



SAFETY DATA SHEET

Issuing Date: 27-May-2015

Revision Date: 27-May-2015

Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: PG-6-Y17FC

Product Name: H/S YELLOW POLYURETHANE T.C.-BAC
3494

Hentzen Coatings, Inc.
6937 West Mill Road, Milwaukee, WI 53218-1225

Company Phone Number: 1-414-353-4200
Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use

Industrial paint (Paint or Paint-Related), Restricted to
professional users

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2

Label Elements

Emergency Overview

WARNING

Hazard Statements

harmful if inhaled
Causes serious eye irritation
Suspected of causing cancer



Appearance Opaque

Physical state Liquid

Odor Solvent

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

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 medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Precautionary Statements - Storage

Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

- May be harmful if swallowed
- May be harmful in contact with skin
- Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains a known or suspected carcinogen

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
METHYL AMYL KETONE	110-43-0	1% - 5%	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³
TITANIUM DIOXIDE	13463-67-7	1% - 5%	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust
XYLENE(PURE)	1330-20-7	1% - 5%	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³
ETHYLBENZENE	100-41-4	0% - 1%	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Call a physician immediately. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Extremely flammable.

Explosion Data

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Use personal protective equipment as required. Remove all sources of ignition. Avoid breathing vapors or mists. Ventilate the area.

Environmental Precautions

Environmental Precautions

Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Methods and materials for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep away from heat, sparks and flame.

Incompatible Products

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH	OSHA	NIOSH IDLH
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METHYL AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m ³
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust	IDLH: 5000 mg/m ³
XYLENE(PURE) 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³	
ETHYLBENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur, wear safety glasses with side-shields.

Skin and Body Protection Chemical resistant apron.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Appearance	Opaque
Odor	Solvent.	Odor Threshold	No data available
pH	No data available	Flash Point	12 °F / -11 °C
Decomposition temperature	No data available	Boiling Point	No data available
Melting Point / Melting Range	No data available	Freezing Point	No data available
Vapor Pressure @20°C (kPa)	No data available	Partition coefficient:	No data available
Vapor Density	No data available	Density	No data available
Bulk density	No data available	Specific Gravity	1.15
Evaporation Rate	No data available	Water solubility	No data available
Dynamic viscosity	No data available	Weight per Gallon (lbs/gal):	9.61
		Flammability Limits in Air	
		Upper	0.84 %
		Lower	0.13 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	The product has not been tested
Inhalation	There is no data for this product.
Eye Contact	There is no data for this product.
Skin Contact	There is no data for this product.
Ingestion	There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
METHYL AMYL KETONE 110-43-0	1600 mg/kg (Rat)	12.6 mL/kg (Rabbit)	2000 ppm (Rat) 4 h
TITANIUM DIOXIDE 13463-67-7	10000 mg/kg (Rat)	N/A	N/A
XYLENE(PURE) 1330-20-7	3500 mg/kg (Rat)	4350 mg/kg (Rabbit)	29.08 mg/L (Rat) 4 h
ETHYLBENZENE 100-41-4	3500 mg/kg (Rat)	15400 mg/kg (Rabbit)	17.2 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

MUTAGENIC EFFECTS No information available.

Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
TITANIUM DIOXIDE 13463-67-7	N/A	Group 2B	N/A	X
XYLENE(PURE) 1330-20-7	N/A	Group 3	N/A	N/A
ETHYLBENZENE 100-41-4	A3	Group 2B	N/A	X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive Toxicity	No information available.
Specific target organ systemic toxicity (single exposure)	No information available.
Specific target organ systemic toxicity (repeated exposure)	No information available.
Target Organ Effects	Central nervous system (CNS), Eyes, Lungs, Peripheral Nervous System (PNS), Respiratory system, Skin.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	3318 mg/kg
ATEmix (dermal)	4061 mg/kg
ATEmix (inhalation-dust/mist)	2.8 mg/l
Oral LD50	1224 mg/kg (rat) Estimated
Dermal LD50	2397 mg/kg (rat) Estimated

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
METHYL AMYL KETONE 110-43-0	N/A	126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	N/A
XYLENE(PURE) 1330-20-7	N/A	30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static 780: 96 h Cyprinus carpio mg/L LC50 13.4: 96 h Pimephales promelas mg/L LC50 flow-through 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 19: 96 h Lepomis macrochirus mg/L LC50	3.82: 48 h water flea mg/L EC50 0.6: 48 h Gammarus lacustris mg/L LC50
ETHYLBENZENE 100-41-4	2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50	9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static	1.8 - 2.4: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient

