# TNEMEC

# **Material Safety Data Sheet**

Preparation Date: 30-Dec-2009 Revision Date: 29-Dec-2009 Revision Number: 0

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Code F264-0264A

Trade Name ELASTO-SHIELD BLACK

Contact Manufacturer Emergency Telephone Number Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 800-535-5053 (INFOTRAC) - TNEMEC REGULATORY DEPT: 816-474-3400

# 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

# WARNING!

COMBUSTIBLE LIQUID AND VAPOR.
HARMFUL IF INHALED.
HARMFUL OR FATAL IF SWALLOWED.

MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.

# **Potential Health Effects**

**Principle Routes of Exposure** Eye contact, Inhalation, Skin contact.

Acute Effects

**Eyes** Moderately irritating to the eyes.

**Skin** Irritating to skin. May cause sensitization by skin contact.

InhalationIrritating to respiratory system.IngestionMay be harmful if swallowed.

#### **Chronic Effects**

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Central nervous system. Kidney disorders. Skin disorders.

Potential Environmental Effects See Section 12 for additional Ecological information

Target Organ Effects Central nervous system, Eyes, Kidney, Respiratory system, Skin

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Hazardous Components** 

Component CAS-No Weight %
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3. COMPOSITION/INFORMATION ON INGREDIENTS					
ASPHALT (PETROLEUM) FUMES 8052-42-4 60 - 100					
MINERAL SPIRITS, AS STODDARD 8052-41-3 9 SOLVENT					
AMINE COMPOUNDS 5 - 10					
XYLENE 1330-20-7 0.35					

## 4. FIRST AID MEASURES

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes.

**Skin Contact** Wash off immediately with soap and plenty of water.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Inhalation Move to fresh air. Oxygen or artificial respiration if needed.

#### 5. FIRE-FIGHTING MEASURES

Combustible material. Flammable Properties

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding

environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO2) -

Foam - Dry chemical

Hazardous Decomposition Products Oxides of carbon, hydrocarbons.

## Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

# **Protective Equipment and Precautions for Firefighters**

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. May cause heat and pressure build-up in closed containers. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

# ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all

sources of ignition.

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary

sewer system.

**Methods for Cleaning Up** If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

Other Information Not applicable

# 7. HANDLING AND STORAGE

# Handling

Close container after each use. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

#### Storage

Keep away from heat, sparks and flame. Use only in an area containing flame proof equipment. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

# **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
ASPHALT (PETROLEUM)	TWA: 0.5 mg/m <sup>3</sup>		TWA: 5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> STEL:
FUMES	_		_	_	10 mg/m <sup>3</sup>
MINERAL SPIRITS, AS	TWA: 100 ppm	TWA: 100 ppm TWA:	TWA: 525 mg/m <sup>3</sup> TWA:	TWA: 525 mg/m <sup>3</sup>	TWA: 523 mg/m <sup>3</sup> TWA:
STODDARD SOLVENT		525 mg/m <sup>3</sup> TWA: 2900	100 ppm		100 ppm STEL: 1050
		mg/m <sup>3</sup> TWA: 500 ppm			mg/m <sup>3</sup> STEL: 200 ppm
XYLENE	TWA: 100 ppm STEL:	TWA: 435 mg/m <sup>3</sup> TWA:	TWA: 434 mg/m <sup>3</sup> TWA:	TWA: 100 ppm TWA:	TWA: 435 mg/m <sup>3</sup> TWA:
	150 ppm	100 ppm STEL: 150	100 ppm STEL: 150	435 mg/m <sup>3</sup> STEL: 150	100 ppm STEL: 150
		ppm STEL: 655 mg/m <sup>3</sup>	ppm STEL: 651 mg/m <sup>3</sup>	ppm STEL: 650 mg/m <sup>3</sup>	ppm STEL: 655 mg/m <sup>3</sup>

Engineering Measures Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment** 

Skin Protection Eye/face Protection Respiratory Protection Lightweight protective clothing, Apron, Impervious gloves Goggles. If splashes are likely to occur, wear face-shield.

**Use only with adequate ventilation.** Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application.

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Follow respirator manufacturer's directions for respirator use.

General Hygiene Considerations

When using, do not eat, drink or smoke Regular cleaning of equipment, work area and clothing Avoid contact with skin, eyes and clothing Wash hands before breaks and

immediately after handling the product Keep away from food, drink and animal feeding stuffs

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Flash Point** 38°C / 101.0°F

MethodPensky Martens - Closed CupBoiling Point/Range154 - 202°C / 310.0 - 395.0°FUpper Exposure LimitsNo information available

Lower Exposure Limits

Evaporation Rate

Vapour Pressure

Vapour Density

No information available
No information available
No information available
No information available

Vapour DensityNo information availaSpecific Gravity1.09440

Density9.10705VOC Content (lbs/gal).852% Volatile by Weight9.3500% Volatile by Volume13.1278

# 10. STABILITY AND REACTIVITY

Chemical stability Stable. Conditions to Avoid Heat, flames and sparks.

