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# SAFETY DATA SHEET

## **SECTION 1**

#### PRODUCT AND COMPANY IDENTIFICATION

#### **PRODUCT**

Product Name: NEO PENTANOIC ACID Product Description: Carboxylic Acid

Intended Use: Chemical intermediate

#### **COMPANY IDENTIFICATION**

Supplier: EXXONMOBIL CHEMICAL COMPANY

SDS - LOC. 106

22777 Springwoods Village Parkway Spring, TX 77389-1425 USA

**24 Hour Health Emergency** (800) 726-2015

Transportation Emergency Phone (800) 424-9300 or (703) 527-3887 CHEMTREC

Product Technical Information (832) 624-8500 Supplier General Contact (832) 624-8500

## **SECTION 2**

## HAZARDS IDENTIFICATION

This material is hazardous according to regulatory guidelines (see (M)SDS Section 15).

#### **CLASSIFICATION:**

Flammable liquid: Category 4.

Acute oral toxicant: Category 4. Acute inhalation toxicant: Category 3. Skin irritation: Category 2. Eye irritation:

Category 2A.
Combustible Dust

# LABEL:



Signal Word: Danger

#### **Hazard Statements:**

H227: Combustible liquid. H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation. H331: Toxic if inhaled.

May form combustible dust concentrations in air.

#### **Precautionary Statements:**

P210: Keep away from flames and hot surfaces. -- No smoking. P261: Avoid breathing dust. P264: Wash skin



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thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves and eye / face protection.P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P311: Call a POISON CENTER or doctor/physician. P330: Rinse mouth. P332 + P313: If skin irritation occurs: Get medical advice/ attention. P337 + P313: If eye irritation persists: Get medical advice/attention. P362 + P364: Take off contaminated clothing and wash it before reuse. P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish.P403 + P233: Store in a well-ventilated place. Keep container tightly closed. P403 + P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.P501: Dispose of contents and container in accordance with local regulations.

Contains: Pivalic acid

Other hazard information:

HAZARD NOT OTHERWISE CLASSIFIED (HNOC): None as defined under 29 CFR 1910.1200.

#### PHYSICAL / CHEMICAL HAZARDS

WARNING: May form combustible dust concentrations in air (during processing/handling). Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited. Combustible.

#### **HEALTH HAZARDS**

May be irritating to nose, throat, and lungs.

#### **ENVIRONMENTAL HAZARDS**

No significant hazards.

NFPA Hazard ID: Health: 2 Flammability: 2 Reactivity: 0
HMIS Hazard ID: Health: 2 Flammability: 2 Reactivity: 0

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

# SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a substance.

Hazardous Substance(s) or Complex Substance(s) required for disclosure

indian de				
Name	CAS#		GHS Hazard Codes	
		Concentration*		
Pivalic acid	75-98-9	100 %	H227, H302, H331, H315,	
			H319(2A)	

<sup>\*</sup> All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

NOTE: Material is a solid at room temperature, but can be transported and stored at elevated temperature in molten



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form. Where appropriate, certain physical/chemical properties and health, safety, environmental and transportation information in this Safety Data Sheet have been provided for the material when it is in the molten state.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

#### **SECTION 4**

#### **FIRST AID MEASURES**

#### **INHALATION**

Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

#### **SKIN CONTACT**

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If burned by contact with hot material, molten material adhering to skin should be cooled as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.

#### **EYE CONTACT**

Flush thoroughly with water for at least 15 minutes. Get medical assistance.

#### **INGESTION**

Seek immediate medical attention. Do not induce vomiting.

# **SECTION 5**

## **FIRE FIGHTING MEASURES**

#### **EXTINGUISHING MEDIA**

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water

#### **FIRE FIGHTING**

**Fire Fighting Instructions:** Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Unusual Fire Hazards:** Combustible. Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentration and in the presence of an ignition source is a potential dust explosion hazard. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Combustion Products: Incomplete combustion products, Oxides of carbon, Smoke, Fume

#### FLAMMABILITY PROPERTIES



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Flash Point [Method]: >60°C (140°F) [ASTM D-93]

Flammable Limits (Approximate volume % in air): LEL: 3.4 UEL: 9.5

**Autoignition Temperature:** >400°C (752°F) [In-house method]

#### **SECTION 6**

#### **ACCIDENTAL RELEASE MEASURES**

#### **NOTIFICATION PROCEDURES**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

#### PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. Dust Deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (for example, clearing dust surfaces with compressed air). Prevent dust exposure to ignition sources. For example, use non-sparking tools and prohibit smoking, flares, sparks or flames in immediate area. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

## SPILL MANAGEMENT

**Land Spill:** Prevent dust cloud. Scrape up spilled material with shovels into a suitable container for recycle or disposal.

**Water Spill:** Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Skim from surface.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

#### **ENVIRONMENTAL PRECAUTIONS**

Prevent entry into waterways, sewers, basements or confined areas.

