

SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information

Product Name: 2600 Black Lacquer Product Code: 2600

Trade Name: Glyptal

Manufactured by:

IN CASE OF EMERGENCY:

GLYPTAL, INC.
305 Eastern Ave.
Chelsea, MA 02150
Telephone (617) 884-6918

CHEMTREC 1-800-424-9300

Product Use: Coatings

Not recommended for: Nonindustrial Use

Section 2 - Hazards Identification

NFPA Ratings, risk phrases, and suggested WHMIS Hazard Categories:

GHS Ratings:

Flammable liquid	2	Flash point < 23°C and initial boiling point > 35°C (95°F)
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Carcinogen	2	Limited evidence of human or animal carcinogenicity
Reproductive toxin	2	Human or animal evidence possibly with other information
Organ toxin single exposure	3	Transient target organ effects- Narcotic effects- Respiratory tract irritation
Organ toxin repeated exposure	2	Presumed to be harmful to human health- Animal studies with significant toxic effects relevant to humans at generally moderate exposure (guidance)- Human evidence in exceptional cases
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity < or = 20.5 mm ² /s at 40° C.
Aquatic toxicity	C3	Acute toxicity > 10.0 but < 100.0 mg/l and lack of rapid degradability and log Kow > 4 unless BCF < 500 and unless chronic toxicity > 1 mg/l

GHS Hazards

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H401	Toxic to aquatic life

GHS Precautions

P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/.../equipment

P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash skin thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P331	Do NOT induce vomiting
P362	Take off contaminated clothing and wash before reuse
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P337+P313	If eye irritation persists, get medical advice/attention
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P403+P233	Store in a well ventilated place. Keep container tightly closed
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container to an approved waste disposal plant

Signal Word: Danger



Section 3 - Composition/Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Xylene (mixed isomers)	1330-20-7	10.00% - 20.00%
Nitrocellulose	9004-70-0	10.00% - 20.00%
Toluene	108-88-3	10.00% - 20.00%
Acetone	67-64-1	5.00% - 10.00%
Isopropyl Alcohol	67-63-0	5.00% - 10.00%
Methyl Ethyl Ketone	78-93-3	1.00% - 5.00%
Bis(2-ethylhexyl) terephthalate	6422-86-2	1.00% - 5.00%
Isobutyl Acetate	110-19-0	1.00% - 5.00%

Section 4 - First Aid Measures

INHALATION - Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room, or physician as further medical treatment may be necessary. Administer oxygen if a qualified operator is available.

EYE CONTACT - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are

worn, quickly remove them, then flush the eyes with water. If irritation persists, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

SKIN CONTACT - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water. If symptoms persist, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

INGESTION - If material is ingested, seek immediate medical attention. Do not induce vomiting. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. Contact a poison control center, emergency room, or physician as further medical treatment will be necessary.

Section 5 - Fire Fighting Measures

Flash Point: -20 C (-4 F)

LEL: 1.00

UEL: 13.00

EXTINGUISHING MEDIA: Use carbon dioxide (CO₂), "alcohol" foam, dry chemical

UNUSUAL FIRE OR EXPLOSION HAZARDS: The product vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback. Closed containers may explode or burst when exposed to extreme heat. May produce hazardous decomposition products when exposed to extreme heat.

HAZARDOUS COMBUSTION PRODUCTS: See section 10 for a list of hazardous decomposition products for this mixture.

FIRE FIGHTING: Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

FIRE FIGHTING EQUIPMENT: Firemen and emergency responders: wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

SPILL AND LEAK PROCEDURES: Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

SMALL SPILLS: Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

LARGE SPILLS: Prevent this material from entering sewers and watercourses by diking or impounding the spilled

material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas .

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Label the waste container. Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 7 - Handling and Storage

HANDLING PRECAUTIONS: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 50 to 85 F (10 to 30 C).

STORAGE: Prevent from freezing. Do not store above 95 F (35 C).

