

## Safety Data Sheet

## Firestone Fibers and Textiles Company

## Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

## 1.1 Product identifier

**Product Name** • Ammoniated Nylon Dip: AP209 and AP329

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified use(s)** • Treatment of tire cord

## 1.3 Details of the supplier of the safety data sheet

**Manufacturer** • Firestone Fibers and Textiles Company  
100 Firestone Lane  
King's Mountain, NC 28086  
United States  
  
FSFT-CustomerService@bfusa.com

## 1.4 Emergency telephone number

**Manufacturer** • 800-424-9300 - CHEMTREC

## Section 2: Hazards Identification

## EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]  
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

## 2.1 Classification of the substance or mixture

**CLP** • Skin Sensitization 1 - H317  
Carcinogenicity 2 - H351

**DSD/DPD** • Carcinogenic Substances - Category 3  
Irritant (Xi)  
R40, R43

## 2.2 Label Elements

CLP

## WARNING



**Hazard statements** • H317 - May cause an allergic skin reaction  
H351 - Suspected of causing cancer.

## Precautionary statements

**Prevention** • P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P261 - Avoid breathing mist/vapours/spray.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P280 - Wear protective gloves .  
P281 - Use personal protective equipment as required.

- 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.
  - P363 - Wash contaminated clothing before reuse.
  - P321 - Specific treatment, see supplemental first aid information.
  - P308+P313 - IF exposed or concerned: Get medical advice/attention.

- Storage/Disposal**
- P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

#### DSD/DPD



- Risk phrases**
- R40 - Limited evidence of a carcinogenic effect.
  - R43 - May cause sensitisation by skin contact.

- Safety phrases**
- S24 - Avoid contact with skin.
  - S36 - Wear suitable protective clothing.
  - S37 - Wear suitable gloves.
  - S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
  - S53 - Avoid exposure - obtain special instructions before use.

### 2.3 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 material is considered dangerous.

## United States (US)

According to OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

- OSHA HCS 2012**
- Skin Irritation 2 - H315
  - Skin Sensitization 1A - H317
  - Eye Irritation 2 - H319
  - Germ Cell Mutagenicity 1B - H340
  - Carcinogenicity 1A - H350
  - Reproductive Toxicity 2 - H361

### 2.2 Label elements

**OSHA HCS 2012**

#### DANGER



- Hazard statements**
- Causes skin irritation - H315
  - May cause an allergic skin reaction - H317
  - Causes serious eye irritation - H319
  - May cause genetic defects. - H340
  - May cause cancer. - H350
  - Suspected of damaging fertility or the unborn child. - H361

#### Precautionary statements

- Prevention**
- Obtain special instructions before use. - P201
  - Do not handle until all safety precautions have been read and understood. - P202
  - Avoid breathing mist/vapours/spray. - P261
  - Wash thoroughly after handling. - P264
  - Contaminated work clothing should not be allowed out of the workplace. - P272
  - Wear protective gloves/protective clothing/eye protection/face protection. - P280
- Response**
- If on skin: Wash with plenty of water .

Take off contaminated clothing and wash before reuse. - P362  
 If skin irritation or rash occurs: Get medical advice/attention. - P333+P313  
 Specific treatment, see supplemental first aid information. - P321  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338  
 If eye irritation persists: Get medical advice/attention. - P337+P313  
 IF exposed or concerned: Get medical advice/attention. - P308+P313

- Storage/Disposal**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

## 2.3 Other hazards

### OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

## Canada

### According to WHMIS

## 2.1 Classification of the substance or mixture

### WHMIS

- Very Toxic - D1A  
Other Toxic Effects - D2A  
Other Toxic Effects - D2B

## 2.2 Label elements

### WHMIS



- Very Toxic - D1A  
Other Toxic Effects - D2A  
Other Toxic Effects - D2B

## 2.3 Other hazards

### WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

### 3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Butadiene/Styrene/2-Vinylpyridine copolymer	CAS:25053-48-9	18.45% TO 19.27%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA

