



# Material Safety Data Sheet

Print Date 14-Jun-2011

Revision Date 14-Jun-2011

Revision Number 6

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Common name</b>	SERIES 1079 PART A
<b>Product code</b>	1079-0763A
<b>Trade name</b>	METALLIC CLEARCOAT SATIN
<b>Product Class</b>	ACRYLIC SOLUTION PAINT
<b>Manufacturer</b>	Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
<b>Emergency telephone</b>	800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### WARNING!

COMBUSTIBLE LIQUID AND VAPOR.  
HARMFUL IF INHALED.  
HARMFUL OR FATAL IF SWALLOWED.  
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.  
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.  
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

#### Potential health effects

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

#### Acute effects

<b>Eyes</b>	Moderately irritating to the eyes.
<b>Skin</b>	Irritating to skin.
<b>Inhalation</b>	Irritating to respiratory system.
<b>Ingestion</b>	May be harmful if swallowed. Do not induce vomiting: may contain petroleum distillates and/or aromatic solvents. Aspiration may cause pulmonary edema and pneumonitis.

#### 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. Gastrointestinal tract. Kidney disorders. Liver disorders. Skin disorders. Respiratory disorders.

**Interactive effects** Use of alcoholic beverages may enhance toxic effects.

**Potential environmental effects** See Section 12 for additional Ecological Information

**Target Organ Effects** Blood, Central nervous system, Gastrointestinal tract, Eyes, Kidney, Liver, Peripheral Nervous System (PNS), Respiratory system, Skin

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
AMORPHOUS SILICA	7631-86-9	10 - 30
METHYL N-AMYL KETONE	110-43-0	10 - 30
XYLENE	1330-20-7	1 - 5
HEXYL ACETATE	88230-35-7	1 - 5
ETHYL 3-ETHOXYPROPIONATE	763-69-9	1 - 5
N-BUTYL ACETATE	123-86-4	1 - 5
AMORPHOUS SILICA	7631-86-9	1 - 5
AMINE STABILIZER	79720-19-7	1 - 5
ETHYL BENZENE	100-41-4	0.1 - 1

### 4. FIRST AID MEASURES

<b>Eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water.
<b>Ingestion:</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Inhalation:</b>	Move to fresh air. Oxygen or artificial respiration if needed.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Combustible material.
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical
<b>Hazardous decomposition products</b>	Oxides of carbon, hydrocarbons. Oxides of nitrogen.
<b>Specific hazards arising from the chemical</b>	Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.
<b>Protective equipment and precautions for firefighters</b>	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.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	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.
<b>Other information</b>	Not applicable

## 7. HANDLING AND STORAGE

### Handling

Close container after each use. 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

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)
METHYL N-AMYL KETONE	: 50 ppm TWA	: 100 ppm TWA; 465 mg/m <sup>3</sup> TWA	TWA: 50 ppm TWAEV; 233 mg/m <sup>3</sup> TWAEV	TWA: 25 ppm TWA; 115 mg/m <sup>3</sup> TWA	: 50 ppm TWA; 235 mg/m <sup>3</sup> TWA : 100 ppm STEL; 465 mg/m <sup>3</sup> STEL
XYLENE	: 100 ppm TWA : 150 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 150 ppm STEL; 655 mg/m <sup>3</sup> STEL	TWA: 100 ppm TWAEV; 434 mg/m <sup>3</sup> TWAEV STEL: 150 ppm STEV; 651 mg/m <sup>3</sup> STEV	TWA: 100 ppm TWA STEL: 150 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 150 ppm STEL; 655 mg/m <sup>3</sup> STEL
HEXYL ACETATE				TWA: 50 ppm TWA; 294 mg/m <sup>3</sup> TWA	
ETHYL 3-ETHOXYPROPIONATE				TWA: 50 ppm TWA; 300 mg/m <sup>3</sup> TWA	
N-BUTYL ACETATE	: 150 ppm TWA : 200 ppm STEL	: 150 ppm TWA; 710 mg/m <sup>3</sup> TWA : 200 ppm STEL; 950 mg/m <sup>3</sup> STEL	TWA: 150 ppm TWAEV; 713 mg/m <sup>3</sup> TWAEV STEL: 200 ppm STEV; 950 mg/m <sup>3</sup> STEV	TWA: 150 ppm TWA STEL: 200 ppm STEL	: 150 ppm TWA; 710 mg/m <sup>3</sup> TWA : 200 ppm STEL; 950 mg/m <sup>3</sup> STEL
ETHYL BENZENE	: 100 ppm TWA : 125 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 125 ppm STEL; 545 mg/m <sup>3</sup> STEL	TWA: 100 ppm TWAEV; 434 mg/m <sup>3</sup> TWAEV STEL: 125 ppm STEV; 543 mg/m <sup>3</sup> STEV	TWA: 100 ppm TWA STEL: 125 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 125 ppm STEL; 545 mg/m <sup>3</sup> STEL