METHYL AMYL KETONE 110-43-0	1.98
XYLENE(PURE) 1330-20-7	3.15
ETHYLBENZENE 100-41-4	3.118

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste treatment methods**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

US EPA Waste Number

D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
XYLENE(PURE) 1330-20-7	N/A	Included in waste stream: F039	N/A	U239
ETHYLBENZENE 100-41-4	N/A	Included in waste stream: F039	N/A	N/A

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
XYLENE(PURE) 1330-20-7	Toxic Ignitable
ETHYLBENZENE 100-41-4	Toxic Ignitable

14. TRANSPORT INFORMATION**DOT**

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions 149, B52, IB2, T4, TP1, TP8, TP28
Description UN1263, Paint, 3, II, RQ
Emergency Response Guide Number 128

TDG

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Description UN1263, Paint, 3, II

MEX

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II

Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions A3, A72
Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions A3, A72
Description UN1263, Paint, 3, II

IMDG/IMO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
EmS-No F-E, S-E
Special Provisions 163
Description UN1263, Paint, 3, II

RID

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Description UN1263, Paint, 3, II

ADR/RID

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Tunnel restriction code (D/E)
Special Provisions 163, 640C, 650
Description UN1263, Paint, 3, II, (D/E)
ADR/RID-Labels 3

ADN

Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Special Provisions 163, 640C, 650
Description UN1263, Paint, 3, II
Limited Quantity (LQ) 5 L
Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	SARA 313 - Threshold Values %
XYLENE(PURE)	1330-20-7	1.0
ETHYLBENZENE	100-41-4	0.1

SARA 311/312 Hazard Categories

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

CAA (Clean Air Act)

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:

Chemical Name	CAS No	Hazardous air pollutants (HAPs) content
XYLENE(PURE)	1330-20-7	Present
ETHYLBENZENE	100-41-4	Present

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE(PURE)	100 lb	N/A	N/A	X
ETHYLBENZENE	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ (reportable quantity)
XYLENE(PURE)	100 lb	N/A	RQ 100 lb final RQ RQ 45.4 kg final RQ
ETHYLBENZENE	1000 lb	N/A	RQ 1000 lb final RQ RQ 454 kg final RQ

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	CAS No	California Proposition 65
TITANIUM DIOXIDE	13463-67-7	Carcinogen
ETHYLBENZENE	100-41-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
METHYL AMYL KETONE	X	X	X	N/A	N/A
TITANIUM DIOXIDE	X	X	X	N/A	X
XYLENE(PURE)	X	X	X	X	X
ETHYLBENZENE	X	X	X	X	X
ETHYL ACETATE	X	X	X	N/A	N/A
BUTYL ACETATE	X	X	X	N/A	X

International Regulations

Mexico - Grade

Slight risk, Grade 1

Chemical Name	Carcinogenic Status	Exposure Limits
METHYL AMYL KETONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 235 mg/m ³ Mexico: STEL 100 ppm Mexico: STEL 465 mg/m ³
TITANIUM DIOXIDE	N/A	Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³
XYLENE(PURE)	N/A	Mexico: TWA 100 ppm Mexico: TWA 435 mg/m ³ Mexico: STEL 150 ppm Mexico: STEL 655 mg/m ³
ETHYLBENZENE	N/A	Mexico: TWA 100 ppm Mexico: TWA 435 mg/m ³ Mexico: STEL 125 ppm Mexico: STEL 545 mg/m ³

16. OTHER INFORMATION

NFPA

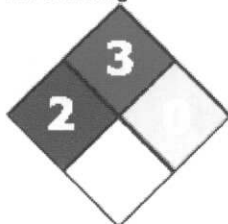
Health Hazard 2

Flammability 3

Instability 0

Physical and Chemical Hazards -

NFPA Rating



HMIS Health Hazard 0 * Flammability 0 Physical Hazard 0 Personal protection X

Chronic Hazard Star Legend

** Chronic Health Hazard*

Issuing Date: 27-May-2015

Revision Date: 27-May-2015

Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. PG-6-Y17FC03

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SAFETY DATA SHEET

Issuing Date: 23-Apr-2015

Revision Date: 23-Apr-2015

Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: PH-34FC

Product Name: POLYURETHANE CURING SOLUTION -
FAST CURE

Hentzen Coatings, Inc.
6937 West Mill Road, Milwaukee, WI 53218-1225

Company Phone Number: 1-414-353-4200
Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use