Resorcinol	<b>CAS:</b> 108-46-3 <b>EC Number:</b> 203-585-2 <b>EU Index:</b> 604-010-00-1	1.56% TO 2.46%	Ingestion/Oral-Rat LD50 • 301 mg/kg Skin-Rabbit LD50 • 3360 mg/kg	<b>EU DSD/DPD:</b> Annex VI, Table 3.2: Xn R22 Xi R36/38 N R50 <b>EU CLP:</b> Annex VI, Table 3.1: Acute Tox. 3, H301; Eye Irrit. 2, H319; Skin Irrit. 2, H315; Aquatic Acute 1, H400 <b>OSHA HCS 2012:</b> Skin Irrit. 2; Eye Irrit. 2; Acute Tox. 3 (oral)	NDA
Formaldehyde	<b>CAS:</b> 50-00-0 <b>EC Number:</b> 200-001-8 <b>EU Index:</b> 605-001-00-5	0.6% TO 1.5%	Ingestion/Oral-Rat LD50 • 100 mg/kg Inhalation-Rat LC50 • 250 ppm 4 Hour(s) Skin-Rabbit LD50 • 270 µL/kg	<b>EU DSD/DPD:</b> Annex VI, Table 3.2: T R23/24/25 C R34 Carc.Cat.3 R40 R43 <b>EU CLP:</b> Annex VI, Table 3.1: Carc. 2, H351; Acute Tox. 2, H331; Acute Tox. 3, H301; Acute Tox. 3, H311; Skin Corr. 1B, H314; Skin Sens. 1, H317 <b>OSHA HCS 2012:</b> Skin Corr. 1C; Eye Dam. 1; Acute Tox. 3 (oral, skn); Carc. 1A; Skin Sens. 1A; Muta. 1B; Acute Tox. 2 (inhl)	NDA
Carbon Black	<b>CAS:</b> 1333-86-4 <b>EC Number:</b> 215-609-9	0% TO 1.08%	Ingestion/Oral-Rat LD50 • >15400 mg/kg Skin-Rabbit LD50 • >3 g/kg	<b>EU DSD/DPD:</b> Self Classified: Carc. Cat. 3 R40 <b>EU CLP:</b> Self Classified: Carc. 2, H351 <b>OSHA HCS 2012:</b> Carc. 2	NDA
Ammonium hydroxide	<b>CAS:</b> 1336-21-6 <b>EC Number:</b> 215-647-6 <b>EU Index:</b> 007-001-01-2	0.04% TO 0.46%	Ingestion/Oral-Rat LD50 • 350 mg/kg	<b>EU DSD/DPD:</b> Annex VI, Table 3.2: C R34 N R50 <b>EU CLP:</b> Annex VI, Table 3.1: Skin Corr. 1, H318; Aquatic Acute 1, H400 <b>OSHA HCS 2012:</b> Skin Corr. 1C; Eye Dam. 1; Acute Tox. 4 (oral)	NDA
Methanol	<b>CAS:</b> 67-56-1 <b>EC Number:</b> 200-659-6 <b>EU Index:</b> 603-001-00-X	0.1% TO 0.3%	Inhalation-Rat LC50 • 64000 ppm 4 Hour(s) Skin-Rabbit LD50 • 15800 mg/kg Ingestion/Oral-Rat LD50 • 5600 mg/kg	<b>EU DSD/DPD:</b> Annex VI, Table 3.2: F R11 T R23/24/25-39/23/24/25 <b>EU CLP:</b> Annex VI, Table 3.1: Flam. Liq. 2, H225; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE 1, H370 <b>OSHA HCS 2012:</b> Flam. Liq. 2; Eye Irrit. 2A; Skin Irrit. 2; STOT SE 1 (Eyes); STOT SE 3: Narc.; STOT RE 1 (Eyes); Repr. 2	NDA
Ethenylbenzene	<b>CAS:</b> 100-42-5 <b>EC Number:</b> 202-851-5 <b>EU Index:</b> 601-026-00-0	0% TO 0.188%	Ingestion/Oral-Rat LD50 • 2650 mg/kg Inhalation-Rat LC50 • 11800 mg/m <sup>3</sup> 4 Hour (s)	<b>EU DSD/DPD:</b> Annex VI, Table 3.2: R10 Xn R20 Xi R36/38 <b>EU CLP:</b> Annex VI, Table 3.1: Acute Tox. 4 *, H332; Eye Irrit. 2, H319; Skin Irrit. 2, H315 <b>OSHA HCS 2012:</b> Acute Tox. 4 (inhl); Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Resp. Irrit.& Narc.; Carc. 2	NDA
Blancol	<b>CAS:</b> 9084-06-4	0% TO 0.15%	Ingestion/Oral-Rat LD50 • 3800 mg/kg	<b>EU DSD/DPD:</b> Not Classified <b>EU CLP:</b> Not Classified <b>OSHA HCS 2012:</b> Not Classified	NDA
1,3-Butadiene	<b>CAS:</b> 106-99-0 <b>EC Number:</b> 203-450-8 <b>EU Index:</b> 601-013-00-X	0% TO 0.0141%	Inhalation-Rat LC50 • 285000 mg/m <sup>3</sup> 4 Hour(s) Ingestion/Oral-Rat LD50 • 5480 mg/kg	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limit(s)	NDA
Sodium hydroxide	<b>CAS:</b> 1310-73-2 <b>EC Number:</b> 215-185-5 <b>EU Index:</b> 011-002-00-6	0.002%	NDA	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limit(s)	NDA

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

- Inhalation**
- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately if symptoms occur.
- Skin**
- IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.
- Eye**
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- If swallowed, DO NOT induce vomiting. Get medical attention immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes 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.

## Section 5 - Firefighting Measures

### 5.1 Extinguishing media

- Suitable Extinguishing Media**
- Material is non-flammable. Use media appropriate for surrounding materials (e.g., water spray, alcohol foam, or carbon dioxide).
- Unsuitable Extinguishing Media**
- None known.

### 5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Heat builds up pressure in closed containers. Cool with water stream.
- Hazardous Combustion Products**
- Containers exposed to fire conditions may release Carbon Oxides, Formaldehyde, Resorcinol, and acrid smoke and fumes.

### 5.3 Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.  
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.  
Wear positive pressure self-contained breathing apparatus (SCBA).

## Section 6 - Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Ventilate the area before entry. Do not breathe fume/gas/mist/vapours. Avoid contact with skin, eyes, and clothing. Do not touch damaged packages or spilled material. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact.
- Emergency Procedures**
- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Ventilate closed spaces before entering. Keep out of low areas. Keep unauthorized personnel away. Stay upwind.

### 6.2 Environmental precautions

- Prevent entry into waterways and sewers.

### 6.3 Methods and material for containment and cleaning up

#### Containment/Clean-up Measures

- Evacuation may be necessary. Contain spill with absorbent material and place into drums for disposal.

### 6.4 Reference to other sections

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

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

#### Handling

- Wear appropriate personal protective equipment. Do not breathe vapors. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated contact with the skin.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

- Store this material at room temperature in a closed container.

### 7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Belgium	Canada Alberta	Canada British Columbia	Canada Manitoba
Ethenylbenzene (100-42-5)	STELs	40 ppm STEL	100 ppm STEL; 432 mg/m3 STEL	40 ppm STEL; 170 mg/m3 STEL	75 ppm STEL	40 ppm STEL
	TWAs	20 ppm TWA	50 ppm TWA; 216 mg/m3 TWA	20 ppm TWA; 85 mg/m3 TWA	50 ppm TWA	20 ppm TWA
1,3-Butadiene (106-99-0)	TWAs	2 ppm TWA	2 ppm TWA; 4.5 mg/m3 TWA	2 ppm TWA; 4.4 mg/m3 TWA	2 ppm TWA	2 ppm TWA
Carbon Black (1333-86-4)	TWAs	3 mg/m3 TWA (inhalable fraction)	3.5 mg/m3 TWA	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable)	3 mg/m3 TWA (inhalable fraction)
Sodium hydroxide (1310-73-2)	Ceilings	2 mg/m3 Ceiling	Not established	2 mg/m3 Ceiling	2 mg/m3 Ceiling	2 mg/m3 Ceiling
Methanol (67-56-1)	STELs	250 ppm STEL	250 ppm STEL; 333 mg/m3 STEL	250 ppm STEL; 328 mg/m3 STEL	250 ppm STEL	250 ppm STEL
	TWAs	200 ppm TWA	200 ppm TWA; 266 mg/m3 TWA	200 ppm TWA; 262 mg/m3 TWA	200 ppm TWA	200 ppm TWA
Formaldehyde (50-00-0)	Ceilings	0.3 ppm Ceiling	Not established	1 ppm Ceiling; 1.3 mg/m3 Ceiling	1 ppm Ceiling	0.3 ppm Ceiling
	TWAs	Not established	Not established	0.75 ppm TWA; 0.9 mg/m3 TWA	0.3 ppm TWA	Not established
Resorcinol (108-46-3)	STELs	20 ppm STEL	20 ppm STEL; 91 mg/m3 STEL	20 ppm STEL; 90 mg/m3 STEL	20 ppm STEL	20 ppm STEL
	TWAs	10 ppm TWA	10 ppm TWA; 46 mg/m3 TWA	10 ppm TWA; 45 mg/m3 TWA	10 ppm TWA	10 ppm TWA

