ecological information

• General notes: At present there are no ecotoxicological assessments.

Results of PBT and vPvB assessment

No PBT and vPvB assessment ahas been conducted by the manufacturer.

Other adverse effects

No further relevant information available.

* Section 13. Disposal Considerations

Waste treatment methods

- Product waste handling
- Recommendation: Dispose of waste product and/or container according to local, regional, state, and national/international regulations.
- Packaging waste handling
- Recommendation: Dispose of packaging or container according to local, regional, state, and national/international regulations.

Section 14. Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN 1133	Not Regulated	NDA	NDA	NDA
TDG	UN 1133	Not Regulated	NDA	NDA	NDA
IMO/IMDG	UN 1133	Not Regulated	NDA	NDA	NDA
IATA/ICAO	UN 1133	Not Regulated	NDA	NDA	NDA

- Special precautions for user None known.
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not Relevent.

* Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture.

	State Right	To Know		
Component	CAS	MA	NJ	P A
Polybutene	9003-29-6	No	No	No
Heptane	142-82-5	Yes	Yes	Yes
Arien	64742-16-1	No	No	No
Kaolin	1332-58-7	Yes	Yes	Yes
Limestone	1317-65-3	Yes	Yes	Yes
Ethylene	74-85-1	Yes	Yes	Yes

(Contd. on page 13)

Article Number 111

Revision Number 2

Page 13/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

(Contd. of page 12)