Industrial paint (Paint or Paint-Related), Restricted to
professional users

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Reproductive Toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 2

Label Elements

Emergency Overview

DANGER

Hazard Statements

Toxic if swallowed
Causes serious eye irritation
Suspected of causing cancer
Suspected of damaging fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
Highly flammable liquid and vapor



Appearance Opaque

Physical state Liquid

Odor Solvent

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/Bond container and receiving equipment
Use explosion-proof electrical/ ventilating/ lighting/ equipment
Use only non-sparking tools
Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
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 medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth
In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool
Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains a known or suspected carcinogen

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
METHYL ETHYL KETONE	78-93-3	10% - 20%	STEL: 300 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 590 mg/m ³
ACETYLACETONE	123-54-6	5% - 10%	TWA: 25 ppm S*	N/A
BUTYL ACETATE	123-86-4	5% - 10%	STEL: 200 ppm TWA: 150 ppm	TWA: 150 ppm TWA: 710 mg/m ³
METHYL AMYL KETONE	110-43-0	1% - 5%	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³
CYCLOHEXANONE	108-94-1	1% - 5%	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m ³
METHYL ISOBUTYL KETONE	108-10-1	1% - 5%	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³
TOLUENE	108-88-3	1% - 5%	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Call a physician immediately. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	No information available.
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Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Extremely flammable.

Explosion Data

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required. Remove all sources of ignition. Avoid breathing vapors or mists. Ventilate the area.
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Environmental Precautions

Environmental Precautions	Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.
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Methods and materials for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
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Methods for Cleaning Up Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep away from heat, sparks and flame.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH	OSHA	NIOSH IDLH
METHYL ETHYL KETONE 78-93-3	STEL: 300 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 590 mg/m ³	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 300 ppm STEL: 885 mg/m ³
TERTIARY BUTYL ACETATE 540-88-5	TWA: 200 ppm	TWA: 200 ppm TWA: 950 mg/m ³	IDLH: 1500 ppm TWA: 200 ppm TWA: 950 mg/m ³
ACETYLACETONE 123-54-6	TWA: 25 ppm S*	N/A	
BUTYL ACETATE 123-86-4	STEL: 200 ppm TWA: 150 ppm	TWA: 150 ppm TWA: 710 mg/m ³	IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³
METHYL AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m ³
CYCLOHEXANONE 108-94-1	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m ³	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m ³
METHYL ISOBUTYL KETONE 108-10-1	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³	IDLH: 500 ppm TWA: 50 ppm TWA: 205 mg/m ³ STEL: 75 ppm STEL: 300 mg/m ³
TOLUENE 108-88-3	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	If splashes are likely to occur, wear safety glasses with side-shields.
Skin and Body Protection	Chemical resistant apron.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Appearance	Opaque
Odor	Solvent.	Odor Threshold	No data available
pH	No data available	Flash Point	12 °F / -11 °C
Decomposition temperature	No data available	Boiling Point	171 °F / 77 °C
Melting Point / Melting Range	No data available	Freezing Point	No data available
Vapor Pressure @20°C (kPa)	No data available	Partition coefficient:	No data available
Vapor Density	No data available	Density	No data available
Bulk density	No data available	Specific Gravity	1.00
Evaporation Rate	No data available	Water solubility	No data available
Dynamic viscosity	No data available	Weight per Gallon (lbs/gal):	8.33
		Flammability Limits in Air	
		Upper	4.18 %
		Lower	0.69 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	The product has not been tested
Inhalation	There is no data for this product.
Eye Contact	There is no data for this product.

Skin Contact There is no data for this product.

Ingestion There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
METHYL ETHYL KETONE 78-93-3	2483 mg/kg (Rat)	5000 mg/kg (Rabbit)	11700 ppm (Rat) 4 h
TERTIARY BUTYL ACETATE 540-88-5	N/A	N/A	2230 mg/m ³ (Rat) 4 h
ACETYLACETONE 123-54-6	N/A	N/A	1224 ppm (Rat) 4 h
BUTYL ACETATE 123-86-4	14.13 mg/kg (Rat)	17600 mg/kg (Rabbit)	390 ppm (Rat) 4 h
METHYL AMYL KETONE 110-43-0	1600 mg/kg (Rat)	12.6 mL/kg (Rabbit)	2000 ppm (Rat) 4 h
CYCLOHEXANONE 108-94-1	1544 mg/kg (Rat)	947 mg/kg (Rabbit)	8000 ppm (Rat) 4 h
METHYL ISOBUTYL KETONE 108-10-1	2080 mg/kg (Rat)	3000 mg/kg (Rabbit)	8.2 mg/L (Rat) 4 h
TOLUENE 108-88-3	2600 mg/kg (Rat)	12000 mg/kg (Rabbit)	12.5 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

MUTAGENIC EFFECTS No information available.

Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
CYCLOHEXANONE 108-94-1	A3	Group 3	N/A	N/A
METHYL ISOBUTYL KETONE 108-10-1	A3	Group 2B	N/A	X
TOLUENE 108-88-3	N/A	Group 3	N/A	N/A

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive Toxicity No information available.

Specific target organ systemic No information available.

toxicity (single exposure)

Specific target organ systemic No information available.

toxicity (repeated exposure)

Chronic Toxicity

Target Organ Effects

May cause adverse liver effects.

Central nervous system (CNS), Eyes, Kidney, Liver, Peripheral Nervous System (PNS),

Respiratory system, Skin.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	110 mg/kg
ATEmix (dermal)	6851 mg/kg
ATEmix (inhalation-dust/mist)	7.4 mg/l
Oral LD50	675 mg/kg (rat) Estimated
Dermal LD50	4331 mg/kg (rat) Estimated

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
METHYL ETHYL KETONE 78-93-3	N/A	3130 - 3320: 96 h Pimephales promelas mg/L LC50 flow-through	520: 48 h Daphnia magna mg/L EC50 5091: 48 h Daphnia magna mg/L EC50 4025 - 6440: 48 h Daphnia magna mg/L EC50 Static
TERTIARY BUTYL ACETATE 540-88-5	N/A	296 - 362: 96 h Pimephales promelas mg/L LC50 flow-through	N/A
ACETYLACETONE 123-54-6	N/A	98.3 - 110: 96 h Pimephales promelas mg/L LC50 flow-through 50.3 - 71.8: 96 h Lepomis macrochirus mg/L LC50 flow-through 64.1 - 80.1: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	34.4: 48 h Daphnia magna mg/L EC50
BUTYL ACETATE 123-86-4	674.7: 72 h Desmodesmus subspicatus mg/L EC50	100: 96 h Lepomis macrochirus mg/L LC50 static 17 - 19: 96 h Pimephales promelas mg/L LC50 flow-through	N/A
METHYL AMYL KETONE 110-43-0	N/A	126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	N/A
CYCLOHEXANONE 108-94-1	N/A	481 - 578: 96 h Pimephales promelas mg/L LC50 flow-through 8.9: 96 h Pimephales promelas mg/L LC50	N/A
METHYL ISOBUTYL KETONE 108-10-1	400: 96 h Pseudokirchneriella subcapitata mg/L EC50	496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through	170: 48 h Daphnia magna mg/L EC50
TOLUENE 108-88-3	433: 96 h Pseudokirchneriella subcapitata mg/L EC50 12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 12.6: 96 h Pimephales promelas mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 54: 96 h Oryzias latipes mg/L LC50 static 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static	5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static 11.5: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
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METHYL ETHYL KETONE 78-93-3	0.29
ACETYLACETONE 123-54-6	0.34
BUTYL ACETATE 123-86-4	1.81
METHYL AMYL KETONE 110-43-0	1.98
CYCLOHEXANONE 108-94-1	0.86
METHYL ISOBUTYL KETONE 108-10-1	1.19
TOLUENE 108-88-3	2.65

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste treatment methods**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

US EPA Waste NumberD001
U019 U057 U161 U159 U220

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ETHYL KETONE 78-93-3	U159	Included in waste streams: F005, F039	200.0 mg/L regulatory level	U159
CYCLOHEXANONE 108-94-1	N/A	Included in waste stream: F039	N/A	U057
METHYL ISOBUTYL KETONE 108-10-1	N/A	Included in waste stream: F039	N/A	U161
TOLUENE 108-88-3	U220	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151	N/A	U220

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
TOLUENE 108-88-3	N/A	N/A	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	N/A