### Engineering measures

Ensure adequate ventilation, especially in confined areas

### Personal Protective Equipment

#### Skin protection

Lightweight protective clothing, Apron, Impervious gloves

#### Eye/face protection

Safety glasses with side-shields

#### Respiratory protection

**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. Follow respirator manufacturer's directions for respirator use.

#### 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

43°C / 110.0°F

#### Boiling range

118 - 176°C / 244.0 - 349.0°F

#### Upper explosion limit

No information available

#### Lower explosion limit

No information available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Evaporation rate	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	1.10437 g/cm <sup>3</sup>
Density	9.18998 lbs/gal
Volatile organic compounds (VOC) content	2.962 lbs/gal
Volatile by weight	32.2340 %
Volatile by volume	41.5504 %

## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible products</b>	Strong oxidizing agents. Acids. Caustics. Alkalines.	<b>Possibility of hazardous reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
AMORPHOUS SILICA	5000 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	2.2 mg/L ( Rat ) 1 h
METHYL N-AMYL KETONE	1670 mg/kg ( Rat )	12600 µL/kg ( Rabbit )	
XYLENE	4300 mg/kg ( Rat )	1700 mg/kg ( Rabbit )	5000 ppm ( Rat ) 4 h 47635 mg/L ( Rat ) 4 h
ETHYL 3-ETHOXYPROPIONATE	3200 mg/kg ( Rat )	10 mL/kg ( Rabbit )	
N-BUTYL ACETATE	10768 mg/kg ( Rat )	17600 mg/kg ( Rabbit )	390 ppm ( Rat ) 4 h
AMORPHOUS SILICA	5000 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	2.2 mg/L ( Rat ) 1 h
ETHYL BENZENE	3500 mg/kg ( Rat )	15354 mg/kg ( Rabbit )	17.2 mg/L ( Rat ) 4 h
DISPERSING AGENT	12300 µL/kg ( Rat )	20 mL/kg ( Rabbit )	

<b>Irritation</b>	No information available
<b>Corrosivity</b>	No information available
<b>Sensitization</b>	No information available

### Chronic toxicity

#### Carcinogenicity

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

Component	ACGIH	IARC	NTP	OSHA	Mexico
ETHYL BENZENE	A3	Group 2B		X	

<b>Mutagenicity</b>	No information available
<b>Reproductive effects</b>	No information available
<b>Developmental effects</b>	No information available
<b>Teratogenicity</b>	No information available
<b>Target Organ Effects</b>	Blood, Central nervous system, Gastrointestinal tract, Eyes, Kidney, Liver, Peripheral Nervous System (PNS), Respiratory system, Skin.
<b>Endocrine Disruptor Information</b>	No information available

## 12. ECOLOGICAL INFORMATION

## 12. ECOLOGICAL INFORMATION

## Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
AMORPHOUS SILICA	EC50 = 440 mg/L 72 h	LC50= 5000 mg/L Brachydanio rerio 96 h		EC50 = 7600 mg/L 48 h
METHYL N-AMYL KETONE		LC50 126-137 mg/L Pimephales promelas 96 h		
XYLENE		LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661-4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5-17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1-16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711-9.591 mg/L Lepomis macrochirus 96 h LC50 23.53-29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50> 780 mg/L Cyprinus carpio 96 h LC50 30.26-40.75 mg/L Poecilia reticulata 96 h	EC50 = 0.0084 mg/L 24 h	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h
ETHYL 3-ETHOXYPROPIONATE		LC50= 62 mg/L Pimephales promelas 96 h		EC50 = 970 mg/L 48 h
N-BUTYL ACETATE	EC50 = 674.7 mg/L 72 h	LC50 17-19 mg/L Pimephales promelas 96 h LC50= 100 mg/L Lepomis macrochirus 96 h LC50= 62 mg/L Leuciscus idus 96 h	EC50 = 70.0 mg/L 5 min EC50 = 82.2 mg/L 15 min EC50 = 98.9 mg/L 30 min EC50 = 959 mg/L 18 h	EC50 = 72.8 mg/L 24 h
AMORPHOUS SILICA	EC50 = 440 mg/L 72 h	LC50= 5000 mg/L Brachydanio rerio 96 h		EC50 = 7600 mg/L 48 h
ETHYL BENZENE	EC50 = 4.6 mg/L 72 h EC50 > 438 mg/L 96 h EC50 2.6 - 11.3 mg/L 72 h EC50 1.7 - 7.6 mg/L 96 h	LC50 11.0-18.0 mg/L Oncorhynchus mykiss 96 h LC50= 4.2 mg/L Oncorhynchus mykiss 96 h LC50 7.55-11 mg/L Pimephales promelas 96 h LC50= 32 mg/L Lepomis macrochirus 96 h LC50 9.1-15.6 mg/L Pimephales promelas 96 h LC50= 9.6 mg/L Poecilia reticulata 96 h	EC50 = 9.68 mg/L 30 min EC50 = 96 mg/L 24 h	EC50 1.8 - 2.4 mg/L 48 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.

