# Safety Data Sheet

# **GenFlex Roofing Systems**

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

1.1 Product identifier	
Product Name	Pourable Sealer Part B
1.2 Relevant identified us	ses of the substance or mixture and uses advised against
Relevant identified use(s)	Construction
1.3 Details of the supplier	r of the safety data sheet
Manufacturer	<ul> <li>Firestone Building Products Company</li> </ul>
	250 West 96th Street Indianapolis, IN 46260 United States
	genflexmsds@bfdp.com
Telephone (General)	• 800-428-4442
1.4 Emergency telephone	e number
Manufacturer	• (800) 424-9300 - CHEMTREC
Manufacturer	<ul> <li>(703) 527-3887 - CHEMTREC - International</li> </ul>

#### **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	<ul> <li>Skin Irritation 2 - H315 Skin Sensitization 1 - H317 Eye Irritation 2 - H319 Acute Toxicity Inhalation 4 - H332 Respiratory Sensitization 1 - H334 Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335 Carcinogenicity 2 - H351 Reproductive Toxicity 2 - H361 Specific Target Organ Toxicity Repeated Exposure 2 - H373</li> </ul>
DSD/DPD	<ul> <li>Harmful (Xn) Irritant (Xi) Carcinogenic Substances - Category 3 Substances Toxic To Reproduction - Category 3 R20, R36/37/38, R40, R42/43, R48/20, R62, R63</li> </ul>
2.2 Label Elements	

#### CLP

#### DANGER



Hazard statements • H315 - Causes skin irritation

- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335 May cause respiratory irritation
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements

- Prevention . P201 - Obtain special instructions before use.
  - P202 Do not handle until all safety precautions have been read and understood.
  - P260 Do not breathe mist/vapours/spray.
  - P264 Wash thoroughly after handling.
  - P271 Use only outdoors or in a well-ventilated area.
  - P272 Contaminated work clothing should not be allowed out of the workplace.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P281 Use personal protective equipment as required.
  - P285 In case of inadequate ventilation wear respiratory protection.
- **Response** P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P321 - Specific treatment, see supplemental first aid information. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362 - Take off contaminated clothing and wash before reuse. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P308+P313 - IF exposed or concerned: Get medical advice/attention. P314 - Get medical advice/attention if you feel unwell. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. Storage/Disposal P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

#### DSD/DPD



Risk phrases	R20 - Harmful by inhalation.
	R36/37/38 - Irritating to eyes, respiratory system and skin.
	R40 - Limited evidence of a carcinogenic effect.
	R42/43 - May cause sensitisation by inhalation and skin contact.
	R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
	R62 - Possible risk of impaired fertility.
	R63 - Possible risk of harm to the unborn child.
Safety phrases •	S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	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 preparation is considered dangerous.

#### United States (US) According to OSHA 29 CFR 1910.1200 HCS

#### 2.1 Classification of the substance or mixture

 Skin Irritation 2 - H315 Skin Sensitization 1A - H317 Eye Irritation 2A - H319 Acute Toxicity Inhalation 4 - H332 Respiratory Sensitization 1A - H334 Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335 Reproductive Toxicity 2 - H361 Specific Target Organ Toxicity Repeated Exposure 1 - H372

#### 2.2 Label elements

OSHA HCS 2012



	· · ·
Hazard statements •	Causes skin irritation - H315 May cause an allergic skin reaction - H317 Causes serious eye irritation - H319 May cause allergy or asthma symptoms or breathing difficulties if inhaled - H334 Harmful if inhaled - H332 May cause respiratory irritation - H335 Suspected of damaging fertility or the unborn child H361 Causes damage to organs through prolonged or repeated exposure - H372
Precautionary statements	
Prevention •	Obtain special instructions before use P201 Do not handle until all safety precautions have been read and understood P202 Do not breathe mist/vapours/spray P260 Wash thoroughly after handling P264 Do not eat, drink or smoke when using this product P270 Use only outdoors or in a well-ventilated area P271 Contaminated work clothing should not be allowed out of the workplace P272 Wear protective gloves/protective clothing/eye protection/face protection P280 In case of inadequate ventilation wear respiratory protection P285
Response •	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P304+P340 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician P342+P311 IF ON SKIN: Wash with plenty of soap and water P302+P352 Specific treatment, see supplemental first aid information P321 If skin irritation or rash occurs: Get medical advice/attention P333+P313 Take off contaminated clothing and wash before reuse P362 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 Get medical advice/attention if you feel unwell P314
Storage/Disposal •	Store in a well-ventilated place. Keep container tightly closed P403+P233 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations P501
Supplemental information .	2-5 percent of this product consists of an ingredient of unknown toxicity.

