

# **Safety Data Sheet** US HCS, UN GHS, WHMIS 2015

#### Section 1: Company and Product Identification

#### 1.1. Product Identification:

Product Name: MCO® Outerwrap 110

**Product Code(s):** MCO110-04-04, MCO110-04-12, MCO110-04-27, MCO110-06-27,

MCO110-09-40

#### 1.2. Product use(s) and applications advised against:

Product use(s): Mechanical protection

Applications advised against: Consult technical data sheet

#### 1.3. Details of the Supplier of the Safety Data Sheet

Company: Trenton Corp.

7700 Jackson Road Ann Arbor, MI 48103 PH: 734-424-3600

Emergency Response:

CHEMTREC (24 hrs): 800-424-9300

## Section 2: Hazards Identification

#### 2.1 Classification of the Substance or Mixture

Hazard Category: Skin corrosion/irritation Cat 2

Serious eye damage/eye irritation Cat 2

Specific target organ tox, single exp. Cat 3 (resp irrit)

Sensitization, skin Cat 1 Sensitization, resp. Cat 1

Specific target organ tox, repeat exp. Cat 2

Acute tox, inh. Cat 4

#### 2.2 GHS Label Elements

Signal Word: Danger

GHS07 GHS08

Hazard Pictograms:





Hazard Statements: H315: Causes skin irritation

H319: Causes serious eye irritation H335: May cause respiratory irritation H317: May cause an allergic skin reaction

H334: May cause allergy or asthma symptoms or breathing difficulties if

inhaled

H373: May cause damage to organs through prolonged or repeated exposure

H332: Harmful if inhaled

Precautionary P203: Obtain, read and follow until all safety precautions have been read and understood

Statements: P233: Keep container tightly closed

P260: Do not breathe dust/fume/gas/mist/vapours/spray

P264: Wash thoroughly after handling

P265: Do not touch eyes

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

P284: In case of inadequage ventilation, wear respiratory protection

P304+340, 342+316: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Get emergency help immediately.

P302+352, 333+317, 362+364: **IF ON SKIN**: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get emergency medical help.

P305+351+338, 337+317: **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 emergency medical help.

P318: If exposed or concerned, get medical advice.

P403+233, 405: Store in a well ventilated place. Keep container tightly closed. Store locked up. P501: Dispose of contents/container in accordance with local/regional/national/international rules.

2.3 Other Hazards Not applicable, none known.

#### Section 3: Composition / Information on Ingredients

#### 3.1 Hazardous Components

Hazardous substance (name)	CAS#	Weight %	GHS Classification
isocyanates, reaction product of polyol with	53862-89-8	10-20	Skin Irrit 2 (H315), Skin Sens 1, Eye Irrit 2
diphenylmethane 4,4'-diisocyanate	101-68-8	5-12	Skin Irrit 2 (H315), Skin Sens 1, Eye Irrit 2
methylenediphenyldiisocyanate, isomers	9016-87-9	2-8	Skin Irrit 2 (H315), Skin Sens 1, Eye Irrit 2
diphenylmethane-2,4'-diisocyanate	5873-54-1	2-8	Skin Irrit 2 (H315), Skin Sens 1, Eye Irrit 2
Fiber Glass fabric heat cleaned and silane			
treated	65997-17-3	50-75	Not Classified
carbon black	1333-86-4	<2	See Section 8

Information regarding the exact chemical identity or concentration of certain substances may be reserved as a trade secret as per 29 CFR 1910.1200(i).

#### 3.2 Other Information None

#### **Section 4: First Aid Measures**

#### 4.1 Description of First Aid Measures

Eye contact:

General Info: Product may give off vapors in affecting the inhalation route. Ensure proper ventilation during

application / curing. Seek medical treatment if any excessive exposures result in symptoms.

If ingested: Not an expected route of exposure for product.

If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms:

Get emergency help immediately.

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do –

continue rinsing. If eye irritation persists: Get emergency medical help.

Skin contact: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin

irritation or rash occurs: Get emergency medical help. A PEG-400 oil, or corn oil may be an effective

skin cleanser.

#### 4.2 Most Important Symptoms and Effects, Acute and Delayed

Notable Exposure symptoms:

Contains isocyanates. An allergic or asthmatic response (sensitzation reaction), may occur in some

exposed individuals. If these symptoms occur, seek medical attention immediately.