## 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.

## Proper shipping name

PAINT IN OIL

## 15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	Does not Comply
EINECS/ELINCS	Does not Comply
CHINA	Does not Comply
ENCS	Does not Comply
KECL	Does not Comply
PICCS	Does not Comply
AICS	Does not Comply

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component  
XYLENE  
ETHYL BENZENE

United States of America Federal RegulationsSARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
XYLENE	1330-20-7	1 - 5	1.0 % de minimis concentration
ETHYL BENZENE	100-41-4	0.1 - 1	0.1 % de minimis concentration

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 RQ			X
N-BUTYL ACETATE	5000 lb RQ			X
ETHYL BENZENE	1000 lb RQ	X	X	X

CERCLAUnited States of America State RegulationsCalifornia Prop. 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
ETHYL BENZENE	100-41-4	Carcinogen

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
AMORPHOUS SILICA	X		X		
METHYL N-AMYL KETONE	X	X	X		X
XYLENE	X	X	X	X	X
N-BUTYL ACETATE	X	X	X		X
AMORPHOUS SILICA	X		X		
ETHYL BENZENE	X	X	X	X	X

#### Other international regulations

##### Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

##### WHMIS Classification

B3 Combustible liquid  
D2A Very toxic materials



Component	NPRI
XYLENE	Part 1, Group 1 Substance; Part 5 Substance
N-BUTYL ACETATE	Part 5 Substance
ETHYL BENZENE	Part 1, Group 1 Substance

#### Legend

NPRI - National Pollutant Release Inventory

## 16. OTHER INFORMATION

Revision Date 14-Jun-2011

Revision Note No information available

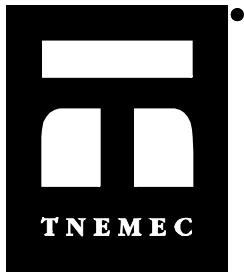
HMIS (Hazardous Material Information System) Health 3 Flammability 2 Reactivity 1

#### 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 or 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**



# Material Safety Data Sheet

Print Date 14-Jun-2011

Revision Date 14-Jun-2011

Revision Number 5

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Common name</b>	SERIES 1079 PART A
<b>Product code</b>	1079-1079A
<b>Trade name</b>	METALLIC CLEARCOAT GLOSS
<b>Product Class</b>	ACRYLIC SOLUTION PAINT
<b>Manufacturer</b>	Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
<b>Emergency telephone</b>	800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### WARNING!

COMBUSTIBLE LIQUID AND VAPOR.  
HARMFUL IF INHALED.  
HARMFUL OR FATAL IF SWALLOWED.  
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.  
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.  
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

#### Potential health effects

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

#### Acute effects

<b>Eyes</b>	Moderately irritating to the eyes.
<b>Skin</b>	Irritating to skin.
<b>Inhalation</b>	Irritating to respiratory system.
<b>Ingestion</b>	May be harmful if swallowed. Do not induce vomiting: may contain petroleum distillates and/or aromatic solvents. Aspiration may cause pulmonary edema and pneumonitis.

#### 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. Gastrointestinal tract. Kidney disorders. Liver disorders. Skin disorders. Respiratory disorders.

**Interactive effects** Use of alcoholic beverages may enhance toxic effects.

**Potential environmental effects** See Section 12 for additional Ecological Information

**Target Organ Effects** Blood, Central nervous system, Gastrointestinal tract, Eyes, Kidney, Liver, Peripheral Nervous System (PNS), Respiratory system, Skin

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
METHYL N-AMYL KETONE	110-43-0	10 - 30
ETHYL 3-ETHOXYPROPIONATE	763-69-9	5 - 10
N-BUTYL ACETATE	123-86-4	5 - 10
HEXYL ACETATE	88230-35-7	1 - 5
AMINE STABILIZER	79720-19-7	1 - 5
XYLENE	1330-20-7	1 - 5

### 4. FIRST AID MEASURES

<b>Eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water.
<b>Ingestion:</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Inhalation:</b>	Move to fresh air. Oxygen or artificial respiration if needed.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Combustible material.
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical

**Hazardous decomposition products** Oxides of carbon, hydrocarbons. Oxides of nitrogen.

#### 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.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	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.
<b>Other information</b>	Not applicable

## 7. HANDLING AND STORAGE

### Handling

Close container after each use. 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