# 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).

See Section 12 for Ecological Information.

# 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		
Polymethylene polyphenyl isocyanate	<b>CAS:</b> 9016-87-9	25% TO 50%	Ingestion/Oral-Rat LD50 • 49 g/kg Inhalation-Rat LC50 • 490 mg/m <sup>3</sup> 4 Hour(s) Skin-Rabbit LD50 • >9400 mg/kg	<b>EU DSD/DPD:</b> Self Classified: Xn, R20-40-48/20; Xn, R42/43, Xi, R36/37/38; Carc. 3 <b>EU CLP:</b> Self Classified: Acute Tox. 2, H330; STOT RE 2, H373; Eye Irrit. 2, H319; STOT SE 3: Resp. Irrit., H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; Carc. 2, H351 <b>OSHA HCS 2012:</b> Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1A; STOT SE 3: Resp. Irrit.; Resp. Sens. 1A; STOT RE 1 (Lung); Acute Tox. 2 (Mist)	NDA		
				<b>EU DSD/DPD:</b> Annex VI, Table 3.2: Xn; R20-48/20 Xi; R36/37/38 Carc.Cat.3; R40 R42/43			

Isocyanic acid, methylenedi-p- phenylene ester	<b>CAS:</b> 101-68-8 <b>EC</b> <b>Number:</b> 202- 966-0	25% TO 50%	Ingestion/Oral-Rat LD50 • 9200 mg/kg Inhalation-Rat LC50 • 178 mg/m <sup>3</sup>	<b>EU CLP:</b> Annex VI: Carc. 2, H351; Acute Tox. 3, H332; STOT RE 2, H373; Eye Irrit. 2, H319; STOT SE 3: Resp. Irrit., H335; Skin Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317 <b>OSHA HCS 2012:</b> Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; Resp. Sens. 1; STOT SE 3: Resp. Irrit.; Acute Tox. 4 (InhI); STOT RE 2 (Lungs)	NDA
Phthalic acid, diisodecyl ester	<b>CAS</b> :26761-40- 0 <b>EINECS</b> :247- 977-1	5% TO 20%	Ingestion/Oral-Rat LD50 • 64 g/kg Skin-Rabbit LD50 • >3160 mg/kg	Ingestion/Oral-Rat LD50 • 64 g/kg Skin-Rabbit LD50 • Skin-Rabbit LD50 • Skin-Rabbit LD50 •	
diphenylmethane-2,4'- diisocyanate	<b>CAS:</b> 5873-54-1 <b>EC</b> <b>Number:</b> 227- 534-9	2.5% TO 10%	NDA	EU DSD/DPD: Annex VI, Table 3.2: Xn; R20-48/20 Xi; R36/37/38 Carc.Cat.3; R40 R42/43 EU CLP: Annex VI: Acute Tox. 4, H332; STOT RE 2, H373; Eye Irrit. 2, H315; STOT SE 3: Resp. Irrit., H335; Skin Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317 OSHA HCS 2012: Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1A; STOT SE 3: Resp. Irrit.; Resp. Sens. 1A; STOT RE 1 (Lung)	NDA
Carbon Black	<b>CAS:</b> 1333-86-4 <b>EC</b> <b>Number:</b> 215- 609-9	<= 2.5%	Ingestion/Oral-Rat LD50 • >15400 mg/kg Skin-Rabbit LD50 • >3 g/kg	EU DSD/DPD: Self Classified: Carc. 3; R40 EU CLP: Self Classified: Carc. 2, H351 OSHA HCS 2012: Carc. 2	NDA

See Section 11 for Toxicological Information. See Section 16 for full text of H-statements and R-phrases.