#### Section 5: Fire Fighting Measures

**5.1 Extinguishing Media** Carbon dioxide (CO2), dry chemical, foam.

5.2 Special Hazards Arising from

Mixture

Product will sustain burning. Constituents associated with burning / combustion are to be considered

toxic.

5.3 Advice for Firefighters / Protective

equipment

Firefighters should wear self-contained breathing apparatus (SCBA) and full protective equipment.

Direct water spray may spread fire.

#### Section 6: Accidental Release Measures

**6.1** Personal precautions, protective equipment and procedures:

Product is a solid / tape wrap. Clean up mechanically, manually. Wear appropriate protective equipment and clothing during clean-up operations. Avoid breathing

vapors. Ventilate area if easy to do so.

6.2 Environmental Precautions: No special precautions.

6.3 Methods and Materials for Containment and Cleanup

Solid material can be collected and gathered mechanically.

**6.4 References to Other Sections** For personal protection, see section 8 of the SDS. For disposal information, Section

13.

7.1 Precautions for Safe Handling Do not handle until all safety precautions have been read and understood. Ensure

adequate ventilation. Avoid breathing vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective

equipment.

7.2 Recommendations for Storage: Store in cool area. Store away from strong acids or oxidizing agents. Refer to Section

10.

#### Section 8: Exposure Control / Personal Protection

#### 8.1 Components with Exposure Control Limits

Substances with Exposure Limits	CAS#		ACGIH-TLV	NIOSH-REL	OSHA-PEL
				0.005 ppm	
		TWA	0.005 ppm	(0.05 mg/m3)	-
				0.02 ppm	
diphenylmethane 4,4'-diisocyanate	101-68-8	C		(0.2 mg/m3)	0.2 mg/m3
				0.005 ppm	
		TWA		(0.05 mg/m3)	
Diphenylmethane diisocyanate,				0.02 ppm	
polymeric	9016-87-9	C		(0.2 mg/m3)	0.2 mg/m3
				0.005 ppm	
		TWA		(0.05 mg/m3)	
				0.02 ppm	
2,4'-methylenediphenyl diisocyanate	5873-54-1	C		(0.2 mg/m3)	0.2 mg/m3
					15 mg/m3 (Tot)
Fiberglass*	65997-17-3	TWA	5 mg/m3		5 mg/m3 (Resp)
			3 mg/m3		
carbon black*	1333-86-4	TWA	(inhalable)		3.5 mg/m3
*Material is bound in resin matrix and not respirable during normal use.					

#### 8.2 Exposure Controls

Engineering Ensure proper ventilation in enclosed spaces.

Controls:

Work Clothing: Protective work clothing which covers skin and prevents exposures.

Eye/face protection: Safety glasses.

Skin Protection: Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based

on the results of an exposure assessment. Selection shall be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection

of appropriate compatible gloves/protective clothing.

Gloves made from the following materials are recommended:

Material	Thickness (mm)	Breakthrough Time
Butyl Rubber	0.5	=> 8 hrs
Nitrile Rubber	0.35	=> 8 hrs

The glove data are based on the substance driving dermal toxicity and conditions present at the time of testing. Breakthrough time may be altered when glove is subjected to use conditions that place additional stress on glove.

Gloves should be changed a minimum of every 30 minutes

Respiratory Protection: Utilize organic vapor respirator if airborne levels are not maintained below exposure limits, or if ventilation is

inadequate.

Environmental Exposure Controls: No special considerations. Avoid release of material to surface waters.

Additional Information: Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash hands or exposed

skin after using the product. Cutting or grinding of the product may release substances which require monitoring

(see chart above).

### Section 9: Physical and Chemical Properties

9.1 Physical/Chemical Properties

State: Solid, Tape Melting Point: Not available Freezing Point: Not available Color: Black Boiling ~150C pH Not available

Point/Range:

Sp. Grav. ~1.14 Odor: Slight musty Water Solubility: NA - water reactive Evaporation rate: Not available Flash Point: 113C (235F) Part. Coeff Not available Upper Flam Limits: Not available Lower Not available Vapor Pressure: Not available VOC Content Not available Viscosity: Not available Autoignition Temp: Not available

(lbs/gal):

9.2 Other Information No further information.

#### Section 10: Stability and Reactivity

10.1 Reactivity This product will react with water / moisture, producing CO2 gas. Exothermic reaction with materials containing

active hydrogen groups.

10.2 Chemical Stability Product is stable at room temperature. Polymerization may occur at elevated temperatures in the presence of

alkalis, tertiary amines, and metal compounds.