	Ctat	o Right	To Know			
Component					NI	D 4
	CAS		MA V		NJ	PA
Propene Date (Colored Date)	115-11-7		Yes		Yes	Yes
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75		No		No	No
Carbon Black	1333-86-		Yes		Yes	Yes
		Invento	1	TO C. A	EU EDVE CO	ELLEL MICO
Component	CAS	Canada DSL	Canada NDSL	TSCA	EU EINECS	EU ELNICS
Polybutene	9003-29-6	Yes	No	Yes	No	Yes
Heptane	142-82-5	Yes	No	Yes	Yes	No
Arien	64742-16-1	Yes	No	Yes	Yes	No
Kaolin	1332-58-7	Yes	No	Yes	Yes	No
Limestone	1317-65-3	No	Yes	Yes	Yes	No
Ethylene	74-85-1	No	No	Yes	Yes	No
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	Yes	No	Yes	Yes	Yes
Propene	115-7-1	Yes	No	Yes	Yes	No
Cabon Black	1333-86-4	Yes	No	Yes	Yes	Yes
• Arien						
• Heptane	142-82			В		
	64742-1	0-1 < 11	1%			Not Listed
	64742-1 1332-58		0% % D2A (Ir	certain cas	ses, this classification	Not Listed a does not apply
			6 D2A (Ir		ses, this classification on, consult the Substa	does not apply
		3-7 >39	6 D2A (Ir For mor		-	does not apply
 Kaolin Limestone Ethylene	1332-58	3-7 >39 5-3 <39 <49	6 D2A (In For most 6 D2A (A,B1,D.	e informati	-	does not apply
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- 	1332-58 1317-65 74-85-1 119-47-	3-7 > 39 5-3 < 39 < 49 1 < 0.	D2A (In For mon to D2A (In For m	re informati 2B	-	does not apply
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene 	1332-58 1317-65 74-85-1 119-47- 115-7-1	3-7 > 39 5-3 < 39 6 < 49 1 < 0 < 39	6 D2A (In For mon 6 D2A (A, B1, D. 19%)	re informati 2B D2B	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- 	1332-58 1317-65 74-85-1 119-47-	3-7 > 39 5-3 < 39 6 < 49 1 < 0 < 39	D2A (In For mon D2A) D2A D2A D2A A,BI,D. D3% Carbon	re informati 2B D2B	-	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene 	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86	3-7 > 39 5-3 < 39 6 < 49 1 < 0 < 39	D2A (In For mon D2A) D2A D2A D2A A,BI,D. D3% Carbon	e informati 2B D2B Black is no	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Cabon Black Labor	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86	3-7 > 39 5-3 < 39 <49 1 < 0 <39 6-4 < 0.	6 D2A (In For mon 6 D2A 6 A,B1,D. 19% 6 A, B1, In 03% Carbon WHMIS	e informati 2B D2B Black is no	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Cabon Black Labor Canada - WHMIS - Ingrediant Disc 	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86 closure List	3-7 > 39 5-3 < 39 6-4 < 0. 6-4 < 0.	D2A (In For mon 6 D2A 6 A,B1,D. 19% 6 A, B1, In 193% Carbon WHMIS	2B D2B Black is no website.	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Cabon Black Labor Canada - WHMIS - Ingrediant Disc 	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86 closure List 9003-29	3-7 > 39 5-3 < 39	6 D2A (In For mon 6 D2A (In Fo	Pe informati PB P2B P2B Black is no website.	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Cabon Black Labor Canada - WHMIS - Ingrediant Disc Polybutene Heptane 	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86 closure List 9003-29 142-82-3	3-7 > 39 5-3 < 39 < 49 1 < 0 < 39 6-4 < 0. 2-6 < 5 16-1 <	D2A (In For mon For mon M	re informati 2B D2B Black is no website.	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Cabon Black Labor Canada - WHMIS - Ingrediant Disc Polybutene Heptane Arien 	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86 closure List 9003-29 142-82-: 64742-1	3-7 > 39 5-3 < 39 1 < 0 < 39 6-4 < 0 2-6 < 5 16-1 < 7 3-7 > 7	D2A (In For mon For mon MHMIS) D2A A,B1,D. A,B1, In D. Carbon WHMIS A 10% No. No.	Pe informati PB P2B P2B Black is no website. t Listed	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Cabon Black Labor Canada - WHMIS - Ingrediant Disc Polybutene Heptane Arien Kaolin 	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86 closure List 9003-29 142-82-: 64742-1 1332-58	3-7 > 39 5-3 < 39 < 49 1 < 0 < 39 6-4 < 0. 2-6 < 5 16-1 < 7 3-7 > 7	D2A (In For mon For mon Manager Manage	Per information of the second	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Cabon Black Labor Canada - WHMIS - Ingrediant Disc Polybutene Heptane Arien Kaolin Limestone 	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86 closure List 9003-29 142-82-3 64742-1 1332-58 1317-65	3-7 > 39 5-3 < 39 6-3 < 49 1 < 0	D2A (In For mon For mon Manager Manage	Per information of the property of the propert	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Cabon Black Labor Canada - WHMIS - Ingrediant Disc Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- 	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86 closure List 9003-29 142-82-: 64742-1 1332-58 1317-65 74-85-1	3-7 > 39 5-3 < 39 <49 1 <0 <39 6-4 <0. 2-6 < 5-1 < 1-7 > 5-3 >	D2A (In For mon For mon Manager 1978) 6 D2A (A, B1, D. 1978) 6 A, B1, II (D3% Carbon WHMIS) 8 35% No 1978 110% No 3% No 1978 14% No 0.1% 1978	Per information of the property of the propert	ion, consult the Substa	a does not apply ance Specific issue Not Listed
 Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Cabon Black Labor Canada - WHMIS - Ingrediant Disc Polybutene Heptane Arien Kaolin Limestone Ethylene 	1332-58 1317-65 74-85-1 119-47- 115-7-1 1333-86 closure List 9003-29 142-82-: 64742-1 1332-58 1317-65 74-85-1 16219-7	3-7 > 39 5-3 < 39 1 < 0	D2A (In For mon For mon Manager 1978) 6 D2A (A, B1, D. 1978) 6 A, B1, II (D3% Carbon WHMIS) 8 35% No 1978 110% No 3% No 1978 14% No 0.1% 1978	re informati 2B 2B 22B Black is no website. t Listed t Listed t Listed t Listed t Listed t Listed	ion, consult the Substa	a does not apply ance Specific issue Not Listed

Article Number 111 Revision Number 2 Page 14/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