Store only in original containers.

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Xylene (mixed isomers) 1330-20-7	PEL 100 ppm - TWA PEL 150 ppm - STEL	TLV 100 ppm - TWA TLV 150 ppm - STEL	Not Established
Nitrocellulose 9004-70-0	Not Established	Not Established	Not Established
Toluene 108-88-3	100 ppm - TWA (Z-1) 150 ppm - STEL (Z-1) 200 ppm TWA (Z-2)	TLV 20 ppm - TWA	Not Established
Acetone 67-64-1	PEL 1000 ppm - TWA	TLV 500 ppm - TWA STEL 750 ppm	Not Established
Isopropyl Alcohol 67-63-0	PEL 400 ppm - TWA VPEL 400 ppm - TWA	TLV 200 ppm - TWA TLV 400 ppm - STEL	Not Established
Methyl Ethyl Ketone 78-93-3	PEL 200 ppm - TWA VPEL 200 ppm - TWA VPEL 300 ppm - STEL	TLV 200 ppm - TWA TLV 300 ppm - STEL	Not Established
Bis(2-ethylhexyl) terephthalate 6422-86-2	Not Established	Not Established	Not Established
Isobutyl Acetate 110-19-0	TWA - 150 ppm (Z-1) TWA - 150 ppm (P-0)	TWA - 150 ppm TLV	Not Established

ENGINEERING: Provide general dilution of local exhaust ventilation in volume and pattern to keep concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

VENTILATION: Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits. Refer to OSHA standards 1910.94, 1910.107, 1910.108.

PERSONAL PROTECTIVE EQUIPMENT

EYES:

Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

PROTECTIVE GLOVES:

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear. If necessary, wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

RESPIRATORY PROTECTION:

Respiratory protection may not be needed if the local exhaust is sufficient to maintain levels of hazardous ingredients below occupational exposure limits. Where ventilation is inadequate, use a NIOSH/MSHA-approved, air-purifying respirator equipped with the appropriate chemical cartridges or positive-pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

CONTAMINATED EQUIPMENT: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

<p>Appearance Black Liquid</p> <p>Physical State Liquid</p> <p>Vapor Pressure 31.8 mm Hg @ 68 F</p> <p>Boiling Range 56 to 375 °C</p> <p>Lbs VOC/Gallon Solids 11.4</p>	<p>Odor Solvent odor</p> <p>Vapor Density Heavier than air</p> <p>Evaporation Rate Slower than ether</p> <p>Specific Gravity (SG) 1.026</p> <p>Lbs VOC/Gallon Less Water and Exempt Solvent 4.32</p>
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Section 10 - Stability and Reactivity

Stability:

STABLE

Components of this mixture are incompatible with the following materials:

Acids, acid chlorides, acid anhydrides, oxidizing agents, chloroformates.

Strong oxidizing agents, acids, alkali/base/caustic solutions, and amines

Strong oxidizing agents, acids, alkali/base/caustic solutions, and reducing agents

Strong oxidizing agents
Copper, copper alloys, strong alkalis, strong oxidizing agents
Strong oxidizing agents, strong acids, strong bases, nitrates

This mixture is likely to exhibit the following combustion products:

Carbon Dioxide, Carbon Monoxide
Oxides of nitrogen
Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Component Toxicity

1330-20-7	Xylene (mixed isomers) Oral LD50: 4,300 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rabbit)
67-64-1	Acetone Oral LD50: 6 g/kg (Rat) Dermal LD50: 7 g/kg (Guinea Pig) Inhalation LC50: 50 g/m3 (Rat)
78-93-3	Methyl Ethyl Ketone Oral LD50: 2,737 mg/kg (Rat) Dermal LD50: 6 g/kg (Rabbit) Inhalation LC50: 320 g/m3 (Mouse)
6422-86-2	Bis(2-ethylhexyl) terephthalate Oral LD50: 5,000 mg/kg (Rat)
110-19-0	Isobutyl Acetate Inhalation LC50: 23 mg/L (Rat)

Toxicological information: The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 3 and 15 for details.