# **Section 4 - First Aid Measures**

#### 4.1 Description of first aid measures

Inhalation	Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Get medical attention if symptoms occur.					
Skin	• In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Take off contaminated clothing and wash before reuse. If irritation develops and persists, get medical attention.					
Eye	In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.					
Ingestion	<ul> <li>Rinse out mouth and then drink plenty of water. Do NOT induce vomiting. Get medical attention immediately.</li> </ul>					
4.2 Most important symptom	oms and effects, both acute and delayed					
	Refer to Section 11 - Toxicological Information.					
4.3 Indication of any imme	diate 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	<ul> <li>CO2, extinguishing powder or water spray. Fight larger fires with water spray. Use fire extingusihing media as appropriate for surrounding conditions.</li> </ul>						
Unsuitable Extinguishing Media	<ul> <li>Do not use a direct stream of water.</li> </ul>						

# 5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards Hazardous Combustion Products

- Containers may explode when heated or if contaminated with water. Formation of toxic gases is possible during heating or in case of fire.
  - No data available

#### 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). Move fire exposed containers if safe to do so. Cool fire exposed containers with water spray. Dike contaminated fire-control water for later disposal.

#### **Section 6 - Accidental Release Measures**

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

on r croonar precaduo	ns, protective equipment and emergency procedures
Personal Precautions	<ul> <li>Do not walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist/vapours/spray. Avoid contact with skin, eyes, and clothing.</li> </ul>
Emergency Procedures	<ul> <li>As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Stay upwind. Keep out of low areas. Keep unauthorized personnel away. Ventilate closed spaces before entering.</li> </ul>
6.2 Environmental pred	autions
	<ul> <li>Avoid run off to waterways and sewers.</li> </ul>
6.3 Methods and mater	ial for containment and cleaning up
Containment/Clean-up Measures	<ul> <li>Stop leak if you can do it without risk. Cover spilled material with neutralization solution and mix Wait 15 minutes. Collect material in open-head metal containers. Repeat neutralization and cleaning process until surface is decontaminated. Apply drum lid but DO NOT secure. Allow containers to vent for 72 hours to let carbon dioxide escape. Neutralization solution 1: A mixture of 90% water. 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent.</li> </ul>

Neutralization solution 2: A mixture of 80% water, 20% non-ionic surfactant.

#### 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

 Use only with adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist/vapours/spray. Avoid contact with skin, eyes, and clothing. Prevent formation of aerosols. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

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

Storage

 Keep container tightly closed. Protect from atmospheric moisture. Do NOT store in containers made of copper, copper alloys, or galvanized surfaces. Uncontaminated containers, free of moisture, may be resealed only after placing under a nitrogen blanket. Store in a cool, dry, well-ventilated place. Store between 10°C (50°F) and 32°C (90°F).

# 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			
Carbon Black (1333-86-4)	TWAs	3 mg/m3 TWA (inhalable fraction)	3.5 mg/m3 TWA	5 mg/m3 TWA 3.5 mg/m3 TWA		3 mg/m3 TWA (inhalable fraction)			
TWAs Isocyanic acid, methylenedi-p-		0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))	0.005 ppm TWA; 0.052 mg/m3 TWA	0.005 ppm TWA; 0.05 mg/m3 TWA	0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))	0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))			
phenylene ester (101-68-8)	Ceilings	Not established	Not established	Not established	0.01 ppm Ceiling (listed under Methylene bisphenyl isocyanate (MDI))	Not established			
Polymethylene polyphenyl isocyanate (9016-87-9)	TWAs	Not established	Not established	0.005 ppm TWA; 0.07 mg/m3 TWA	Not established	Not established			
		Ex	posure Limits/Gui	delines (Con't.)					
	Result	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut	Canada Ontario			
Carbon Black	TWAs	3.5 mg/m3 TWA	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable fraction)	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable)			
(1333-86-4)	STELs	Not established	7 mg/m3 STEL	Not established	7 mg/m3 STEL	Not established			
Phthalic acid, diisodecyl ester (26761-40-0)	TWAs	Not established	Not established	Not established	Not established	5 mg/m3 TWA			
Isocyanic acid, methylenedi-p- phenylene ester (101-68-8)	TWAs	0.005 ppm TWA (listed under Methylene bisphenyl isocyanate); 0.051 mg/m3 TWA (listed under Methylene bisphenyl isocyanate)	Not established	0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))	Not established	0.005 ppm TWA (designated substances regulation, listed under Isocyanates, organic compounds (Methylene bisphenyl isocyanate (MDI))); 0.005 ppm TWA (applies to workplaces to which the designated substances regulation does not apply, listed under Methylene bisphenyl isocyanate (MDI))			
	Ceilings	Not established	Not established	Not established	Not established	0.02 ppm Ceiling (designated substances regulation, listed under Isocyanates, organic compounds			