Incompatible Products Strong oxidizing agents. Possibility of Hazardous None under normal processing

Reactions

# 11. TOXICOLOGICAL INFORMATION

# **Acute Toxicity**

#### **Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
ASPHALT (PETROLEUM) FUMES	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	
XYLENE	4300 mg/kg (Rat)	1700 mg/kg (Rabbit)	47635 mg/L (Rat) 4 h 5000 ppm (
			Rat ) 4 h

Irritation No information available Corrosivity No information available Sensitization No information available

**Chronic Toxicity** 

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

**Mutagenic Effects** No information available **Reproductive Effects** No information available **Developmental Effects** No information available **Teratogenicity** No information available

**Target Organ Effects** Central nervous system, Eyes, Kidney, Respiratory system, Skin.

**Endocrine Disruptor Information** No information available

# 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
XYLENE		LC50= 13.4 mg/L Pimephales	EC50 = 0.0084 mg/L 24 h	EC50 = 3.82 mg/L 48 h LC50
		promelas 96 h LC50= 8.05		= 0.6 mg/L 48 h
		mg/L Oncorhynchus mykiss 96		
		h LC50= 16.1 mg/L Lepomis		
		macrochirus 96 h LC50= 26.7		
		mg/L Pimephales promelas 96		
		h		

# 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in accordance

with local, state and federal regulations.

Empty containers should be taken for local recycling, recovery or waste disposal **Contaminated Packaging** 

# 14. TRANSPORT INFORMATION

**DOT** Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.

PAINT IN OIL **Proper Shipping Name** 

# 15. REGULATORY INFORMATION

## **International Inventories**

TSCA Complies Complies

EINECS/ELINCS

CHINA

Does not Comply
ENCS

Does not Comply
ENCS

Does not Comply
FICCS

Does not Comply
PICCS

Does not Comply
PICCS

Does not Comply
AICS

Component XYLENE

# **U.S. Federal Regulations**

## **SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values
XYLENE	1330-20-7	0.35	1.0

# SARA 311/312 Hazardous Categorization

Chronic Health Hazard Yes
Acute Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE	100 lb			X

# **CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs
XYLENE	100 lb	

# **U.S. State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals:

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
ASPHALT (PETROLEUM)	X	X	X		X
FUMES					
MINERAL SPIRITS, AS	X	X	X		X
STODDARD SOLVENT					
XYLENE	X	X	X	X	X

# **Other International Regulations**

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#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

## **WHMIS Hazard Class**

B3 Combustible liquid D2B Toxic materials



Component	NPRI
MINERAL SPIRITS, AS STODDARD SOLVENT	Part 5 Substance
XYLENE	Part 1, Group 1 Substance; Part 5 Substance

# Legend

NPRI - National Pollutant Release Inventory

## 16. OTHER INFORMATION

**Revision Date:** 29-Dec-2009

**Revision Summary** No information available

**HMIS** Health 2 Flammability 2 Reactivity 1

#### Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

**End of MSDS** 

# TNEMEC

# **Material Safety Data Sheet**

Preparation Date: 04-Jan-2010 Revision Date: 29-Dec-2009 Revision Number: 0

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Code B264-0265B

Trade Name F264/F265 CONVERTER

Contact Manufacturer Emergency Telephone Number Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 800-535-5053 (INFOTRAC) - TNEMEC REGULATORY DEPT: 816-474-3400

# 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

# DANGER!

HARMFUL IF INHALED. MAY CAUSE LUNG INJURY.

MAY CAUSE ALLERGIC RESPIRATORY REACTION; EFFECTS MAY BE PERMANENT.
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.
HARMFUL OR FATAL IF SWALLOWED.

# **Potential Health Effects**

**Principle Routes of Exposure** Eye contact, Inhalation, Skin contact.

**Acute Effects** 

**Eyes** Moderately irritating to the eyes. Risk of serious damage to eyes. **Skin** Irritating to skin. May cause sensitization by skin contact.

Inhalation Irritating to skin. May cause sensitization by skin contact.

Irritating to skin. May cause sensitization by skin contact.

Irritating to skin. May cause sensitization by skin contact.

**Ingestion** May be harmful if swallowed.

**Chronic Effects** 

Avoid repeated exposure

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions No information available

**Interactions with Other Chemicals** Use of alcoholic beverages may enhance toxic effects.

Potential Environmental Effects See Section 12 for additional Ecological information

Target Organ Effects Eyes, Respiratory system

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Hazardous Components** 

3. COMPOSITION/INFORMATION ON INGREDIENTS					
DIPHENYLMETHANE DIISOCYANATE (MDI) 39310-05-9 60 - 100 POLYMER					
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER	101-68-8	18.86			

## 4. FIRST AID MEASURES

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes.

**Skin Contact** Wash off immediately with soap and plenty of water.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Inhalation Move to fresh air. Oxygen or artificial respiration if needed.

# 5. FIRE-FIGHTING MEASURES

Flammable Properties No information available.