**Exposure Limits/Guidelines (Con't.)**

	<b>Result</b>	<b>Canada New Brunswick</b>	<b>Canada Northwest Territories</b>	<b>Canada Nova Scotia</b>	<b>Canada Nunavut</b>	<b>Canada Ontario</b>
Ethenylbenzene (100-42-5)	STELs	40 ppm STEL; 170 mg/m <sup>3</sup> STEL	100 ppm STEL; 426 mg/m <sup>3</sup> STEL	40 ppm STEL	100 ppm STEL; 426 mg/m <sup>3</sup> STEL	100 ppm STEL
	TWAs	20 ppm TWA; 85 mg/m <sup>3</sup> TWA	50 ppm TWA; 213 mg/m <sup>3</sup> TWA	20 ppm TWA	50 ppm TWA; 213 mg/m <sup>3</sup> TWA	35 ppm TWA
1,3-Butadiene (106-99-0)	TWAs	2 ppm TWA; 4.4 mg/m <sup>3</sup> TWA	1000 ppm TWA; 2212 mg/m <sup>3</sup> TWA	2 ppm TWA	1000 ppm TWA; 2212 mg/m <sup>3</sup> TWA	2 ppm TWA
	STELs	Not established	1250 ppm STEL; 2765 mg/m <sup>3</sup> STEL	Not established	1250 ppm STEL; 2765 mg/m <sup>3</sup> STEL	Not established
Carbon Black (1333-86-4)	TWAs	3.5 mg/m <sup>3</sup> TWA	3.5 mg/m <sup>3</sup> TWA	3 mg/m <sup>3</sup> TWA (inhalable fraction)	3.5 mg/m <sup>3</sup> TWA	3 mg/m <sup>3</sup> TWA (inhalable)
	STELs	Not established	7 mg/m <sup>3</sup> STEL	Not established	7 mg/m <sup>3</sup> STEL	Not established
Sodium hydroxide (1310-73-2)	Ceilings	2 mg/m <sup>3</sup> Ceiling	2 mg/m <sup>3</sup> Ceiling	2 mg/m <sup>3</sup> Ceiling	2 mg/m <sup>3</sup> Ceiling	2 mg/m <sup>3</sup> Ceiling
Methanol (67-56-1)	STELs	250 ppm STEL; 328 mg/m <sup>3</sup> STEL	250 ppm STEL; 328 mg/m <sup>3</sup> STEL	250 ppm STEL	250 ppm STEL; 328 mg/m <sup>3</sup> STEL	250 ppm STEL
	TWAs	200 ppm TWA; 262 mg/m <sup>3</sup> TWA	200 ppm TWA; 262 mg/m <sup>3</sup> TWA	200 ppm TWA	200 ppm TWA; 262 mg/m <sup>3</sup> TWA	200 ppm TWA
Formaldehyde (50-00-0)	STELs	1.5 ppm STEL	Not established	Not established	Not established	1.0 ppm STEL
	TWAs	0.5 ppm TWA	Not established	Not established	Not established	Not established
	Ceilings	Not established	2 ppm Ceiling; 2.4 mg/m <sup>3</sup> Ceiling	0.3 ppm Ceiling	2 ppm Ceiling; 2.4 mg/m <sup>3</sup> Ceiling	1.5 ppm Ceiling
Resorcinol (108-46-3)	STELs	20 ppm STEL; 90 mg/m <sup>3</sup> STEL	20 ppm STEL; 90 mg/m <sup>3</sup> STEL	20 ppm STEL	20 ppm STEL; 90 mg/m <sup>3</sup> STEL	20 ppm STEL
	TWAs	10 ppm TWA; 45 mg/m <sup>3</sup> TWA	10 ppm TWA; 45 mg/m <sup>3</sup> TWA	10 ppm TWA	10 ppm TWA; 45 mg/m <sup>3</sup> TWA	10 ppm TWA