10.3 Possibility of Hazardous reactions or instability may occur under certain conditions of use.

Hazardous Reactions

10.4 Conditions to Avoid Avoid extreme temperatures, flame, oxidizers, and acids / bases.

10.5 Incompatible Materials Water, alcohols, amines, strong acids/bases. 10.6 Hazardous Carbon monoxide, carbon dioxide, nitrogen oxides

**Decomposition Products** 

#### Section 11: Toxicological Information

#### 11.1 Information on Toxicological Effects

General Product has not been tested. Potentially irritating or sensitizing to respiratory system.

Information:

Acute Toxicity (Oral): Product has not been tested. Not expected to pose an acute oral toxicity hazard.

Acute Toxicity (Dermal): Skin contact is not expected to pose a dermal toxicity hazard.

Acute Toxicity (Inhalation): Product has not been tested. Calculated ATE = 1.05 - Acute Inhalation Toxicity, Category

Skin Corrosion / Irritation: Skin irritant

Eye Corrosion / Irritation: Eye / mucous membrane irritant.

Sensitization: Persons already sensitized to diisocyanages may develop allergic reactions when using this product. Presons

suffering from asthma, eczema or skin problems should avoid contact, including dermal contact with this product.

Carcinogenicity / Contains no materials >0.1% that have been classified as to carcinogenicity by IARC, NTP or OSHA, with the Mutagenicity: exception of Carbon Black (IARC Class 2B). However, since carbon black particulates are bound in a resin matrix,

they are not available for inhalation and therefore not classifiable as to carcinogenicity.

### **Toxicological Information**

#### (contained substances)

Hazardous substance (name)	LD50 Oral	LD50 Dermal	LC50 Inh	Irritancy:
isocyanates, reaction product of polyol with				·
methylenediphenyl diisocyanate	>10000 mg/kg (rat)	>9400 mg/kg (rabbit)	0.49 mg/l (4h, rat)	Eye / Skin / Resp
diphenylmethane 4,4'-diisocyanate	>2000 mg/kg (rat)	>9400 mg/kg (rabbit)	431.18 mg/m3 (4h, rat)	Eye / Skin / Resp
methylenediphenyldiisocyanate, isomers				
and homologues	>10000 mg/kg (rat)	>9400 mg/kg (rabbit)	431.18 mg/m3 (4h, rat)	Eye / Skin / Resp
diphenylmethane-2,4'-diisocyanate	>10000 mg/kg (rat)	>9400 mg/kg (rabbit)	431.18 mg/m3 (4h, rat)	Eye / Skin / Resp
Fiber Glass fabric heat cleaned and silane			-	
treated	ND	ND	ND	ND
carbon black	>8000 mg/kg (rat)	ND	ND	ND

#### 11.2 Information on Other Hazards

None known.

#### **Section 12: Ecological Information**

12.1 Toxicity Product has not been tested, however, once cured, it is inert. Component data provided

when available for informational purposes.

Acute Aquatic Ecotoxicity: Not Classified

Ingredient	CAC#	Test/Results
Ingredient	L (A)#	Test/ Nesulis

		Aquatic Toxicity Fish: LC50 >1000 mg/L (96-h),
		Brachydanio rerio (zebrafish), static - freshwater, OECD Guideline 203
		Aquatic Toxicity Invertebrates: EC50 >1000 mg/L (24-h),
isocyanates, reaction product of polyol with		Daphnia magna (Water flea), static - freshwater, OECD
methylenediphenyl diisocyanate	53862-89-8	Guideline 202
		Aquatic Toxicity Fish: LC50 >100 mg/L (96-h), Brachydanio rerio (zebrafish), static - freshwater, OECD Guideline 203
		Aquatic Toxicity Invertebrates: EL50 > 9 mg/L (48-h),
		Daphnia magna (Water flea), semi-static - freshwater, OECD Guideline 202
		Aquatic Algae/Aquatic plants: EC50 > 100 mg/L (72-h),
		Desmodesmus subspicatus (green algae), static - freshwater,
diphenylmethane 4,4'-diisocyanate	101-68-8	OECD Guideline 201
		Aquatic Toxicity Fish: LC50 >1000 mg/L (96-h), Brachydanio rerio (zebrafish), static - freshwater, OECD
		Guideline 203
		Aquatic Toxicity Invertebrates: EL50 >31.7 mg/L (48-h),
		Daphnia magna (Water flea), semi-static - freshwater, OECD
		Guideline 202
		Aquatic Algae/Aquatic plants: EC50 >100 mg/L (72-h),
methylenediphenyldiisocyanate, isomers		Desmodesmus subspicatus (green algae), static - freshwater,
and homologues	9016-87-9	OECD Guideline 201
		Aquatic Toxicity Fish: LL50 > 100 mg/L (96-h), Brachydanio
		rerio (zebrafish), static - freshwater, OECD Guideline 203 Aquatic Toxicity Invertebrates: EL50 > 3.7 mg/L (48-h),
		Daphnia magna (Water flea), semi-static - freshwater, OECD
		Guideline 202
		Aquatic Algae/Aquatic plants: EL10 > 100 mg/L (72-h),
		Desmodesmus subspicatus (green algae), static - freshwater,
diphenylmethane 2,4'-diisocyanate	5873-54-1	OECD Guideline 201
		Aquatic Toxicity Fish: LC0 > 1000 mg/L (96-h), Brachydanio
		rerio (zebrafish), static - freshwater, OECD Guideline 203 Aquatic Toxicity Invertebrates: EC50 > 5600mg/L (24-h),
		Daphnia magna (Water flea), semi-static - freshwater, OECD
		Guideline 202
		Aquatic Algae/Aquatic plants: EC50 >10,000 mg/L (NOEC)
	1222 06 4	(72-h), Scenedesmus subspicatus (green algae), static -
Carbon black	1333-86-4	freshwater, OECD Guideline 201