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding

environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO2) -

Foam - Dry chemical

Hazardous Decomposition Products Oxides of carbon, hydrocarbons. Oxides of nitrogen. Hydrogen cyanide.

#### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

# **Protective Equipment and Precautions for Firefighters**

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. May cause heat and pressure build-up in closed containers.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all

sources of ignition.

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary

sewer system.

**Methods for Cleaning Up** If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated

absorbent, container and unused contents in accordance with local, state and federal

regulations.

Other Information Not applicable

# 7. HANDLING AND STORAGE

# Handling

Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

#### Storage

Close container after each use. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
DIPHENYLMETHANE	TWA: 0.005 ppm	Ceiling: 0.2 mg/m <sup>3</sup>	TWA: 0.051 mg/m <sup>3</sup>	TWA: 0.2 µmol/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA:
DIISOCYANATE (MDI)		Ceiling: 0.02 ppm	TWA: 0.005 ppm	TWA: 0.005 ppm CEV:	0.005 ppm TWA: 0.051
REACTIVE MONOMER				0.02 ppm CEV: 0.8	mg/m <sup>3</sup> TWA: 0.02 ppm
				µmol/m <sup>3</sup>	

**Engineering Measures** Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment** 

Skin Protection **Eye/face Protection Respiratory Protection**  Lightweight protective clothing, Apron, Impervious gloves

Safety glasses with side-shields

INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS OR PRIOR REACTION TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOR OR SPRAY MIST. Do not breathe vapor or spray mist. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits. An airline respirator (TC 19C NIOSH/MSHA) is recommended. A vaporparticulate respirator (TC 23C NIOSH/MSHA) may be appropriate where air monitoring demonstrates vapors are less than ten times the applicable exposure limits and the isocyanate concentration is less than its applicable exposure limit. The use of an air-supplied respirator is mandatory whenever the airborne concentration of isocyanate monomer is

unknown.

**General Hygiene** Considerations

Handle in accordance with good industrial hygiene and safety practice.

Avoid breathing dust created by cutting, sanding, or grinding.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Flash Point** 121°C / 250.0°F

Pensky Martens - Closed Cup Method **Boiling Point/Range** No information available **Upper Exposure Limits** No information available **Lower Exposure Limits** No information available **Evaporation Rate** No information available **Vapour Pressure** 

No information available **Vapour Density** No information available

**Specific Gravity** 1.20233 **Density** 10.00522 **VOC Content (lbs/gal)** .000 % Volatile by Weight .0000 % Volatile by Volume .0000

# 10. STABILITY AND REACTIVITY

**Conditions to Avoid** Chemical stability Stable. Heat, flames and sparks.

Amines.

**Incompatible Products** Water, alcohols, amines, strong Possibility of Hazardous None under normal processing

> bases, metal components, Reactions

surface active materials.

# 11. TOXICOLOGICAL INFORMATION

# 11. TOXICOLOGICAL INFORMATION

#### **Acute Toxicity**

# **Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
DIPHENYLMETHANE	9200 mg/kg (Rat)		
DIISOCYANATE (MDI) REACTIVE			
MONÔMEŔ			

Irritation No information available Corrosivity No information available Sensitization No information available

**Chronic Toxicity** 

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

**Mutagenic Effects** No information available **Reproductive Effects** No information available **Developmental Effects** No information available Teratogenicity No information available **Target Organ Effects** Eyes, Respiratory system.

**Endocrine Disruptor Information** No information available

# 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

# 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Keep container tightly closed. If spilled, contain spilled material and remove with inert

absorbent. Dispose of contaminated absorbent, container and unused contents in accordance

with local, state and federal regulations.

**Contaminated Packaging** Empty containers should be taken for local recycling, recovery or waste disposal

# 14. TRANSPORT INFORMATION

DOT Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.

# 15. REGULATORY INFORMATION

# **International Inventories**

Complies **TSCA** DSL/NDSL Complies Does not Comply **EINECS/ELINCS** Complies **CHINA** 

**ENCS** Does not Comply

**KECL** Complies **PICCS** Complies

# **AICS**

Complies

# **U.S. Federal Regulations**

## **SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER	101-68-8	18.86	1.0

# SARA 311/312 Hazardous Categorization

Chronic Health Hazard	Yes
Acute Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

# **CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE	5000 lb	
MONOMER		

# **U.S. State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals:

State Right-to-Know

Ctate Itigite to Itilon					
Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
DIPHENYLMETHANE	X	X	X	X	X
DIISOCYANATE (MDI)					
REACTIVE MONOMER					

# Other International Regulations

# Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

# **WHMIS Hazard Class**

D2A Very toxic materials

Component	NPRI
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER	Part 1, Group 1 Substance

# Legend

NPRI - National Pollutant Release Inventory

# 16. OTHER INFORMATION

**Revision Date:** 29-Dec-2009

**Revision Summary** No information available

**HMIS** Health 3 Flammability 1 Reactivity 2

#### Disclaimer

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**End of MSDS**