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)
METHYL N-AMYL KETONE	: 50 ppm TWA	: 100 ppm TWA; 465 mg/m <sup>3</sup> TWA	TWA: 50 ppm TWAEV; 233 mg/m <sup>3</sup> TWAEV	TWA: 25 ppm TWA; 115 mg/m <sup>3</sup> TWA	: 50 ppm TWA; 235 mg/m <sup>3</sup> TWA : 100 ppm STEL; 465 mg/m <sup>3</sup> STEL
ETHYL 3-ETHOXYPROPIONATE				TWA: 50 ppm TWA; 300 mg/m <sup>3</sup> TWA	
N-BUTYL ACETATE	: 150 ppm TWA : 200 ppm STEL	: 150 ppm TWA; 710 mg/m <sup>3</sup> TWA : 200 ppm STEL; 950 mg/m <sup>3</sup> STEL	TWA: 150 ppm TWAEV; 713 mg/m <sup>3</sup> TWAEV STEL: 200 ppm STEV; 950 mg/m <sup>3</sup> STEV	TWA: 150 ppm TWA STEL: 200 ppm STEL	: 150 ppm TWA; 710 mg/m <sup>3</sup> TWA : 200 ppm STEL; 950 mg/m <sup>3</sup> STEL
HEXYL ACETATE				TWA: 50 ppm TWA; 294 mg/m <sup>3</sup> TWA	
XYLENE	: 100 ppm TWA : 150 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 150 ppm STEL; 655 mg/m <sup>3</sup> STEL	TWA: 100 ppm TWAEV; 434 mg/m <sup>3</sup> TWAEV STEL: 150 ppm STEV; 651 mg/m <sup>3</sup> STEV	TWA: 100 ppm TWA STEL: 150 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 150 ppm STEL; 655 mg/m <sup>3</sup> STEL

### Engineering measures

Ensure adequate ventilation, especially in confined areas

### Personal Protective Equipment

#### Skin protection

Lightweight protective clothing, Apron, Impervious gloves

#### Eye/face protection

Safety glasses with side-shields

#### Respiratory protection

**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. Follow respirator manufacturer's directions for respirator use.

#### 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

43°C / 110.0°F

#### Boiling range

118 - 176°C / 244.0 - 349.0°F

#### Upper explosion limit

No information available

#### Lower explosion limit

No information available

#### Evaporation rate

No information available

#### Vapor pressure

No information available

#### Vapor density

No information available

#### Specific Gravity

1.02621 g/cm<sup>3</sup>

#### Density

8.53962 lbs/gal

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Volatile organic compounds (VOC) content</b>	2.483 lbs/gal
<b>Volatile by weight</b>	29.0760 %
<b>Volatile by volume</b>	34.4844 %

## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible products</b>	Strong oxidizing agents. Acids. Caustics. Alkalines.	<b>Possibility of hazardous reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL N-AMYL KETONE	1670 mg/kg ( Rat )	12600 µL/kg ( Rabbit )	
ETHYL 3-ETHOXYPROPIONATE	3200 mg/kg ( Rat )	10 mL/kg ( Rabbit )	
N-BUTYL ACETATE	10768 mg/kg ( Rat )	17600 mg/kg ( Rabbit )	390 ppm ( Rat ) 4 h
XYLENE	4300 mg/kg ( Rat )	1700 mg/kg ( Rabbit )	5000 ppm ( Rat ) 4 h 47635 mg/L ( Rat ) 4 h

<b>Irritation</b>	No information available
<b>Corrosivity</b>	No information available
<b>Sensitization</b>	No information available

### Chronic toxicity

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

<b>Mutagenicity</b>	No information available
<b>Reproductive effects</b>	No information available
<b>Developmental effects</b>	No information available
<b>Teratogenicity</b>	No information available
<b>Target Organ Effects</b>	Blood, Central nervous system, Gastrointestinal tract, Eyes, Kidney, Liver, Peripheral Nervous System (PNS), Respiratory system, Skin.
<b>Endocrine Disruptor Information</b>	No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
METHYL N-AMYL KETONE		LC50 126-137 mg/L Pimephales promelas 96 h		
ETHYL 3-ETHOXYPROPIONATE		LC50= 62 mg/L Pimephales promelas 96 h		EC50 = 970 mg/L 48 h

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
N-BUTYL ACETATE	EC50 = 674.7 mg/L 72 h	LC50 17-19 mg/L Pimephales promelas 96 h LC50= 100 mg/L Lepomis macrochirus 96 h LC50= 62 mg/L Leuciscus idus 96 h	EC50 = 70.0 mg/L 5 min EC50 = 82.2 mg/L 15 min EC50 = 98.9 mg/L 30 min EC50 = 959 mg/L 18 h	EC50 = 72.8 mg/L 24 h
XYLENE		LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661-4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5-17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1-16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711-9.591 mg/L Lepomis macrochirus 96 h LC50 23.53-29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50> 780 mg/L Cyprinus carpio 96 h LC50 30.26-40.75 mg/L Poecilia reticulata 96 h	EC50 = 0.0084 mg/L 24 h	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 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.