Chronic Aquatic Ecotoxicity:

Does not meet classification criteria

Ingredient	CAS#	Test/Results
		Aquatic Toxicity Invertebrates: NOEC >=10 mg/L (21-d),
isocyanates, reaction product of polyol with		Daphnia magna (Water flea), static - freshwater, OECD
methylenediphenyl diisocyanate	53862-89-8	Guideline 211
		Aquatic Toxicity Invertebrates: NOEC >=10 mg/L (21-d),
		Daphnia magna (Water flea), static - freshwater, OECD
diphenylmethane 4,4'-diisocyanate	101-68-8	Guideline 211
		Aquatic Toxicity Invertebrates: NOEC >=10 mg/L (21-d),
methylenediphenyldiisocyanate, isomers		Daphnia magna (Water flea), static - freshwater, OECD
and homologues	9016-87-9	Guideline 211
		Aquatic Toxicity Invertebrates: NOEC >=10 mg/L (21-d),
		Daphnia magna (Water flea), static - freshwater, OECD
diphenylmethane 2,4'-diisocyanate	5873-54-1	Guideline 211

12.2 Persistence and Degradability

No specific data available. Product is not expected to rapidly degrade.

12.3 Bioaccumulation Potential No specific data available. Product is not expected to bioaccumulate in biological

tissue.

12.4 Mobility in Soil No further information available.

12.5 Results of PBT and Assessment not carried out. Product does not contain any PBT / vPvB

vPvB Assessment constituents.

12.6 Endocrine Disrupting Properties Does not contain any endocrine disrupting substances.

12.7 Other Adverse Effects No further information available.

#### Section 13: Disposal Information

#### 13.1 Waste Treatment Methods

Product disposal: Dispose of product in accordance with local, regional, and national regulations. Consult with waste contractor.

Container disposal: Packaging of product may contain small amounts of residual product which can be

discarded.

Other No further information.

considerations:

#### Section 14: Transport Information

DOT: Not regulated

IMO/IMDG: Not regulated IATA: Not regulated

ADR: Not regulated

OTHER: No further information

#### Section 15: Regulatory Information

TSCA: All components listed on the TSCA 8(b) inventory.

CERCLA RQ: Not applicable

SARA 311/312: Immediate (acute), delayed (chronic) health hazards.

SARA 313 Isocyanate compound (N120), ~25%

California Prop 65 Substances: Carbon black as airborne, unbound particles of respirable size, since carbon black is bound in a resin matrix and

particulates are not available for inhalation, not regulated under Proposition 65.

Canadian DSL: All substances in product are listed on the DSL.

WHMIS: See Section 3 for disclosure substances, if applicable.

#### Section 16: Other Information

SDS Author: Trenton Corporation Version Date: 2025-11-19

The provider of this SDS urges the buyer or user to study it carefully and consult with appropriate expertise, as necessary to become aware of and understand the data contained herein. This information is provided in good faith and is believed to be accurate as of the effective date, or version date shown. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer or user's responsibility to ensure that its activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. It is the buyer's/user's duty to determine the conditions necessary for the safe use of this product.