								(Methylene bispher isocyanate (MDI)))
			Ex	posure Limits/Gui	idelines (Con't.)			
	Result	Canada	Quebec	Canada Saskatchewan	Canada Yukon	Deni	mark	Germany DFG
Carbon Black	TWAs	3.5 mg/m3 <sup>-</sup>	TWAEV	3.5 mg/m3 TWA	3.5 mg/m3 TWA	3.5 mg/m3	TWA	Not established
(1333-86-4)	STELs	Not establis	hed	Not established	7 mg/m3 STEL	Not establi	shed	Not established
Phthalic acid, diisodecyl ester (26761-40-0)	TWAs	Not established		Not established	Not established	3 mg/m3 T	WA	Not established
	TWAs	0.005 ppm TWAEV; 0.051 mg/m3 TWAEV		0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))	Not established	0.005 ppm 0.05 mg/m		Not established
Isocyanic acid, methylenedi-p- phenylene ester (101-68-8)	Ceilings	Not established		Not established	0.02 ppm Ceiling (Methylene bisphenyl isocyanate (MDI)); 0.2 mg/m3 Ceiling (Methylene bisphenyl isocyanate (MDI))	Not establi	shed	0.05 mg/m3 Peak (inhalable fraction)
MAKs		Not established		Not established	Not established	Not established		0.05 mg/m3 TWA MAK (see also polymeric MDI, inhalable fraction)
Polymethylene polyphenyl	Ceilings	Not established		Not established	Not established	Not established		0.05 mg/m3 Peak (inhalable fraction)
isocyanate (9016-87-9)	MAKs	Not established		Not established	Not established	Not established		0.05 mg/m3 TWA MAK (inhalable fraction)
				posure Limits/Gui	delines (Con't.)		u	
		Result	Germ	any TRGS	NIOSH		C	OSHA
Carbon Black (1333-86-4)		TWAs	Not estat	blished	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	
diphenylmethane- 2,4'-diisocyanate (5873-54-1)		TWAs 0.05 mg/m cceiling far exposure			Not established		Not established	
Ceilings		Not established		0.020 ppm Ceiling (10 min); 0.2 mg/m3 Ceiling (10 min)		0.02 ppm Ceiling; 0.2 mg/m3 Ceiling		
(The risk phenylene ester (101-68-8) TWAs TWAs		mg/m3 TWA AGW e risk of damage to embryo or fetus be excluded when V and BGW values observed, ceiling or 2, exposure			Not estab	ished		
Polymethylene			0.05 mg/r (The risk	n3 TWA AGW of damage to yo or fetus				

polyphenyl isocyanate (9016-87-9)	TWAs	can be excluded when AGW and BGW values are observed, inhalable fraction, as MDI, exposure factor 1)	Not established	Not established
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# **Exposure Control Notations**