(Contd. of page 13)				
Environment Canada - CEPA - Priority Substance	List			
Polybutene	9003-29-6	< 35%	Not Listed	
Heptane	142-82-5	14%	Not Listed	
Arien	64742-16-1	<10%	Not Listed	
Kaolin	1332-58-7	>3%	Not Listed	
Limestone	1317-65-3	>3%	Not Listed	
Ethylene	74-85-1	>4%	Not Listed	
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed	
Propene	115-7-1	<3%	Not Listed	
Carbon Black	1333-86-4	< 0.03%	Not Listed	

UNITED STATES Labor U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals 9003-29-6 < 35% Not Listed Polybutene Heptane 14% Not Listed 142-82-5 Arien <10% Not Listed 64742-16-1 Kaolin 1332-58-7 >3% Not Listed >3% Limestone Not Listed 1317-65-3 Ethylene 74-85-1 Not Listed >4% Methane, 2,2'-bis(6-t-buytl-p-cresyl)-16219-75-3 >0.1% Not Listed Not Listed Propene 115-7-1 <3% 1333-86-4 < 0.03% Not Listed Carbon Black U.S. - OSHA - Specifically Regulated Chemicals Polybutene 9003-29-6 < 35% Not Listed Not Listed Heptane 14% 142-82-5 Arien 64742-16-1 <10% Not Listed >3% Kaolin 1332-58-7 Not Listed Limestone Not Listed 1317-65-3 >3% Not Listed Ethylene 74-85-1 >4% Methane, 2,2'-bis(6-t-buytl-p-cresyl)-Not Listed 16219-75-3 >0.1% 115-7-1 <3% Not Listed Propene Carbon Black 1333-86-4 < 0.03% Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

Polybutene	9003-29-6	<35%	Not Listed
Heptane	142-82-5	14%	Not Listed
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Not Listed
Limestone	1317-65-3	>3%	Not Listed
Ethylene	74-85-1	>4%	Not Listed

(Contd. on page 15)

Article Number 111 Revision Number 2 Page 15/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

	(Contd.	of page 14)	
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Not Listed
Carbon Black	1333-86-4	<0.03%	Not Listed
S CERCLA/SARAH - Hazar	dous Substan	ices and t	heir Reprotable Quantities
Polybutene	9003-29-6	<35%	Not Listed
Heptane	142-82-5	14%	Not Listed
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Not Listed
Limestone	1317-65-3	>3%	Not Listed
Ethylene	74-85-1	>4%	Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Not Listed
Carbon Black	1333-86-4	<0.03%	Not Listed
S CERCLA/SARAH - Radion			
Polybutene	9003-29-6	<35%	Not Listed
Heptane	142-82-5	14%	Not Listed
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Not Listed
Limestone	1317-65-3	>3%	Not Listed
Ethylene	74-85-1	>4%	Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Not Listed
•	*****	.0.0001	37 . 7 1
Carbon Black	1333-86-4	<0.03%	Not Listed
Carbon Black S CERCLA/SARAH - Section	n 302 Extrem	ely Haza	rdous Substances EPCRA RQ
Carbon Black S CERCLA/SARAH - Section Polybutene	9003-29-6	ely Hazai	rdous Substances EPCRA RQ
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane	9003-29-6 142-82-5	<35% 14%	rdous Substances EPCRA RQ Not Listed Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien	9003-29-6 142-82-5 64742-16-1	<35% 14% <10%	rdous Substances EPCRA RQ Not Listed Not Listed Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin	9003-29-6 142-82-5 64742-16-1 1332-58-7	<35% 14% <10% >3%	rdous Substances EPCRA RQ Not Listed Not Listed Not Listed Not Listed Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin Limestone	9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3	<35% 14% <10% >3% >3%	rdous Substances EPCRA RQ Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin Limestone Ethylene	9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1	<35% 14% <10% >3% >3% >4%	Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3	<35% 14% <10% >3% >3% >4% >0.1%	Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene	9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1	<35% 14% <10% >3% >3% >4% >0.1% <3%	Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1 1333-86-4	<35% 14% <10% >3% >3% >4% >0.1% <3% <0.03%	Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black	9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1 1333-86-4	<35% 14% <10% >3% >3% >4% >0.1% <3% <0.03%	Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black S CERCLA/SARAH - Section	9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1 1333-86-4 n 302 Extrem	<pre><sty <="" hazar="" pre=""> <pre><35% 14% <10% >3% >3% >4% >0.1% <3% <0.03% </pre> <pre><ely hazar<="" pre=""></ely></pre></sty></pre>	Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black S CERCLA/SARAH - Section Polybutene	9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1 1333-86-4 n 302 Extrem 9003-29-6	<pre><35% 14% <10% >3% >3% >4% >0.1% <3% <0.03% eely Hazai <35%</pre>	Not Listed
Carbon Black S CERCLA/SARAH - Section Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black S CERCLA/SARAH - Section Polybutene Heptane	9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1 1333-86-4 n 302 Extrem 9003-29-6 142-82-5	<pre><35% 14% <10% >3% >3% >4% >0.1% <3% <0.03% rely Hazar <35% 14%</pre>	Not Listed