# **SECTION 7**

#### HANDLING AND STORAGE

## **HANDLING**

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dust from material can accumulate electrostatic charges due to friction from transfer and mixing operations and cause an electrical spark (ignition source). Provide adequate precautions to ignition sources, such as electrical grounding and bonding, inert atmosphere or non-sparking tools. However, bonding and grounds may not eliminate the hazard for static accumulation. Consult local applicable standards for guidance. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids and EN 61241, Electrical Apparatus



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for Use in the Presence of Combustible Dust for safe handling. Eliminate all ignition sources (no smoking,

flares, sparks or flames in immediate area). Avoid contact with skin. Avoid contact with eyes. When heated, the vapors/fumes given off may cause respiratory tract irritation. Prevent small spills and leakage to avoid slip hazard. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Vapours can plug vent lines. Thaw product with low pressure steam. Product temperature should not exceed 55 °C. Recommend Nitrogen blanket if product is kept liquid.

Loading/Unloading Temperature: 38°C (100°F) - 49°C (120°F)

Transport Temperature: 38°C (100°F) - 49°C (120°F)

**Static Accumulator:** This material is a static accumulator.

## **STORAGE**

Do not store in open or unlabelled containers. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be grounded and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

Storage Temperature:  $38^{\circ}\text{C} (100^{\circ}\text{F}) - 49^{\circ}\text{C} (120^{\circ}\text{F})$ 

Storage Pressure: [Ambient]

Suitable Materials and Coatings (Chemical Compatibility): Polyethylene; Aluminum; Epoxy Phenolics;

Stainless Steel, Type 316

Unsuitable Containers/Packing: Mild Steel

Unsuitable Materials and Coatings: Amine Epoxy; Copper; Inorganic Zinc; Polyamide Epoxy; Stainless

Steel, Type 304

# SECTION 8

#### **EXPOSURE CONTROLS / PERSONAL PROTECTION**

# **EXPOSURE LIMIT VALUES**

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit / Standard		NOTE	Source	
Pivalic acid	Stable Aerosol.	TWA	5 mg/m3		N/A	ExxonMobil
Pivalic acid	Vapor.	TWA	25 mg/m3		N/A	ExxonMobil

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

# **ENGINEERING CONTROLS**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Adequate ventilation should be provided so that exposure limits are not exceeded. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product are designed and maintained to minimize dust generation and accumulation. Ensure that dust-handling systems (such as exhaust ducts, dusts collectors,



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vessels, and processing equipment) are designed to minimize the potential for dust ignition and prevent

explosion propagation. For example, use explosion relief vents, an explosion suppression system or inert equipment internals. Additional examples of proper equipment include using only appropriately

classified electrical equipment and powered industrial trucks.

#### PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Half-face filter respirator

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

**Eye Protection:** Chemical goggles are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

Chemical/oil resistant clothing is recommended.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

## **ENVIRONMENTAL CONTROLS**

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## **SECTION 9**

#### PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

#### **GENERAL INFORMATION**



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Physical State: Solid

Form: Chunk
Color: White
Odor: Strong

Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

**Relative Density (at 40 °C):** 0.907 [With respect to water] [Calculated] **Density (at 40 °C):** 905 kg/m³ (7.55 lbs/gal, 0.91 kg/dm³) [ASTM D4052]

Flammability (Solid, Gas): N/A

Flash Point [Method]: >60°C (140°F) [ASTM D-93]

Flammable Limits (Approximate volume % in air): LEL: 3.4 UEL: 9.5

**Autoignition Temperature:** >400°C (752°F) [In-house method]

**Boiling Point / Range:** 160°C (320°F) - 162°C (324°F) [ASTM D1078]

**Decomposition Temperature:** N/D

Vapor Density (Air = 1): > 1 at 101 kPa [In-house method]

Vapor Pressure: [N/D at 20 °C] | 9 kPa (67.5 mm Hg) at 100°C

| 0.73 kPa (5.48 mm Hg) at 50°C [In-house method]

Evaporation Rate (n-butyl acetate = 1): < 0.01 [In-house method]

pH: N/D

Log Pow (n-Octanol/Water Partition Coefficient): 1.8 [In-house method]

Solubility in Water: Appreciable

Viscosity: [N/D at 40 °C] | 1.7 cSt (1.7 mm2/sec) at 60 °C [ASTM D7042]

Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: N/D Melting Point: N/D

**Pour Point:** 36°C (97°F) [ASTM D5950]

Molecular Weight: 102.6 [Calculated]

Hygroscopic: No

SECTION 10 STABILITY AND REACTIVITY

**REACTIVITY:** See sub-sections below.

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Open flames and high energy ignition sources. Alkaline pH.