#### **Germany TRGS**

•Polymethylene polyphenyl isocyanate (9016-87-9): Carcinogens: (Category 3 (as inhalable aerosol, alveola fraction)) | Developmental Toxins: (Based on current data, this substance cannot be classified in categories 1-3 (as inhalable aerosol, alveoli fraction)) | Reproductive Toxins: (Based on current data, this substance cannot be classified in categories 1-3 (as inhalable aerosol, alveola fraction)) | Germ Cell Mutagens: (Based on current data, this substance cannot be classified in categories 1-3 (as inhalable aerosol, alveola fraction)) | Skin: (skin notation (calculated as MDI))

•Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): Carcinogens: (Category 3 (as inhalable aerosol, alveola fraction)) | Developmental Toxins: (Based on current data, this substance cannot be classified in categories 1-3 (as inhalable aerosol, alveoli fraction)) | Reproductive Toxins: (Based on current data, this substance cannot be classified in categories 1-3 (as inhalable aerosol, alveola fraction)) | Germ Cell Mutagens: (Based on current data, this substance cannot be classified in categories 1-3 (as inhalable aerosol, alveola fraction)) Germany DFG

•Polymethylene polyphenyl isocyanate (9016-87-9): Carcinogens: (Category 4 (no significant contribution to human cancer)) | Pregnancy: (no risk to embryo/fetus if exposure limits adhered to (inhalable fraction)) | Sensitizers: (respiratory and skin sensitizer (inhalable fraction)) | Skin: (skin notation)

•Isocyanic acid, methylenedi-p-phenylene ester (101-68-8): Carcinogens: (Category 4 (no significant contribution to human cancer)) Pregnancy: (no risk to embryo/fetus if exposure limits adhered to (inhalable fraction, see also polymeric MDI)) | Sensitizers: (respiratory and skin sensitizer (inhalable fraction)) | Skin: (skin notation)

•Phthalic acid, diisodecyl ester (26761-40-0): Carcinogens: (Category 3B (could be carcinogenic for man))

•Carbon Black (1333-86-4): Carcinogens: (Category 3B (could be carcinogenic for man, inhalable fraction))

# 8.2 Exposure controls

Engineering Measures/Controls	This material is designed to be used outdoors, in roofing applications. 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.
<b>Personal Protective Equipment</b>	
	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 splash goggles.
Skin/Body	Wear appropriate gloves. Wear appropriate chemical resistant 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

TWAEV = Time-Weighted Average Exposure Value

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

# Section 9 - Physical and Chemical Properties

# 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Black liquid with a characteristic odor.
Color	Black	Odor	Characteristic

Odor Threshold	Data lacking	I	1
General Properties		•	U
Boiling Point	190 C(374 F)	Melting Point	Data lacking
Decomposition Temperature	Data lacking	рН	Data lacking
Specific Gravity/Relative Density	1.2 Water=1	Water Solubility	Insoluble
Solvent Solubility	Data lacking	Viscosity	Data lacking
Explosive Properties	Not explosive.	Oxidizing Properties:	Not an oxidizer.
Volatility		•	
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability		•	
Flash Point	111 C(231.8 F)	UEL	Data lacking
LEL	.4 %	Autoignition	400 C(752 F)
Flammability (solid, gas)	Not flammable.		
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 under normal temperatures and pressures.

#### **10.3 Possibility of hazardous reactions**

 MDI reacts slowly with water to form carbon dioxide gas. Reaction with water at high temperatures may be more severe, possibly rupturing sealed containers if contaminated with water.

#### **10.4 Conditions to avoid**

• Excess heat. Moisture .

#### **10.5 Incompatible materials**

• Water, amines, caustic alkali solutions, alcohols, ammonia, oxidizers, acids, polyols.

#### **10.6 Hazardous decomposition products**

• Carbon monoxide, carbon dioxide, Nitrogen oxides, Isocyanate, Hydrocarbons.