**Exposure Limits/Guidelines (Con't.)**

	<b>Result</b>	<b>Canada Quebec</b>	<b>Canada Saskatchewan</b>	<b>Canada Yukon</b>	<b>Cyprus</b>	<b>Denmark</b>
Ethenylbenzene (100-42-5)	Ceilings	Not established	Not established	Not established	Not established	25 ppm Ceiling; 105 mg/m <sup>3</sup> Ceiling
	STELs	100 ppm STEV; 426 mg/m <sup>3</sup> STEV	Not established	125 ppm STEL; 525 mg/m <sup>3</sup> STEL	Not established	Not established
	TWAs	50 ppm TWAEV; 213 mg/m <sup>3</sup> TWAEV	20 ppm TWA	100 ppm TWA; 420 mg/m <sup>3</sup> TWA	Not established	Not established
1,3-Butadiene (106-99-0)	TWAs	2 ppm TWAEV; 4.4 mg/m <sup>3</sup> TWAEV	2 ppm TWA	1000 ppm TWA; 2200 mg/m <sup>3</sup> TWA	Not established	10 ppm TWA; 22 mg/m <sup>3</sup> TWA
	STELs	Not established	Not established	1250 ppm STEL; 2750 mg/m <sup>3</sup> STEL	Not established	Not established
Carbon Black (1333-86-4)	TWAs	3.5 mg/m <sup>3</sup> TWAEV	3.5 mg/m <sup>3</sup> TWA	3.5 mg/m <sup>3</sup> TWA	Not established	3.5 mg/m <sup>3</sup> TWA
	STELs	Not established	Not established	7 mg/m <sup>3</sup> STEL	Not established	Not established
Sodium hydroxide (1310-73-2)	Ceilings	2 mg/m <sup>3</sup> Ceiling	Not established	2 mg/m <sup>3</sup> Ceiling	Not established	2 mg/m <sup>3</sup> Ceiling
Methanol (67-56-1)	TWAs	200 ppm TWAEV; 262 mg/m <sup>3</sup> TWAEV	200 ppm TWA	200 ppm TWA; 260 mg/m <sup>3</sup> TWA	200 ppm TWA; 260 mg/m <sup>3</sup> TWA	200 ppm TWA; 260 mg/m <sup>3</sup> TWA
	STELs	250 ppm STEV; 328 mg/m <sup>3</sup> STEV	Not established	250 ppm STEL; 310 mg/m <sup>3</sup> STEL	Not established	Not established

Formaldehyde (50-00-0)	Ceilings	2 ppm Ceiling; 3 mg/m3 Ceiling	Not established	2 ppm Ceiling; 3 mg/m3 Ceiling	Not established	0.3 ppm Ceiling; 0.4 mg/m3 Ceiling
Resorcinol (108-46-3)	TWAs	10 ppm TWAEV; 45 mg/m3 TWAEV	10 ppm TWA	10 ppm TWA; 45 mg/m3 TWA	10 ppm TWA; 45 mg/m3 TWA	10 ppm TWA; 45 mg/m3 TWA
	STELs	20 ppm STEV; 90 mg/m3 STEV	Not established	20 ppm STEL; 90 mg/m3 STEL	Not established	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Europe	Germany DFG	Germany TRGS	NIOSH	OSHA
Ethenylbenzene (100-42-5)	Ceilings	Not established	40 ppm Peak; 172 mg/m3 Peak	Not established	Not established	200 ppm Ceiling
	TWAs	Not established	Not established	20 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 86 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)	50 ppm TWA; 215 mg/m3 TWA	100 ppm TWA
	STELs	Not established	Not established	Not established	100 ppm STEL; 425 mg/m3 STEL	Not established
	MAKs	Not established	20 ppm TWA MAK; 86 mg/m3 TWA MAK	Not established	Not established	Not established
1,3-Butadiene (106-99-0)	STELs	Not established	Not established	Not established	Not established	5 ppm STEL (see 29 CFR 1910.1051)
	TWAs	Not established	Not established	Not established	Not established	1 ppm TWA (listed under Butadiene)
Carbon Black (1333-86-4)	TWAs	Not established	Not established	Not established	3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)	3.5 mg/m3 TWA
Sodium hydroxide (1310-73-2)	TWAs	Not established	Not established	Not established	Not established	2 mg/m3 TWA
	Ceilings	Not established	Not established	Not established	2 mg/m3 Ceiling	Not established
Methanol (67-56-1)	TWAs	200 ppm TWA; 260 mg/m3 TWA	Not established	200 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 4); 270 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when	200 ppm TWA; 260 mg/m3 TWA	200 ppm TWA; 260 mg/m3 TWA



				AGW and BGW values are observed, exposure factor 4)		
	STELs	Not established	Not established	Not established	250 ppm STEL; 325 mg/m3 STEL	Not established
	Ceilings	Not established	800 ppm Peak; 1080 mg/m3 Peak	Not established	Not established	Not established
	MAKs	Not established	200 ppm TWA MAK; 270 mg/m3 TWA MAK	Not established	Not established	Not established
Formaldehyde (50-00-0)	STELs	Not established	Not established	Not established	Not established	2 ppm STEL (see 29 CFR 1910.1048)
	TWAs	Not established	Not established	Not established	0.016 ppm TWA	0.75 ppm TWA
	Ceilings	Not established	0.6 ppm Peak (no irritation should occur during mixed exposure); 0.74 mg/m3 Peak (no irritation should occur during mixed exposure)	Not established	0.1 ppm Ceiling (15 min)	Not established
	MAKs	Not established	0.3 ppm TWA MAK; 0.37 mg/m3 TWA MAK (no irritation should occur during mixed exposure)	Not established	Not established	Not established
Resorcinol (108-46-3)	TWAs	10 ppm TWA; 45 mg/m3 TWA	Not established	4 ppm TWA AGW (inhalable fraction, exposure factor 1); 20 mg/m3 TWA AGW (inhalable fraction, exposure factor 1)	10 ppm TWA; 45 mg/m3 TWA	Not established
	STELs	Not established	Not established	Not established	20 ppm STEL; 90 mg/m3 STEL	Not established

## Exposure Control Notations

### Cyprus

- Methanol (67-56-1): **Skin:** (Skin-potential for cutaneous absorption)
- Resorcinol (108-46-3): **Skin:** (Skin-potential for cutaneous absorption)

### Germany TRGS

- Methanol (67-56-1): **Skin:** (skin notation)
- Resorcinol (108-46-3): **Skin:** (skin notation)

### Germany DFG

- Carbon Black (1333-86-4): **Carcinogens:** (Category 3B (could be carcinogenic for man, inhalable fraction))
- Formaldehyde (50-00-0): **Carcinogens:** (Category 4 (no significant contribution to human cancer)) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Sensitizers:** (skin sensitizer)
- Methanol (67-56-1): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Skin:** (skin notation)
- Resorcinol (108-46-3): **Sensitizers:** (skin sensitizer)
- Ethenylbenzene (100-42-5): **Carcinogens:** (Category 5 (low carcinogenic potency)) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)
- 1,3-Butadiene (106-99-0): **Carcinogens:** (Category 1 (causes cancer in man))

## 8.2 Exposure controls

### Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other

engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

## Personal Protective Equipment

### Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

### Eye/Face

- Wear chemical splash safety goggles.