**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.

**Proper shipping name** PAINT IN OIL

### 15. REGULATORY INFORMATION

#### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Does not Comply
<b>EINECS/ELINCS</b>	Does not Comply
<b>CHINA</b>	Does not Comply
<b>ENCS</b>	Does not Comply
<b>KECL</b>	Does not Comply
<b>PICCS</b>	Complies
<b>AICS</b>	Does not Comply

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component  
XYLENE

#### United States of America Federal Regulations

#### SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
XYLENE	1330-20-7	1 - 5	1.0 % de minimis concentration

**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
N-BUTYL ACETATE	5000 lb RQ			X
XYLENE	100 lb RQ			X

**CERCLA****United States of America State Regulations****California Prop. 65**

This product contains the following Proposition 65 chemicals:

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
METHYL N-AMYL KETONE	X	X	X		X
N-BUTYL ACETATE	X	X	X		X
XYLENE	X	X	X	X	X

**Other international regulations****Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**WHMIS Classification**

B3 Combustible liquid  
D2A Very toxic materials



Component	NPRI
N-BUTYL ACETATE	Part 5 Substance
XYLENE	Part 1, Group 1 Substance; Part 5 Substance

**Legend**

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION
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Revision Date

14-Jun-2011

Revision Note No information available

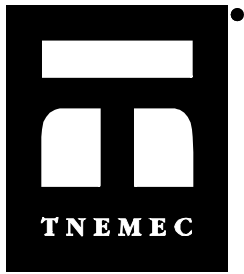
HMIS (Hazardous Material Health 3 Flammability 2 Reactivity 1  
Information System)

**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**



# Material Safety Data Sheet

Print Date 02-May-2011

Revision Date 02-May-2011

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Common name</b>	SERIES 1079 PART B
<b>Product code</b>	1079-1079B
<b>Trade name</b>	METALLIC CLEARCOAT CONVERTER
<b>Product Class</b>	POLYISOCYANATE PAINT
<b>Manufacturer</b>	Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
<b>Emergency telephone</b>	800-535-5053 (INFOTRAC) - TNE MEC 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.  
COMBUSTIBLE LIQUID AND VAPOR.  
HARMFUL OR FATAL IF SWALLOWED.  
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

<b>Eyes</b>	Moderately irritating to the eyes. Risk of serious damage to eyes.
<b>Skin</b>	Irritating to skin. May cause sensitization by skin contact.
<b>Inhalation</b>	Irritating to respiratory system. May cause allergic respiratory reaction.
<b>Ingestion</b>	May 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. Skin disorders. Respiratory disorders.

**Interactive effects** Use of alcoholic beverages may enhance toxic effects.

**Potential environmental effects** See Section 12 for additional Ecological Information

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
HEXAMETHYLENE DIISOCYANATE (HDI) POLYMER	28182-81-2	60 - 100
PETROLEUM SOLVENT (NAPHTHA)	64742-95-6	5 - 10
N-BUTYL ACETATE	123-86-4	5 - 10
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER	822-06-0	0.1 - 1

### 4. FIRST AID MEASURES

<b>Eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water.
<b>Ingestion:</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Inhalation:</b>	Move to fresh air. Oxygen or artificial respiration if needed.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Combustible material.
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical
<b>Hazardous decomposition products</b>	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. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	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.
<b>Other information</b>	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. 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)
N-BUTYL ACETATE	: 150 ppm TWA : 200 ppm STEL	: 150 ppm TWA; 710 mg/m <sup>3</sup> TWA : 200 ppm STEL; 950 mg/m <sup>3</sup> STEL	TWA: 150 ppm TWAEV; 713 mg/m <sup>3</sup> TWAEV STEL: 200 ppm STEV; 950 mg/m <sup>3</sup> STEV	TWA: 150 ppm TWA STEL: 200 ppm STEL	: 150 ppm TWA; 710 mg/m <sup>3</sup> TWA : 200 ppm STEL; 950 mg/m <sup>3</sup> STEL
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER	: 0.005 ppm TWA		TWA: 0.005 ppm TWAEV; 0.034 mg/m <sup>3</sup> TWAEV	TWA: 0.005 ppm TWA (designated substance regulation, listed under Isocyanates, organic compounds); 0.005 ppm TWA (applies to workplaces to which the designated substance regulation does not apply) CEV: 0.02 ppm Ceiling (designated substances regulation)	

### Engineering measures

Ensure adequate ventilation, especially in confined areas

### Personal Protective Equipment

#### Skin protection

Lightweight protective clothing, Apron, Impervious gloves

#### Eye/face protection

Safety glasses with side-shields

#### Respiratory protection

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 vapor-particulate 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

38°C / 100.4°F

### Method

Pensky Martens - Closed Cup

### Boiling range

118 - 128°C / 244.0 - 262.0°F

### Upper explosion limit

No information available

### Lower explosion limit

No information available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Evaporation rate	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	1.12354 g/cm <sup>3</sup>
Density	9.34955 lbs/gal
Volatile organic compounds (VOC) content	.935 lbs/gal
Volatile by weight	10.0000 %
Volatile by volume	13.9009 %

## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to avoid</b>	Heat, flames and sparks. Amines.
<b>Incompatible products</b>	Strong oxidizing agents. Caustics. Water, alcohols, amines, strong bases, metal components, surface active materials.	<b>Possibility of hazardous reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
HEXAMETHYLENE DIISOCYANATE (HDI) POLYMER			18500 mg/m <sup>3</sup> ( Rat ) 1 h
PETROLEUM SOLVENT (NAPTHA)	8400 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	3400 ppm ( Rat ) 4 h 5.2 mg/L ( Rat ) 4 h
N-BUTYL ACETATE	10768 mg/kg ( Rat )	17600 mg/kg ( Rabbit )	390 ppm ( Rat ) 4 h
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER	710 mg/kg ( Rat )	570 mg/kg ( Rabbit )	0.15 mg/L ( Rat ) 4 h 0.29 mg/L ( Rat ) 1 h

<b>Irritation</b>	No information available
<b>Corrosivity</b>	No information available
<b>Sensitization</b>	No information available

### Chronic toxicity

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

<b>Mutagenicity</b>	No information available
<b>Reproductive effects</b>	No information available
<b>Developmental effects</b>	No information available
<b>Teratogenicity</b>	No information available
<b>Target Organ Effects</b>	Central nervous system, Eyes, Respiratory system, Skin.
<b>Endocrine Disruptor Information</b>	No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
PETROLEUM SOLVENT (NAPTHA)		LC50= 9.22 mg/L Oncorhynchus mykiss 96 h		EC50 = 6.14 mg/L 48 h
N-BUTYL ACETATE	EC50 = 674.7 mg/L 72 h	LC50 17-19 mg/L Pimephales promelas 96 h LC50= 100 mg/L Lepomis macrochirus 96 h LC50= 62 mg/L Leuciscus idus 96 h	EC50 = 70.0 mg/L 5 min EC50 = 82.2 mg/L 15 min EC50 = 98.9 mg/L 30 min EC50 = 959 mg/L 18 h	EC50 = 72.8 mg/L 24 h
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER		LC50= 26.1 mg/L Brachydanio rerio 96 h	EC50 = 53.2 mg/L 5 min EC50 = 25.5 mg/L 15 min EC50 = 15.7 mg/L 30 min	

### 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.

**Proper shipping name** PAINT IN OIL

### 15. REGULATORY INFORMATION

#### International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
CHINA	Complies
ENCS	Does not Comply
KECL	Complies
PICCS	Complies
AICS	Complies

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component  
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER

#### United States of America Federal Regulations

##### SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER	822-06-0	0.1 - 1	1.0 % de minimis concentration (listed under Chemical Category N120, Diisocyanates)

#### 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
N-BUTYL ACETATE	5000 lb RQ			X

**CERCLA****United States of America State Regulations****California Prop. 65**

This product contains the following Proposition 65 chemicals:

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
N-BUTYL ACETATE	X	X	X		X
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER	X	X		X	

**Other international regulations****Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**WHMIS Classification**

B3 Combustible liquid  
D2A Very toxic materials



Component	NPRI
PETROLEUM SOLVENT (NAPHTHA)	Part 5 Substance
N-BUTYL ACETATE	Part 5 Substance

**Legend**

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION
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Revision Date 02-May-2011

Revision Note No information available

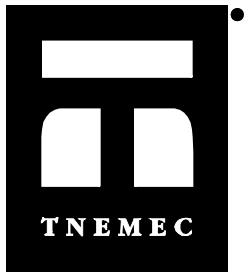
HMIS (Hazardous Material Information System)      Health 2\*      Flammability 2      Reactivity 1

**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**



# Material Safety Data Sheet

Print Date 26-May-2011

Revision Date 26-May-2011

Revision Number 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Common name</b>	SERIES1079 PART C
<b>Product code</b>	1079-1079C
<b>Trade name</b>	METALLIC CLEARCOAT ACCELERATOR
<b>Product Class</b>	CATALYST SOLUTION
<b>Manufacturer</b>	Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
<b>Emergency telephone</b>	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 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

<b>Eyes</b>	Moderately irritating to the eyes.
<b>Skin</b>	Irritating to skin.
<b>Inhalation</b>	Irritating to respiratory system.
<b>Ingestion</b>	May be harmful if swallowed. Do not induce vomiting; may contain petroleum distillates and/or aromatic solvents. Aspiration may cause pulmonary edema and pneumonitis.

#### 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. Gastrointestinal tract. Kidney disorders. Liver disorders. Skin disorders. Respiratory disorders.