# **Section 11 - Toxicological Information**

# 11.1 Information on toxicological effects

Component Name	CAS	Data
Polymethylene polyphenyl isocyanate (25% TO 50%)	9016-87-9	Acute Toxicity: orl-rat LD50:49 gm/kg; ihl-rat LC50:490 mg/m3/4H; skn-rbt LD50:>9400 mg/kg; Irritation: eye-rbt 100 mg MLD; Reproductive: ihl-rat TCLo:12 mg/m3/6H (6-15D preg)
Isocyanic acid, methylenedi-p-phenylene ester (25% TO 50%)	1111-68-8	Acute Toxicity: orl-rat LD50:9200 mg/kg; Irritation: eye-rbt 100 mg MOD; skn-rbt 500 mg/24H

Phthalic acid, diisodecyl ester (5% TC	20%) 2676	51-40-0			
Carbon Black (<= 2.5%)	1333	8-86-4	Acute Toxicity: orl-rat LD50:>15400 mg/kg; skn-rbt LD50:>3 gm/kg; Tumorigen/Carcinogen: ihl-rat TCLo:11600 ug/m3/18H/2Y-l		
GHS Properties		Class	sification		
Acute toxicity			LP • Acute Toxicity - Inhalation 4 A HCS 2012 • Acute Toxicity - Inhalation 4		
Aspiration Hazard			LP • Classification criteria not met A HCS 2012 • Classification criteria not met		
Carcinogenicity			LP • Carcinogenicity 2 A HCS 2012 • Classification criteria not met		
Germ Cell Mutagenicity			LP • Classification criteria not met A HCS 2012 • Classification criteria not met		
Skin corrosion/Irritation			LP • Skin Irritation 2 A HCS 2012 • Skin Irritation 2		
Skin sensitization			E <b>LP ●</b> Skin Sensitizer 1 A HCS 2012 ● Skin Sensitizer 1A		
STOT-RE			EU/CLP • Specific Target Organ Toxicity Repeated Exposure 2 OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1		
STOT-SE		OSH	<b>EU/CLP</b> • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation <b>OSHA HCS 2012</b> • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation		
Toxicity for Reproduction		EU/CLP • Toxic to Reproduction 2 OSHA HCS 2012 • Toxic to Reproduction 2			
Respiratory sensitization			EU/CLP • Respiratory Sensitizer 1 OSHA HCS 2012 • Respiratory Sensitizer 1A		
Serious eye damage/Irritation			EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2A		
Target Organs Route(s) of entry/exposure Potential Health Effects Inhalation	<ul> <li>Lungs</li> <li>Inhalation, \$</li> </ul>	Skin, E	ye, Ingestion		
Acute (Immediate) Chronic (Delayed)			haled. May cause respiratory irritation. allergy or asthma symptoms or breathing difficulties if inhaled.		
Skin		n irritati	irritation. May cause skin sensitization. Symptoms include redness and		
Chronic (Delayed) • No data availa					
Acute (Immediate) • Causes seric Chronic (Delayed) • No data avail			e irritation.		

Ingestion

Acute (Immediate) Chronic (Delayed) Although swallowing this product is an unlikely means of exposure, irritation of the mouth, pharynx, esophagus and stomach can develop following ingestion.
No data available

# Other

#### Chronic (Delayed)

Causes damage to the lungs through prolonged or repeated exposure via Inhalation.

**Carcinogenic Effects** 

May cause cancer.

Carcinogenic Effects		
	CAS	IARC
Carbon Black	1333-86-4	Group 2B-Possible Carcinogen
Reproductive Effects	•	May cause adverse reproductive effects - such as birth defects, miscarriages or infertility based on animal data.
Key to abbreviations LC = Lethal Concentration LD = Lethal Dose MLD = Mild	MOD = Mo TC = Tox	derate xic 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

No PBT and vPvB assessment has been conducted.

#### 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

#### 

user 14.7 Transport in bulk

Not relevant.

according to Annex II of MARPOL 73/78 and the IBC Code Not releval

# **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	
Carbon Black	1333-86-4	Yes	Yes	Yes	
diphenylmethane- 2,4'-diisocyanate	5873-54-1	No	No	No	
Isocyanic acid, methylenedi-p- phenylene ester	101-68-8	No	No	Yes	
Phthalic acid, diisodecyl ester	26761-40-0	No	No	No	
Polymethylene polyphenyl isocyanate	9016-87-9	No	Yes	No	