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
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METHYL ETHYL KETONE 78-93-3	Toxic Ignitable
BUTYL ACETATE 123-86-4	Toxic
TOLUENE 108-88-3	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions 149, B52, IB2, T4, TP1, TP8, TP28
Description UN1263, Paint, 3, II, RQ
Emergency Response Guide Number 128

TDG

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Description UN1263, Paint, 3, II

MEX

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions A3, A72
Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions A3, A72
Description UN1263, Paint, 3, II

IMDG/IMO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
EmS-No F-E, S-E

Special Provisions	163
Description	UN1263, Paint, 3, II
RID	
UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Description	UN1263, Paint, 3, II
ADR/RID	
UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Tunnel restriction code	(D/E)
Special Provisions	163, 640C, 650
Description	UN1263, Paint, 3, II, (D/E)
ADR/RID-Labels	3
ADN	
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Special Provisions	163, 640C, 650
Description	UN1263, Paint, 3, II
Limited Quantity (LQ)	5 L
Ventilation	VE01

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	SARA 313 - Threshold Values %
METHYL ISOBUTYL KETONE	108-10-1	1.0
TOLUENE	108-88-3	1.0

SARA 311/312 Hazard Categories

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

CAA (Clean Air Act)

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:

Chemical Name	CAS No	Hazardous air pollutants (HAPs) content
METHYL ISOBUTYL KETONE	108-10-1	Present
TOLUENE	108-88-3	Present

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
TERTIARY BUTYL ACETATE	N/A	N/A	N/A	X
BUTYL ACETATE	5000 lb	N/A	N/A	X
TOLUENE	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ (reportable quantity)
METHYL ETHYL KETONE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
TERTIARY BUTYL ACETATE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
BUTYL ACETATE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
CYCLOHEXANONE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
METHYL ISOBUTYL KETONE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
TOLUENE	1000 lb 1 lb	N/A	RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	CAS No	California Proposition 65
METHYL ISOBUTYL KETONE	108-10-1	Carcinogen Developmental

TOLUENE	108-88-3	Developmental Female Reproductive
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U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
METHYL ETHYL KETONE	X	X	X	X	N/A
TERTIARY BUTYL ACETATE	X	X	X	N/A	N/A
ACETYLACETONE	X	X	X	N/A	N/A
BUTYL ACETATE	X	X	X	N/A	N/A
METHYL AMYL KETONE	X	X	X	N/A	N/A
CYCLOHEXANONE	X	X	X	X	N/A
METHYL ISOBUTYL KETONE	X	X	X	X	N/A
TOLUENE	X	X	X	X	X

International Regulations

Mexico - Grade

Serious risk, Grade 3

Chemical Name	Carcinogenic Status	Exposure Limits
METHYL ETHYL KETONE	N/A	Mexico: TWA 200 ppm Mexico: TWA 590 mg/m ³ Mexico: STEL 300 ppm Mexico: STEL 885 mg/m ³
TERTIARY BUTYL ACETATE	N/A	Mexico: TWA 200 ppm Mexico: TWA 950 mg/m ³ Mexico: STEL 250 ppm Mexico: STEL 1190 mg/m ³
BUTYL ACETATE	N/A	Mexico: TWA 150 ppm Mexico: TWA 710 mg/m ³ Mexico: STEL 200 ppm Mexico: STEL 950 mg/m ³
METHYL AMYL KETONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 235 mg/m ³ Mexico: STEL 100 ppm Mexico: STEL 465 mg/m ³
CYCLOHEXANONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 200 mg/m ³ Mexico: STEL 100 ppm Mexico: STEL 400 mg/m ³
METHYL ISOBUTYL KETONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 205 mg/m ³ Mexico: STEL 75 ppm Mexico: STEL 307 mg/m ³
TOLUENE	N/A	Mexico: TWA 50 ppm Mexico: TWA 188 mg/m ³

16. OTHER INFORMATION

NFPA

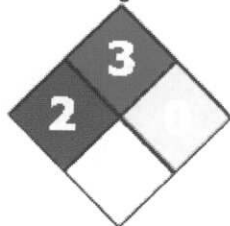
Health Hazard 2

Flammability 3

Instability 0

Physical and Chemical
Hazards -

NFPA Rating



HMIS

Health Hazard 1 * Flammability 3 Physical Hazard 0 Personal protection X

Chronic Hazard Star Legend

* Chronic Health Hazard

Issuing Date: 23-Apr-2015

Revision Date: 23-Apr-2015

Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. PH-34FC3V

end