MATERIALS TO AVOID: Aldehydes, Alkanolamines, Alkylene Oxides, Amines, Ammonia, Caustics,

Inorganic acids, Monomers, Polymerizable esters, Strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS



**NEO PENTANOIC ACID** Product Name:

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Hazard Class	Conclusion / Remarks
Inhalation	
Acute Toxicity: (Mouse) 6 hour(s) LC50 < 4 mg/l (Vapor)	Moderately toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 403
Irritation: No end point data for material.	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
Ingestion	
Acute Toxicity (Rat): LD50 2000 mg/kg	Slightly toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 420
Skin	
Acute Toxicity (Rabbit): LC50 > 3160 mg/kg	Minimally Toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 402
Skin Corrosion/Irritation: Data available.	Irritating to the skin. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 404
Eye	
Serious Eye Damage/Irritation: Data available.	Irritating and will injure eye tissue. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 405
Sensitization	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: Data available.	Not expected to be a skin sensitizer. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 406
Aspiration: Data available.	Not expected to be an aspiration hazard. Based on physico- chemical properties of the material.
Germ Cell Mutagenicity: Data available.	Not expected to be a germ cell mutagen. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 471 473 476
Carcinogenicity: No end point data for material.	Not expected to cause cancer.
<b>Reproductive Toxicity:</b> No end point data for material.	Not expected to be a reproductive toxicant.
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: Data available.	Not expected to cause organ damage from prolonged or repeated exposure. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 407

## OTHER INFORMATION

**For the product itself:** Dust may be irritating to eyes and respiratory tract.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC 3 = IARC 1 5 = IARC 2B 4 = IARC 2A 2 = NTP SUS 6 = OSHA CARC



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# **SECTION 12**

# **ECOLOGICAL INFORMATION**

The information given is based on data available for the material, the components of the material, and similar materials.

#### **ECOTOXICITY**

Material -- Not expected to be harmful to aquatic organisms.

Material -- Not expected to demonstrate chronic toxicity to aquatic organisms.

#### **MOBILITY**

Material -- Expected to partition to water. Some partitioning to sediment and wastewater solids. Minimally volatile.

#### PERSISTENCE AND DEGRADABILITY

**Biodegradation:** 

Material -- Expected to biodegrade slowly.

**Hydrolysis:** 

Material -- Transformation due to hydrolysis not expected to be significant.

Photolysis:

Material -- Transformation due to photolysis not expected to be significant.

**Atmospheric Oxidation:** 

Material -- Transformation due to atmospheric oxidation not expected to be significant.

## **ECOLOGICAL DATA**

**Ecotoxicity** 

Test	Duration	Organism Type	Test Results
Aquatic - Acute Toxicity	48 hour(s)	Daphnia magna	EL50 202 mg/l
Aquatic - Acute Toxicity	96 hour(s)	Oncorhynchus mykiss	LL0 300 mg/l
Aquatic - Acute Toxicity	72 hour(s)	Pseudokirchneriella subcapitata	NOEC 246 mg/l
Aquatic - Acute Toxicity	72 hour(s)	Pseudokirchneriella subcapitata	EC50 >979 mg/l

Persistence, Degradability and Bioaccumulation Potential

Media	Test Type	Duration	Test Results
Sediment	Sediment Adsorption		log Koc 2.37
Water	Ready Biodegradability	28 day(s)	Percent Degraded 24.1

## SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.



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#### **DISPOSAL RECOMMENDATIONS**

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

#### REGULATORY DISPOSAL INFORMATION

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrositivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

#### SECTION 14

#### TRANSPORT INFORMATION

**LAND (DOT):** Not Regulated for Land Transport

**SEA (IMDG):** Not Regulated for Sea Transport according to IMDG-Code

Marine Pollutant: No

AIR (IATA): Not Regulated for Air Transport

## **SECTION 15**

# **REGULATORY INFORMATION**

**OSHA HAZARD COMMUNICATION STANDARD:** This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, ENCS, IECSC, KECI, PICCS, TCSI, TSCA

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

**SARA (311/312) REPORTABLE GHS HAZARD CLASSES:** Acute Toxicity (any route of exposure), Flammable (gases, aerosols, liquids, or solids), Serious eye damage or eye irritation, Skin Corrosion or Irritation, Combustible Dust



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**SARA (313) TOXIC RELEASE INVENTORY:** This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The following ingredients are cited on the lists below: None.

#### -- REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

## **SECTION 16**

#### OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

#### KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):

H227: Combustible liquid; Flammable Liquid, Cat 4 H302: Harmful if swallowed; Acute Tox Oral, Cat 4 H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A

H331: Toxic if inhaled; Acute Tox Inh, Cat 3

## THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Section 01: Company Mailing Address information was deleted. Section 01: Company Mailing Address information was modified.

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Internal Use Only

MHC: 1, 0, 9, 2, 4, 1



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DGN: 4400494OUS (1007454)

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