Article Number 111 Revision Number 2 Page 16/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

		of maco 15)	
	(Conta.	of page 15)	
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Not Listed
Carbon Black	1333-86-4	<0.03%	Not Listed
.S CERCLA/SARAH - Section	1 313 - Emiss	ion Repo	rting
Polybutene	9003-29-6	<35%	Not Listed
Heptane	142-82-5	14%	Not Listed
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Not Listed
Limestone	1317-65-3	>3%	Not Listed
Ethylene	74-85-1	>4%	Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Not Listed
Carbon Black	1333-86-4	< 0.03%	Not Listed
Polybutene	9003-29-6	<35%	Not Listed
Heptane	142-82-5	14%	Not Listed
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Not Listed
Limestone	1317-65-3	>3%	Not Listed
·			
Ethylene	74-85-1	>4%	Not Listed
Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	74-85-1 16219-75-3	>4% >0.1%	Not Listed Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black	16219-75-3	>0.1%	Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California Invironment U.S California - Proposition	16219-75-3 115-7-1 1333-86-4 2 65 - Carcino	>0.1% <3% <0.03% Ogens Lis	Not Listed Not Listed Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California nvironment U.S California - Proposition Polybutene	16219-75-3 115-7-1 1333-86-4 2 65 - Carcine 9003-29-6	>0.1% <3% <0.03% ogens Lis <35%	Not Listed Not Listed Not Listed t Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California nvironment U.S California - Proposition Polybutene Heptane	16219-75-3 115-7-1 1333-86-4 2 65 - Carcino 9003-29-6 142-82-5	>0.1% <3% <0.03% Ogens Lis <35% 14%	Not Listed Not Listed Not Listed t Not Listed Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California nvironment U.S California - Proposition Polybutene Heptane Arien	16219-75-3 115-7-1 1333-86-4 2 65 - Carcine 9003-29-6 142-82-5 64742-16-1	>0.1% <3% <0.03% Depart List <35% 14% <10%	Not Listed Not Listed Not Listed t Not Listed Not Listed Not Listed Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California nvironment U.S California - Proposition Polybutene Heptane Arien Kaolin	16219-75-3 115-7-1 1333-86-4 2 65 - Carcine 9003-29-6 142-82-5 64742-16-1 1332-58-7	>0.1% <3% <0.03% Ogens Lis <35% 14% <10% >3%	Not Listed Not Listed Not Listed **Not Listed** Not Listed Not Listed Not Listed Not Listed Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California nvironment U.S California - Proposition Polybutene Heptane Arien Kaolin Limestone	16219-75-3 115-7-1 1333-86-4 2 65 - Carcino 9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3	>0.1% <3% <0.03% Ogens Lis <35% 14% <10% >3% >3%	Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California nvironment U.S California - Proposition Polybutene Heptane Arien Kaolin Limestone Ethylene	16219-75-3 115-7-1 1333-86-4 2 65 - Carcine 9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1	>0.1% <3% <0.03% Ogens Lis <35% 14% <10% >3% >3% >4%	Not Listed Not Listed Not Listed **Not Listed** Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California Invironment U.S California - Proposition Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3 115-7-1 1333-86-4 2 65 - Carcine 9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3	>0.1% <3% <0.03% Pagens Lis <35% 14% <10% >3% >3% >4% >0.1%	Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California nvironment U.S California - Proposition Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene	16219-75-3 115-7-1 1333-86-4 2 65 - Carcino 9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1	>0.1% <3% <0.03% Ogens Lis <35% 14% <10% >3% >34% >0.1% <3%	Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California Invironment U.S California - Proposition Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3 115-7-1 1333-86-4 2 65 - Carcine 9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3	>0.1% <3% <0.03% Pagens Lis <35% 14% <10% >3% >3% >4% >0.1%	Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California nvironment U.S California - Proposition Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene	16219-75-3 115-7-1 1333-86-4 2 65 - Carcine 9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1 1333-86-4	>0.1% <3% <0.03% Ogens Lis <35% 14% <10% >3% >3% >4% >0.1% <3% <0.03%	Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Carcinogen, intial date 2/21/03 (airborne, unbound particles of respirable size)
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California Invironment U.S California - Proposition Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black	16219-75-3 115-7-1 1333-86-4 2 65 - Carcine 9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1 1333-86-4	>0.1% <3% <0.03% Ogens Lis <35% 14% <10% >3% >3% >4% >0.1% <3% <0.03%	Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Carcinogen, intial date 2/21/03 (airborne, unbound particles of respirable size)
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California Invironment U.S California - Proposition Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black U.S California - Proposition	16219-75-3 115-7-1 1333-86-4 2 65 - Carcino 9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1 1333-86-4	>0.1% <3% <0.03% Ogens Lis <35% 14% <10% >3% >4% >0.1% <3% <0.03% Omental Times	Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Carcinogen, intial date 2/21/03 (airborne, unbound particles of respirable size)
Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black Inited States - California Invironment U.S California - Proposition Polybutene Heptane Arien Kaolin Limestone Ethylene Methane, 2,2'-bis(6-t-buytl-p-cresyl)- Propene Carbon Black U.S California - Proposition	16219-75-3 115-7-1 1333-86-4 2 65 - Carcino 9003-29-6 142-82-5 64742-16-1 1332-58-7 1317-65-3 74-85-1 16219-75-3 115-7-1 1333-86-4 2 65 - Develop 9003-29-6	>0.1% <3% <0.03% Ogens Lis <35% 14% <10% >3% >3% >4% >0.1% <3% <0.03% Omental Times <35%	Not Listed Not Listed Carcinogen, intial date 2/21/03 (airborne, unbound particles of respirable size) Foxicity Not Listed