			Inventory			
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
Carbon Black	1333-86-4	Yes	No	Yes	Yes	Yes
diphenylmethane- 2,4'-diisocyanate	5873-54-1	Yes	No	Yes	No	Yes
Isocyanic acid, methylenedi-p- phenylene ester	101-68-8	Yes	No	Yes	No	Yes
Phthalic acid, diisodecyl ester	26761-40-0	Yes	No	Yes	No	Yes
Polymethylene polyphenyl isocyanate	9016-87-9	Yes	No	No	No	Yes

# Belgium

La	ab	0	r	-

Belgium - Substances and Preparations - Carcinogens and Mutagens			
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed	
Carbon Black	1333-86-4	Not Listed	
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed	
I			

- Polymethylene polyphenyl isocyanate
- diphenylmethane-2,4'-diisocyanate

# Canada

		Uncontrolled product
Phthalic acid, diisodecyl ester	26761-40-0	according to WHMIS classification criteria
		D2A (In certain cases, this classification does not apply For more information, consul
• Carbon Black	1333-86-4	the section Substance Spec Issues - Carbon Black, non- respirable on Health Canada WHMIS Division website.)
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	D1A, D2A, D2B
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	D1A, D2A, D2B
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	Not Listed
Canada - WHMIS - Ingredient Disclosure List		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	1 %
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	0.1 %
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	Not Listed

9016-87-9

5873-54-1

Not Listed

Not Listed

Canada - 2004 NPRI (National Pollutant Release Inventory)		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Part 1, Group 1 Substance
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Part 1, Group 1 Substance
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
Canada - 2005 NPRI (National Pollutant Release Inventory)		
<ul> <li>Phthalic acid, diisodecyl ester</li> </ul>	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Part 1, Group 1 Substance
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Part 1, Group 1 Substance
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting		
<ul> <li>Phthalic acid, diisodecyl ester</li> </ul>	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
Canada - CEPA - Priority Substances List		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed

Format: EU CLP/REACH Language: English (US) WHMIS, EU CLP, EU DSD/DPD, OSHA HCS 2012

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diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
Canada - DWQ (Drinking Water Quality) - IMACs		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	Not Listed

Canada - Accelerated Reduction/Elimination of Toxics (ARET)		
<ul> <li>Phthalic acid, diisodecyl ester</li> </ul>	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	Not Listed

#### **Canada New Brunswick**

Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
anada - New Brunswick - Ozone Depleting Substances - Schedule I	В	
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
	101-68-8	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-00-0	
Isocyanic acid, methylenedi-p-phenylene ester Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed

# Denmark

Denmark - List of Undesirable Substances - Product Groups/Function		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	Binders; Curing agents; Glue Paints; Coatings; Molding compounds
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Binders; Curing agents; Glue Paints; Coatings; Molding compounds

#### Europe

Other EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	Xn; R20-48/20 Xi; R36/37/38 Carc.Cat.3; R40 R42/43

<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Xn; R20-48/20 Xi; R36/37/38 Carc.Cat.3; R40 R42/43
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	5%<=C: Xi; R:36/37/38 0.1% <=C: R:42
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	5%<=C: Xi; R:36/37/38 0.1% <=C: R:42
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	Xn R:20-36/37/38-40-42/43- 48/20 S:(1/2)-23-36/37-45
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Xn R:20-36/37/38-40-42/43- 48/20 S:(1/2)-23-36/37-45
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	C, 2
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	C, 2
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	S:(1/2)-23-36/37-45
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	S:(1/2)-23-36/37-45

# Germany

<ul> <li>Phthalic acid, diisodecyl ester</li> </ul>	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
ermany - Immission Control - Qualifying Quantities for Safet	y Reporting	
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
ermany - TRGS 505 - Specific Lead Regulations		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed

Carbon Black	1333-86-4	Not Listed	
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed	
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed	
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed	
Germany - TRGS 511 - Specific Ammonium Nitrate Regulations			
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed	
Carbon Black	1333-86-4	Not Listed	
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed	
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed	
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	Not Listed	
			I