**Interactive effects** Use of alcoholic beverages may enhance toxic effects.

**Potential environmental effects** See Section 12 for additional Ecological Information

**Target Organ Effects** Blood, Central nervous system, Gastrointestinal tract, Eyes, Kidney, Liver, Peripheral Nervous System (PNS), Respiratory system, Skin

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
2,4-PENTANEDIONE	123-54-6	30 - 60
METHYL N-AMYL KETONE	110-43-0	30 - 60
XYLENE	1330-20-7	10 - 30
ETHYL BENZENE	100-41-4	1 - 5
ISOBUTYL ALCOHOL	78-83-1	1 - 5
TIN (ORGANIC COMPOUNDS, AS TIN)	77-58-7	0.1 - 1

### 4. FIRST AID MEASURES

<b>Eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water.
<b>Ingestion:</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Inhalation:</b>	Move to fresh air. Oxygen or artificial respiration if needed.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Combustible material.
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical
<b>Hazardous decomposition products</b>	Oxides of carbon, hydrocarbons.
<b>Specific hazards arising from the chemical</b>	Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.
<b>Protective equipment and precautions for firefighters</b>	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.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	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.
<b>Other information</b>	Not applicable

## 7. HANDLING AND STORAGE

### Handling

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. 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)
METHYL N-AMYL KETONE	: 50 ppm TWA	: 100 ppm TWA; 465 mg/m <sup>3</sup> TWA	TWA: 50 ppm TWAEV; 233 mg/m <sup>3</sup> TWAEV	TWA: 25 ppm TWA; 115 mg/m <sup>3</sup> TWA	: 50 ppm TWA; 235 mg/m <sup>3</sup> TWA; 100 ppm STEL; 465 mg/m <sup>3</sup> STEL
XYLENE	: 100 ppm TWA : 150 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 150 ppm STEL; 655 mg/m <sup>3</sup> STEL	TWA: 100 ppm TWAEV; 434 mg/m <sup>3</sup> TWAEV STEL: 150 ppm STEV; 651 mg/m <sup>3</sup> STEV	TWA: 100 ppm TWA STEL: 150 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 150 ppm STEL; 655 mg/m <sup>3</sup> STEL
ETHYL BENZENE	: 100 ppm TWA : 125 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 125 ppm STEL; 545 mg/m <sup>3</sup> STEL	TWA: 100 ppm TWAEV; 434 mg/m <sup>3</sup> TWAEV STEL: 125 ppm STEV; 543 mg/m <sup>3</sup> STEV	TWA: 100 ppm TWA STEL: 125 ppm STEL	: 100 ppm TWA; 435 mg/m <sup>3</sup> TWA : 125 ppm STEL; 545 mg/m <sup>3</sup> STEL
ISOBUTYL ALCOHOL	: 50 ppm TWA	: 50 ppm TWA; 150 mg/m <sup>3</sup> TWA : 100 ppm TWA; 300 mg/m <sup>3</sup> TWA	TWA: 50 ppm TWAEV; 152 mg/m <sup>3</sup> TWAEV	TWA: 50 ppm TWA	: 50 ppm TWA; 150 mg/m <sup>3</sup> TWA : 75 ppm STEL; 225 mg/m <sup>3</sup> STEL
TIN (ORGANIC COMPOUNDS, AS TIN)	TWA: 0.1 mg/m <sup>3</sup>		TWA: 0.1 mg/m <sup>3</sup> STEL: 0.2 mg/m <sup>3</sup> Skin	TWA: 0.1 mg/m <sup>3</sup> Skin	TWA: 0.1 mg/m <sup>3</sup> STEL: 0.2 mg/m <sup>3</sup>

### Engineering measures

Ensure adequate ventilation, especially in confined areas

### Personal Protective Equipment

#### Skin protection

Lightweight protective clothing, Apron, Impervious gloves

#### Eye/face protection

Safety glasses with side-shields

#### Respiratory protection

**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. Follow respirator manufacturer's directions for respirator use.

#### 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

39°C / 102.0°F

#### Boiling range

107 - 154°C / 225.0 - 309.0°F

#### Upper explosion limit

No information available

#### Lower explosion limit

No information available

#### Evaporation rate

No information available

#### Vapor pressure

No information available

#### Vapor density

No information available

#### Specific Gravity

.90048 g/cm<sup>3</sup>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Density	7.49337 lbs/gal
Volatile organic compounds (VOC) content	7.090 lbs/gal
Volatile by weight	94.6100 %
Volatile by volume	95.4308 %

## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible products</b>	Strong oxidizing agents. Acids.	<b>Possibility of hazardous reactions</b>	None under normal processing reactions