### Skin/Body

- Wear appropriate chemical resistant gloves. Wear protective clothing

## Environmental Exposure Controls

- In case of spills, keep product clear of sewers, waterways or land areas. Dispose of waste product in accordance with national and local laws and regulations.

### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

LLV = Limit Level Value is the exposure limit for 8-hour work day

NIOSH = National Institute of Occupational Safety and Health

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

OSHA = Occupational Safety and Health Administration

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

STEV = Short Term Exposure Value

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Pink or black liquid with ammonia odor.
Color	Pink or black.	Odor	Ammonia
Odor Threshold	Data lacking		
General Properties			
Boiling Point	212 F(100 C)	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	10 to 11
Specific Gravity/Relative Density	1 to 1.2 Water=1	Water Solubility	Soluble 100 %
Viscosity	< 8 Centipoise (cPs, cP) or mPas	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	1 Water = 1		
Flammability			
Flash Point	Not applicable. Non-flammable.	UEL	Not applicable. Non-flammable
LEL	Not applicable. Non-flammable	Autoignition	Not applicable.
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

### 9.2 Other Information

- No additional physical and chemical parameters noted.

## Section 10: Stability and Reactivity

## 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

## 10.2 Chemical stability

- Stable

## 10.3 Possibility of hazardous reactions

- None known.

## 10.4 Conditions to avoid

- Incompatible materials.

## 10.5 Incompatible materials

- Acids, alkalies, strong oxidizers.

## 10.6 Hazardous decomposition products

- None known.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

		Components
Ammonium hydroxide (0.04% TO 0.46%)	1336-21-6	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 350 mg/kg; <i>Gastrointestinal:Other changes; Liver:Other changes; Kidney, Ureter, and Bladder:Other changes;</i> <b>Irritation:</b> Eye-Rabbit • 1 mg 30 Second(s)-Rinse • Severe irritation
Carbon Black (0% TO 1.08%)	1333-86-4	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • >15400 mg/kg; <i>Behavioral:Somnolence (general depressed activity);</i> Skin-Rabbit LD50 • >3 g/kg; <b>Mutagen:</b> DNA damage • Inhalation-Rat • 50 µg/L 13 Week(s)-Intermittent; <b>Tumorigen / Carcinogen:</b> Inhalation-Rat TClO • 11600 µg/m <sup>3</sup> 18 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors</i>
Blancol (0% TO 0.15%)	9084-06-4	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 3800 mg/kg
Formaldehyde (0.6% TO 1.5%)	50-00-0	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 100 mg/kg; Inhalation-Rat LC50 • 203 mg/m <sup>3</sup> ; <i>Peripheral Nerve and Sensation:Spastic paralysis with or without sensory change; Behavioral:Convulsions or effect on seizure threshold; Behavioral:Excitement;</i> Inhalation-Rat LC50 • 250 ppm 2 Hour(s); <i>Behavioral:Tetany; Behavioral:Coma; Lungs, Thorax, or Respiration:Acute pulmonary edema;</i> Inhalation-Rat TClO • 15 ppm; <i>Sense Organs and Special Senses:Olfaction:Tumors; Lungs, Thorax, or Respiration:Sputum;</i> <i>Gastrointestinal:Decreased motility or constipation;</i> Skin-Rabbit LD50 • 270 mg/kg; <b>Irritation:</b> Eye-Rabbit • 10 mg • Severe irritation; Skin-Rabbit • 2 mg 24 Hour(s) • Severe irritation; <b>Multi-dose Toxicity:</b> Inhalation-Rat TClO • 15 ppm 6 Hour(s) 24 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Other changes; Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Other oxidoreductases;</i> <b>Mutagen:</b> Cytogenetic analysis • Ingestion/Oral-Mouse • 100 mg/kg; <b>Reproductive:</b> Inhalation-Rat TClO • 12 µg/m <sup>3</sup> 24 Hour(s)(15D pre/1-22D preg); <i>Reproductive Effects:Effects on Newborn:Growth statistics (e.g., reduced weight gain); Reproductive Effects:Effects on Newborn:Other postnatal measures or effects;</i> <b>Tumorigen / Carcinogen:</b> Inhalation-Rat • 15 ppm 6 Hour(s) 78 Week(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors</i>
Methanol (0.1% TO 0.3%)	67-56-1	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 5600 mg/kg; Inhalation-Rat LC50 • 64000 ppm 4 Hour(s); Skin-Rabbit LD50 • 15800 mg/kg; <b>Irritation:</b> Eye-Rabbit • 40 mg • Moderate irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; <b>Multi-dose Toxicity:</b> Inhalation-Rat TClO • 6.5 mg/m <sup>3</sup> 6 Hour(s) 4 Week(s)-Intermittent; <i>Sense Organs and Special Senses:Eye:Conjunctive irritation;</i> <b>Reproductive:</b> Inhalation-Rat TClO • 10000 ppm 7 Hour(s)(7-15D preg); <i>Reproductive Effects:Effects on Embryo or</i>

		<b>Fetus:Fetotoxicity (except death, e.g., stunted fetus)</b>
Resorcinol (1.56% TO 2.46%)	108-46-3	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 202 mg/kg; Skin-Rabbit LD50 • 3360 mg/kg; <b>Irritation:</b> Eye-Rabbit • 100 mg • Severe irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; <b>Multi-dose Toxicity:</b> Ingestion/Oral-Rat TDLo • 150 mg/kg 30 Day(s)-Intermittent; <b>Endocrine:Thyroid weight (goiter); Endocrine:Evidence of thyroid hypofunction</b>
Ethenylbenzene (0% TO 0.188%)	100-42-5	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 2650 mg/kg; <b>Behavioral:Somnolence (general depressed activity); Liver:Other changes;</b> Inhalation-Rat LC50 • 11800 mg/m <sup>3</sup> 4 Hour(s); <b>Irritation:</b> Eye-Rabbit • 100 mg • Severe irritation; Skin-Rabbit • 100 % • Moderate irritation; <b>Mutagen:</b> DNA damage • Inhalation-Human • 36.8 ppm 8.5 Year(s)-Intermittent; <b>Reproductive:</b> Inhalation-Rat TCLo • 1500 µg/m <sup>3</sup> 24 Hour(s)(1-22D preg); <b>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Effects on Embryo or Fetus:Fetal death;</b> <b>Tumorigen / Carcinogen:</b> Inhalation-Mouse TCLo • 40 ppm 6 Hour(s) 104 Week(s)-Intermittent; <b>Tumorigenic:Neoplastic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors</b>