Article Number 111

Revision Number 2

Page 17/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

	(Contd.	of page 16)	
Limestone	1317-65-3	>3%	Not Listed
Ethylene	74-85-1	>4%	Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Not Listed
Carbon Black	1333-86-4	<0.03%	Not Listed
S California - Proposition 65	- Maximum	Allowabl	e Dose Levels (MADL)
Polybutene	9003-29-6	<35%	Not Listed
Heptane	142-82-5	14%	Not Listed
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Not Listed
Limestone	1317-65-3	>3%	Not Listed
Ethylene	74-85-1	>4%	Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Not Listed
Carbon Black	1333-86-4	< 0.03%	Not Listed
S California - Proposition 65 Polybutene	9003-29-6	<35%	Not Listed
Heptane	142-82-5	14%	Not Listed
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Not Listed
Limestone	1317-65-3	>3%	Not Listed
Ethylene	74-85-1	>4%	Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Not Listed
Carbon Black	1333-86-4	<0.03%	Not Listed
S California - Proposition 65	- Reproducti	ive Toxici	ity - Female
Polybutene	9003-29-6	<35%	Not Listed
Heptane	142-82-5	14%	Not Listed
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Not Listed
Limestone	1317-65-3	>3%	Not Listed
Ethylene	74-85-1	>4%	Not Listed
	16219-75-3	>0.1%	Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-		<3%	Not Listed
Propene	115-7-1		
	115-7-1 1333-86-4	<0.03%	Not Listed
Propene	1333-86-4		
Propene Carbon Black	1333-86-4		