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,4-PENTANEDIONE	55 mg/kg ( Rat )	810 µL/kg ( Rabbit )	1224 ppm ( Rat ) 4 h
METHYL N-AMYL KETONE	1670 mg/kg ( Rat )	12600 µL/kg ( Rabbit )	
XYLENE	4300 mg/kg ( Rat )	1700 mg/kg ( Rabbit )	5000 ppm ( Rat ) 4 h 47635 mg/L ( Rat ) 4 h
ETHYL BENZENE	3500 mg/kg ( Rat )	15354 mg/kg ( Rabbit )	17.2 mg/L ( Rat ) 4 h
ISOBUTYL ALCOHOL	2460 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	6.5 mg/L ( Rat ) 4 h
TIN (ORGANIC COMPOUNDS, AS TIN)	175 mg/kg ( Rat )		

<b>Irritation</b>	No information available
<b>Corrosivity</b>	No information available
<b>Sensitization</b>	No information available

### Chronic toxicity

#### Carcinogenicity

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

Component	ACGIH	IARC	NTP	OSHA	Mexico
ETHYL BENZENE	A3	Group 2B		X	

<b>Mutagenicity</b>	No information available
<b>Reproductive effects</b>	No information available
<b>Developmental effects</b>	No information available
<b>Teratogenicity</b>	No information available
<b>Target Organ Effects</b>	Blood, Central nervous system, Gastrointestinal tract, Eyes, Kidney, Liver, Peripheral Nervous System (PNS), Respiratory system, Skin.
<b>Endocrine Disruptor Information</b>	No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
2,4-PENTANEDIONE		LC50 50.3-71.8 mg/L Lepomis macrochirus 96 h LC50 64.1-80.1 mg/L Oncorhynchus mykiss 96 h LC50 98.3-110 mg/L Pimephales promelas 96 h	EC50 = 1050 mg/L 5 min	EC50 = 34.4 mg/L 48 h
METHYL N-AMYL KETONE		LC50 126-137 mg/L Pimephales promelas 96 h		
XYLENE		LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661-4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5-17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1-16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711-9.591 mg/L Lepomis macrochirus 96 h LC50 23.53-29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50> 780 mg/L Cyprinus carpio 96 h LC50 30.26-40.75 mg/L Poecilia reticulata 96 h	EC50 = 0.0084 mg/L 24 h	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h
ETHYL BENZENE	EC50 = 4.6 mg/L 72 h EC50 > 438 mg/L 96 h EC50 2.6 - 11.3 mg/L 72 h EC50 1.7 - 7.6 mg/L 96 h	LC50 11.0-18.0 mg/L Oncorhynchus mykiss 96 h LC50= 4.2 mg/L Oncorhynchus mykiss 96 h LC50 7.55-11 mg/L Pimephales promelas 96 h LC50= 32 mg/L Lepomis macrochirus 96 h LC50 9.1-15.6 mg/L Pimephales promelas 96 h LC50= 9.6 mg/L Poecilia reticulata 96 h	EC50 = 9.68 mg/L 30 min EC50 = 96 mg/L 24 h	EC50 1.8 - 2.4 mg/L 48 h
ISOBUTYL ALCOHOL	EC50 = 230 mg/L 48 h	LC50 1120-1520 mg/L Oncorhynchus mykiss 96 h LC50 1370-1670 mg/L Pimephales promelas 96 h LC50 1480-1730 mg/L Lepomis macrochirus 96 h LC50= 375 mg/L Pimephales promelas 96 h	EC50 = 1224.6 mg/L 15 min	EC50 1070 - 1933 mg/L 48 h EC50 = 1300 mg/L 48 h
TIN (ORGANIC COMPOUNDS, AS TIN)			EC50 = 0.576 mg/L 30 min	

### 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.

#### Proper shipping name

PAINT IN OIL

## 15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
CHINA	Complies
ENCS	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component

XYLENE  
ETHYL BENZENE

United States of America Federal RegulationsSARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
XYLENE	1330-20-7	10 - 30	1.0 % de minimis concentration
ETHYL BENZENE	100-41-4	1 - 5	0.1 % de minimis concentration

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 RQ			X
ETHYL BENZENE	1000 lb RQ	X	X	X

CERCLAUnited States of America State RegulationsCalifornia Prop. 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
ETHYL BENZENE	100-41-4	Carcinogen

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
2,4-PENTANEDIONE	X	X	X		
METHYL N-AMYL KETONE	X	X	X		X

XYLENE	X	X	X	X	X
ETHYL BENZENE	X	X	X	X	X
ISOBUTYL ALCOHOL	X	X	X		X
TIN (ORGANIC COMPOUNDS, AS TIN)					X

**Other international regulations****Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**WHMIS Classification**

B3 Combustible liquid  
D2A Very toxic materials



Component	NPRI
XYLENE	Part 1, Group 1 Substance; Part 5 Substance
ETHYL BENZENE	Part 1, Group 1 Substance
ISOBUTYL ALCOHOL	Part 1, Group 1 Substance

**Legend**

NPRI - National Pollutant Release Inventory

## 16. OTHER INFORMATION

Revision Date 26-May-2011

Revision Note No information available

HMIS (Hazardous Material Information System)      Health 2\*      Flammability 3      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**