- Environment		
Environment Germany - TA Luft - Types and Classes		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	organic Substance: 5.2.5, Class I
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	organic Substance: 5.2.5, Class I
Germany - TA Luft - Emission Limits for Carcinogenic Substances		
<ul> <li>Phthalic acid, diisodecyl ester</li> </ul>	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	Not Listed
Germany - TA Luft - Emission Limits for Fibers		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
Germany - TA Luft - Emission Limits for Inorganic Dusts		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
Germany - TA Luft - Emission Limits for Inorganic Gases		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
Germany - TA Luft - Emission Limits for Organic Substances		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
		0.10 kg/h Mass flow (Class I);
Les envers la constituit en estructura est la constituit en est en est en est	101 00 0	

Isocyanic acid, methylenedi-p-phenylene ester

20 mg/m3 Mass concentration

101-68-8

<ul> <li>Polymethylene polyphenyl isocyanate</li> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	9016-87-9 5873-54-1	(Class I) Not Listed 0.10 kg/h Mass flow (Class I); 20 mg/m3 Mass concentration (Class I)
Germany - Water Classification (VwVwS) - Annex 1		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed ID Number 1742, not
Carbon Black	1333-86-4	considered hazardous to water
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	Not Listed
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
Phthalic acid, diisodecyl ester	26761-40-0	ID Number 606, hazard class 1 - low hazard to waters
Carbon Black	1333-86-4	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	ID Number 635, hazard class 1 - low hazard to waters
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	Not Listed
Germany - Water Classification (VwVwS) - Annex 3		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed

# **United States**

Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
socyanic acid, methylenedi-p-phenylene ester	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
- OSHA - Specifically Regulated Chemicals		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
socyanic acid, methylenedi-p-phenylene ester	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed
r olymetrylene polyphenyl isocyanate		

Environment U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
<ul> <li>Phthalic acid, diisodecyl ester</li> </ul>	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	(listed under Methylene diphenyl diisocyanate)
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed

diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	5000 lb final RQ; 2270 kg final RQ
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
		1.0 % de minimis
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	concentration (listed under Chemical Category N120, Diisocyanates)
		1.0 % de minimis
Polymethylene polyphenyl isocyanate	9016-87-9	concentration (listed under Chemical Category N120, Diisocyanates)
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
Isocyanic acid, methylenedi-p-phenylene ester	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed

# **United States - California**

nvironment	
U.S California - Proposition 65 - Carcinogens List	

Phthalic acid, diisodecyl ester

.

• Carbon Black	1333-86-4	carcinogen, initial date 2/21/03 (airborne, unbound particles of
		respirable size)
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
Phthalic acid, diisodecyl ester	26761-40-0	developmental toxicity, initial date 4/20/07
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
Phthalic acid, diisodecyl ester	26761-40-0	2200 µg/day MADL
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
<ul> <li>Phthalic acid, diisodecyl ester</li> </ul>	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	Not Listed
Polymethylene polyphenyl isocyanate	9016-87-9	Not Listed
diphenylmethane-2,4'-diisocyanate	5873-54-1	Not Listed

# **United States - Pennsylvania**

nthalic acid, diisodecyl ester	26761-40-0	Not Listed
Carbon Black	1333-86-4	Not Listed
<ul> <li>Isocyanic acid, methylenedi-p-phenylene ester</li> </ul>	101-68-8	
<ul> <li>Polymethylene polyphenyl isocyanate</li> </ul>	9016-87-9	Not Listed
<ul> <li>diphenylmethane-2,4'-diisocyanate</li> </ul>	5873-54-1	Not Listed
U.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances		
Phthalic acid, diisodecyl ester	26761-40-0	Not Listed

•	Isocyanic acid, methylenedi-p-phenylene ester Polymethylene polyphenyl isocyanate	101-68-8 9016-87-9 5873-54-1	Not Listed Not Listed
•	diphenylmethane-2,4'-diisocyanate	5873-54-1	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)

Last	Revision	Date

# • 08/May/2014

H330 - Fatal if inhaled

Preparation Date

• 22/July/2011

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#### Key to abbreviations

NDA = No Data Available