(Contd. on page 18)

Article Number 111 Revision Number 2 Page 18/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

(Contd. of page 17)							
Arien	64742-16-1	<10%	Not Listed				
Kaolin	1332-58-7	>3%	Not Listed				
Limestone	1317-65-3	>3%	Not Listed				
Ethylene	74-85-1	>4%	Not Listed				
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed				
Propene	115-7-1	<3%	Not Listed				
Carbon Black	1333-86-4	< 0.03%	Not Listed				
U.S California - Proposition 65	U.S California - Proposition 65 - Reproductive Toxicity - Female						
Polybutene	9003-29-6	<35%	Not Listed				
Heptane	142-82-5	14%	Not Listed				
Arien	64742-16-1	<10%	Not Listed				
Kaolin	1332-58-7	>3%	Not Listed				
Limestone	1317-65-3	>3%	Not Listed				
Ethylene	74-85-1	>4%	Not Listed				
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed				
Propene	115-7-1	<3%	Not Listed				
Carbon Black	1333-86-4	< 0.03%	Not Listed				
Polybutene	9003-29-6	<35%	Not Listed				
Heptane	142-82-5	14%	Not Listed				
Arien	64742-16-1	<10%	Not Listed				
Kaolin	1332-58-7	>3%	Not Listed				
Limestone	1317-65-3	>3%	Not Listed				
Ethylene	74-85-1	>4%	Not Listed				
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed				
Propene	115-7-1	<3%	Not Listed				
Carbon Black	1333-86-4	<0.03%	Not Listed				
United States - Pennsylvania Labor U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List							
Polybutene	9003-29-6	<35%	Not Listed				
Heptane	142-82-5	14%	Not Listed				
Arien	64742-16-1	<10%	Not Listed				
Kaolin	1332-58-7	>3%	Not Listed				
Limestone	1317-65-3	>3%	Not Listed				
Ethylene Mothers 2.21 bis (6.4 bourd in arrand)	74-85-1	>4%	Not Listed				
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed				
Propene Contain Plant	115-7-1	<3%	Not Listed				
Carbon Black	1333-86-4	<0.03%	Not Listed				
U.S Pennsylvania - RTK (Right to K							
Polybutene	9003-29-6	<35%	Not Listed				
	(Contd.	on page 19)					

Article Number 111 Revision Number 2 Page 19/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

(Contd. of page 18)

Heptane	142-82-5	14%	Not Listed
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Not Listed
Limestone	1317-65-3	>3%	Not Listed
Ethylene	74-85-1	>4%	Not Listed
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Not Listed
Carbon Black	1333-86-4	<0.03%	Not Listed

United States - Rhode Island

Labor

U.S. - Rhode Island - Hazardous Substance List

Polybutene	9003-29-6	< 35%	Not Listed
Heptane	142-82-5	14%	Toxic; Flammable
Arien	64742-16-1	<10%	Not Listed
Kaolin	1332-58-7	>3%	Toxic
Limestone	1317-65-3	>3%	Toxic
Ethylene	74-85-1	>4%	Toxic; Flammable
Methane, 2,2'-bis(6-t-buytl-p-cresyl)-	16219-75-3	>0.1%	Not Listed
Propene	115-7-1	<3%	Toxic; Flammable
Carbon Black	1333-86-4	<0.03%	Toxic

Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 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, Roofing Products International, Inc. 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 Roofing Products International, Inc. 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: Technical Services Department.
- Creation Date: 08/12/2000
- *Date of preparation:* 01/23/2015
- Last revision: Format update
- 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 Organization

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)

(Contd. on page 20)

Revision Number 2 Article Number 111 Page 20/20

Trade Name: Royal Edge Water Cut-Off Mastic Revision Date 01/23/2015

(Contd. of page 19)

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
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

End of SDS