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Carcinogenicity 2 OSHA HCS 2012 • Carcinogenicity 1A
Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Germ Cell Mutagenicity 1B
Skin corrosion/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Skin Irritation 2
Skin sensitization	EU/CLP • Skin Sensitizer 1 OSHA HCS 2012 • Skin Sensitizer 1A
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-SE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Toxic to Reproduction 2
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Eye Irritation 2

## Potential Health Effects

### Inhalation

#### Acute (Immediate)

- Inhalation of Formaldehyde vapors may cause upper respiratory tract irritation, difficulty in breathing, cough, and burning of the eyes and throat.

#### Chronic (Delayed)

- No data available

### Skin

#### Acute (Immediate)

- Causes skin irritation. May cause an allergic skin reaction.

#### Chronic (Delayed)

- No data available.

### Eye

**Acute (Immediate)**                      • Causes serious eye irritation.

**Chronic (Delayed)**                     • No data available.

## Ingestion

**Acute (Immediate)**                     • Swallowing this product that contains formaldehyde may cause throat and stomach discomfort, vomiting, and diarrhea that could lead to collapse.

**Chronic (Delayed)**                     • No data available.

## Mutagenic Effects

• Repeated or prolonged exposure to Formaldehyde may cause genetic defects.

## Carcinogenic Effects

• May cause cancer. This material contains formaldehyde. Formaldehyde is listed as an International Agency for Research on Cancer(IARC) Group 1 carcinogen, a specifically regulated carcinogen by OSHA and as reasonably anticipated to be a carcinogen by the National Toxicology Program (NTP).

<b>Carcinogenic Effects</b>				
	<b>CAS</b>	<b>OSHA</b>	<b>IARC</b>	<b>NTP</b>
1,3-Butadiene	106-99-0	Specifically Regulated Carcinogen	Group 1-Carcinogenic	Known Human Carcinogen
Carbon Black	1333-86-4	Not Listed	Group 2B-Possible Carcinogen	Not Listed
Ethynylbenzene	100-42-5	Not Listed	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen
Formaldehyde	50-00-0	Specifically Regulated Carcinogen	Group 1-Carcinogenic	Known Human Carcinogen

**Reproductive Effects**                      • Repeated and prolonged exposure may cause reproductive effects.

### Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

## Section 12 - Ecological Information

### 12.1 Toxicity

• Material data lacking.

### 12.2 Persistence and degradability

• Material data lacking.

### 12.3 Bioaccumulative potential

• Material data lacking.

### 12.4 Mobility in Soil

• Material data lacking.

### 12.5 Results of PBT and vPvB assessment

• PBT and vPvB assessment has not been carried out.

### 12.6 Other adverse effects

• No studies have been found.

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

**Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Packaging waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Section 14 - Transport Information**

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
ADN	NDA	Not Regulated	NDA	NDA	NDA
ADR/RID	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

**14.6 Special precautions for user**

- None specified.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

- Data lacking.

**Section 15 - Regulatory Information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****SARA Hazard Classifications** ● Acute, Chronic

State Right To Know				
Component	CAS	MA	NJ	PA
1,3-Butadiene	106-99-0	Yes	Yes	Yes
Ammonium hydroxide	1336-21-6	Yes	Yes	Yes
Blancol	9084-06-4	No	No	No
Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	No	No	No
Carbon Black	1333-86-4	Yes	Yes	Yes
Ethylbenzene	100-42-5	Yes	Yes	Yes
Formaldehyde	50-00-0	Yes	Yes	Yes
Methanol	67-56-1	Yes	Yes	Yes
Resorcinol	108-46-3	Yes	Yes	Yes
Sodium hydroxide	1310-73-2	Yes	Yes	Yes
Water	7732-18-5	No	No	No

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	Korea KECL
1,3-Butadiene	106-99-0	Yes	No	Yes	No	Yes
Ammonium hydroxide	1336-21-6	Yes	No	Yes	No	Yes
Blancol	9084-06-4	Yes	No	No	No	Yes
Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Yes	No	No	No	Yes
Carbon Black	1333-86-4	Yes	No	Yes	Yes	Yes
Ethylbenzene	100-42-5	Yes	No	Yes	No	Yes
Formaldehyde	50-00-0	Yes	No	Yes	No	Yes
Methanol	67-56-1	Yes	No	Yes	No	Yes
Resorcinol	108-46-3	Yes	No	Yes	No	Yes
Sodium hydroxide	1310-73-2	Yes	No	Yes	No	Yes
Water	7732-18-5	Yes	No	Yes	No	Yes

Inventory (Con't.)		
Component	CAS	TSCA
1,3-Butadiene	106-99-0	Yes
Ammonium hydroxide	1336-21-6	Yes
Blancol	9084-06-4	Yes
Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Yes
Carbon Black	1333-86-4	Yes
Ethylbenzene	100-42-5	Yes
Formaldehyde	50-00-0	Yes
Methanol	67-56-1	Yes
Resorcinol	108-46-3	Yes
Sodium hydroxide	1310-73-2	Yes
Water	7732-18-5	Yes

## Belgium

### Labor

#### Belgium - Substances and Preparations - Carcinogens and Mutagens

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

## Bulgaria

### Environment

#### Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 24 Hour

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	1.0 mg/m3 MAHCL
• Formaldehyde	50-00-0	0.05 mg/m3 MAHCL
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	0.5 mg/m3 MAHCL
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	0.003 mg/m3 MAHCL
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

#### Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 30 Minute

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	3.0 mg/m3 MAHCL
• Formaldehyde	50-00-0	0.1 mg/m3 MAHCL
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	1.0 mg/m3 MAHCL
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

#### Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - Annual

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	0.01 mg/m3 MAHCL
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

## Canada

### Labor

#### Canada - WHMIS - Classifications of Substances

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	D1B, D2B
• 1,3-Butadiene	106-99-0	A, B1, D2A, F
• Formaldehyde	50-00-0	A, B1, D1A, D2A, D2B; B3, D1A, D2A, D2B, E (regulated under Formol) D2A (In certain cases, this classification does not apply. For more information, consult



• Carbon Black	1333-86-4	the section Substance Specific Issues - Carbon Black, non-respirable on Health Canada's WHMIS Division website.)
• Methanol	67-56-1	B2, D1B, D2A, D2B (including 28%) E (including 0.04% in aqueous solution, 0.08%, 0.4% in aqueous solution, 2%, 2.5%, 4% in aqueous solution, 5%, 10%, 16%, 20%, 40%, 50% in aqueous solution, 8.7N)
• Sodium hydroxide	1310-73-2	B2, D2A
• Ethenylbenzene	100-42-5	E
• Ammonium hydroxide	1336-21-6	Uncontrolled product according to WHMIS classification criteria
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**Canada - WHMIS - Ingredient Disclosure List**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	1 %
• 1,3-Butadiene	106-99-0	0.1 %
• Formaldehyde	50-00-0	0.1 %
• Carbon Black	1333-86-4	1 %
• Methanol	67-56-1	1 %
• Sodium hydroxide	1310-73-2	1 %
• Ethenylbenzene	100-42-5	0.1 %
• Ammonium hydroxide	1336-21-6	1 %
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**Environment****Canada - CEPA - Priority Substances List**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Priority Substance List 2 (substance considered toxic)
• Formaldehyde	50-00-0	Priority Substance List 2 (substance considered toxic)
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Priority Substance List 1 (substance not considered toxic)
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**Denmark****Environment****Denmark - List of Undesirable Substances - Product Groups/Function**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed

• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Raw materials; Preservatives
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Solvents
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Solvents in a wide range of products including paints, coatings and cooling lubricants (listed under Organic solvents)
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

## Europe

### Other

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Xn; R22 Xi; R36/38 N; R50
• 1,3-Butadiene	106-99-0	F+; R12 Carc.Cat.1; R45 Muta.Cat.2; R46
• Formaldehyde	50-00-0	T; R23/24/25 C; R34 Carc.Cat.3; R40 R43
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	F; R11 T; R23/24/25-39/23/24/25
• Sodium hydroxide	1310-73-2	C; R35
• Ethenylbenzene	100-42-5	R10 Xn; R20 Xi; R36/38
• Ammonium hydroxide	1336-21-6	C; R34 N; R50
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	10%≤C: Xn; R:22
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	0.2%≤C: R:43 25%≤C: T; R:23/24/25 5%≤C<25%: Xn; R:20/21/22 25%≤C: C; R:34 5%≤C<25%: Xi; R:36/37/38
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	20%≤C: T; R:23/24/25 3%≤C<20%: Xn; R:20/21/22 10%≤C: T; R:39/23/24/25 3%≤C<10%: Xn; R:68/20/21/22 5%≤C: C; R:35 2%≤C<5%: C; R:34 0.5%≤C<2%: Xi; R:36/38
• Sodium hydroxide	1310-73-2	12.5%≤C: Xn; R:20 12.5%≤C: Xi; R:36/38
• Ethenylbenzene	100-42-5	5%≤C<10%: Xi; R:36/37/38 10%≤C: C; R:34
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Xn N R:22-36/38-50 S:(2)-26-61
• 1,3-Butadiene	106-99-0	F+ T R:45-46-12 S:53-45
• Formaldehyde	50-00-0	T R:23/24/25-34-40-43 S:(1/2)-26-36/37/39-45-51
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	F T R:11-23/24/25-39/23/24/25 S:(1/2)-7-16-36/37-45
• Sodium hydroxide	1310-73-2	C R:35 S:(1/2)-26-37/39-45
• Ethenylbenzene	100-42-5	Xn R:10-20-36/38 S:(2)-23
• Ammonium hydroxide	1336-21-6	C N R:34-50 S:(1/2)-26-36/37/39-45-61
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	D
• Formaldehyde	50-00-0	B, D
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	D
• Ammonium hydroxide	1336-21-6	B
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	S:(2)-26-61
• 1,3-Butadiene	106-99-0	S:53-45
• Formaldehyde	50-00-0	S:(1/2)-26-36/37/39-45-51
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	S:(1/2)-7-16-36/37-45
• Sodium hydroxide	1310-73-2	S:(1/2)-26-37/39-45
• Ethenylbenzene	100-42-5	S:(2)-23
• Ammonium hydroxide	1336-21-6	S:(1/2)-26-36/37/39-45-61
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**Germany****Labor****Germany - Immission Control - Qualifying Quantities for Major Accident Prevention**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	5000 kg ( $\geq 90\%$ weight concentration)
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	500000 kg
• Sodium hydroxide	1310-73-2	Not Listed

• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**Germany - Immission Control - Qualifying Quantities for Safety Reporting**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	50000 kg (>=90% weight concentration)
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	5000000 kg
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**Germany - TRGS 505 - Specific Lead Regulations**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**Germany - TRGS 511 - Specific Ammonium Nitrate Regulations**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**Environment****Germany - TA Luft - Types and Classes**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	carcinogenic Substance: 5.2.7.1.1, Class III
• Formaldehyde	50-00-0	organic Substance: 5.2.5, Class I
• Carbon Black	1333-86-4	Not Listed

• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed
<b>Germany - TA Luft - Emission Limits for Carcinogenic Substances</b>		
• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	2.5 g/h Mass flow (Class III); 1 mg/m3 Mass concentration (Class III)
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed
<b>Germany - TA Luft - Emission Limits for Fibers</b>		
• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed
<b>Germany - TA Luft - Emission Limits for Inorganic Dusts</b>		
• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed
<b>Germany - TA Luft - Emission Limits for Inorganic Gases</b>		
• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed

• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed
<b>Germany - TA Luft - Emission Limits for Organic Substances</b>		
• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	0.10 kg/h Mass flow (Class I); 20 mg/m3 Mass concentration (Class I)
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed
<b>Germany - Water Classification (VwVwS) - Annex 1</b>		
• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	ID Number 1742, not considered hazardous to water
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed
<b>Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes</b>		
• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	ID Number 1599, hazard class 1 - low hazard to waters
• 1,3-Butadiene	106-99-0	ID Number 218, hazard class 2 - hazard to waters
• Formaldehyde	50-00-0	ID Number 112, hazard class 2 - hazard to waters
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	ID Number 145, hazard class 1 - low hazard to waters
• Sodium hydroxide	1310-73-2	ID Number 142, hazard class 1 - low hazard to waters (footnote 8)
• Ethenylbenzene	100-42-5	ID Number 187, hazard class 2 - hazard to waters
• Ammonium hydroxide	1336-21-6	ID Number 211, hazard class 2 - hazard to waters

• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**Germany - Water Classification (VwVwS) - Annex 3**

• Blanco	9084-06-4	ID Number 5153, hazard class 1 - low hazard to waters
• Resorcinol	108-46-3	ID Number 1599, hazard class 1 - low hazard to waters
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**United States****Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Blanco	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	1000 lb TQ
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - OSHA - Specifically Regulated Chemicals**

• Blanco	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	5 ppm STEL (See 29 CFR 1910.1051, 15 min); 0.5 ppm Action Level; 1 ppm TWA
• Formaldehyde	50-00-0	2 ppm STEL (See 29 CFR 1910.1048, 15 min); 0.5 ppm Action Level (See 29 CFR 1910.1048); 0.75 ppm TWA (See 29 CFR 1910.1048)
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

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

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	
• Formaldehyde	50-00-0	
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	5000 lb final RQ; 2270 kg final RQ
• 1,3-Butadiene	106-99-0	10 lb final RQ; 4.54 kg final RQ
• Formaldehyde	50-00-0	100 lb final RQ; 45.4 kg final RQ
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	5000 lb final RQ; 2270 kg final RQ
• Sodium hydroxide	1310-73-2	1000 lb final RQ; 454 kg final RQ
• Ethenylbenzene	100-42-5	1000 lb final RQ; 454 kg final RQ
• Ammonium hydroxide	1336-21-6	1000 lb final RQ; 454 kg final RQ
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	100 lb EPCRA RQ
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed



• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed
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**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	500 lb TPQ
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	0.1 % de minimis concentration
• Formaldehyde	50-00-0	0.1 % de minimis concentration
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	1.0 % de minimis concentration
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	0.1 % de minimis concentration
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - EPA - Designated Generic Categories - Aqueous Ammonia**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed

• Ammonium hydroxide	1336-21-6	NH3 Equiv. Wt. % = 48.59
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Included in waste streams: K009, K010, K038, K040, K156, K157
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Included in waste stream: F039
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	waste number U201
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	waste number U122
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed

• Ethenylbenzene	100-42-5	
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	5.6 mg/L (wastewater); 0.75 mg/L TCLP (nonwastewater)
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	waste number U201
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	waste number U122
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	waste number U154 (Ignitable waste)
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**United States - California****Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	carcinogen, initial date 4/1/88

• Formaldehyde	50-00-0	carcinogen, initial date 1/1/88 (gas)
• Carbon Black	1333-86-4	carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size)
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - California - Proposition 65 - Developmental Toxicity**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	developmental toxicity, initial date 4/16/04
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	developmental toxicity, initial date 3/16/12
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**

• Blacol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	0.4 µg/day NSRL
• Formaldehyde	50-00-0	40 µg/day NSRL (gas)
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

• Blacol	9084-06-4	Not Listed
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• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	female reproductive toxicity, initial date 4/16/04
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	Not Listed
• Formaldehyde	50-00-0	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**United States - Pennsylvania****Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	
• 1,3-Butadiene	106-99-0	
• Formaldehyde	50-00-0	
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	
• Sodium hydroxide	1310-73-2	
• Ethenylbenzene	100-42-5	
• Ammonium hydroxide	1336-21-6	
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

**U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances**

• Blancol	9084-06-4	Not Listed
• Resorcinol	108-46-3	Not Listed
• 1,3-Butadiene	106-99-0	
• Formaldehyde	50-00-0	
• Carbon Black	1333-86-4	Not Listed
• Methanol	67-56-1	Not Listed
• Sodium hydroxide	1310-73-2	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Ammonium hydroxide	1336-21-6	Not Listed
• Water	7732-18-5	Not Listed
• Butadiene/Styrene/2-Vinylpyridine copolymer	25053-48-9	Not Listed

## 15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

## 15.3 Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

## Section 16 - Other Information

### Relevant Phrases (code & full text)

- H225 - Highly flammable liquid and vapour
- H301 - Toxic if swallowed
- H311 - Toxic in contact with skin
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H319 - Causes serious eye irritation
- H331 - Toxic if inhaled
- H332 - Harmful if inhaled
- H370 - Causes damage to organs.
- H400 - Very toxic to aquatic life
- R10 - Flammable.
- R11 - Highly flammable.
- R20 - Harmful by inhalation.
- R22 - Harmful if swallowed.
- R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.
- R34 - Causes burns.
- R36/38 - Irritating to eyes and skin.
- R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
- R50 - Very toxic to aquatic organisms.

### Last Revision Date

- 29/August/2014

### Preparation Date

- 01/June/2009

### Disclaimer/Statement of Liability

- The information contained herein is based on data considered accurate which has been obtained from other companies and organizations. However, no warranty or representation is expressed or implied that the information, is accurate, complete or representative. Firestone Fibers and Textiles Company, a subsidiary of Bridgestone Americas Holding, Inc. assumes no responsibility for injury to the buyer, the buyer's employees, or any third persons, if reasonable safety procedures are not followed. Additionally, Firestone Fibers and Textiles Company assumes no responsibility for injury to buyer, the buyer's employees, or any third persons caused by abnormal use of this material, even if reasonable safety procedures are followed.

### Key to abbreviations

NDA = No data available