Routes of Entry:

Inhalation Skin Contact Eye Contact

Exposure to this material may affect the following organs:

Blood Eyes Kidneys Liver Lungs Central Nervous System Reproductive System
Skin

Effects of Overexposure

108-88-3

Toluene

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: metallic taste, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, temporary changes in mood and behavior, muscle weakness, loss of coordination, confusion, irregular heartbeat, coma, and death.

Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

Ingestion Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

Skin Contact May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use .

110-19-0

Isobutyl Acetate

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), narcosis (dazed or sluggish feeling).

Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

Ingestion Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects . Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

Skin Contact May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use .

1330-20-7

Xylene (mixed)

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the face and neck, mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), tight feeling in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, effects on memory, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), coma.

Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

Ingestion Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects . Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

Skin Contact Can cause skin irritation. Prolonged and repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of the skin, burns and other skin damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use .

64742-89-8

VM&P Naphtha

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: sweating, fever, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), lung irritation, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), abdominal pain, frequent or painful urination, confusion, blood abnormalities, (breakage of red blood cells), kidney damage, lung damage, respiratory failure.

- Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

- Ingestion Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

- Inhalation Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

- Skin Contact May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

67-63-0

2-Propanol

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), low blood pressure, mild, temporary changes in the liver, effects on heart rate, respiratory depression (slowing of the breathing rate) loss of coordination, confusion, lung edema (fluid buildup in the lung tissue), kidney damage, coma.

- Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

- Ingestion Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury. Exposure causes severe irritation of the gastrointestinal tract.

- Inhalation Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

- Skin Contact May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

67-64-1

Acetone

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), and other central nervous system effects, high blood sugar, coma .

- Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.
- Ingestion Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.
- Inhalation Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.
- Skin Contact May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use .

78-93-3

Methyl Ethyl Ketone

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use .
Methyl Ethyl Ketone (78-93-3)

- Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

Methyl Ethyl Ketone (78-93-3)
- Ingestion Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.
Methyl Ethyl Ketone (78-93-3)
- Inhalation Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects . Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

Methyl Ethyl Ketone (78-93-3)
- Skin Contact May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use .

Methyl Ethyl Ketone (78-93-3)

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing) . See Section 15 for carcinogenicity assessment.

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
None			N/A

Section 12 - Ecological Information

Component Ecotoxicity

Xylene (mixed isomers)

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

Toluene

12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 7.63 mg/l - 96 h

NOEC - Pimephales promelas (fathead minnow) - 5.44 mg/l - 7 d

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 8.00 mg/l - 24 h

other aquatic invertebrates

Immobilization EC50 - Daphnia magna (Water flea) - 6 mg/l - 48 h

Toxicity to algae EC50 - Chlorella vulgaris (Fresh water algae) - 245.00 mg/l - 24 h

EC50 - Pseudokirchneriella subcapitata (green algae) - 10.00 mg/l - 24 h

12.2 Persistence and degradability

Biodegradability Result: - Readily biodegradable

12.3 Bioaccumulative potential

Bioaccumulation Leuciscus idus (Golden orfe) - 3 d - 0.05 mg/l

Bioconcentration factor (BCF): 90

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

Acetone

12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 5,540 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates LC50 - Daphnia magna (Water flea) - 8,800 mg/l - 48 h

Toxicity to algae Remarks: no data available

12.2 Persistence and degradability

Biodegradability Result: 91 % - Readily biodegradable. (OECD Test Guideline 301B)

12.3 Bioaccumulative potential

Does not bioaccumulate.

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

Isopropyl Alcohol

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 9,640.00 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 5,102.00 mg/l - 24 h

Immobilization EC50 - Daphnia magna (Water flea) - 6,851 mg/l - 24 h

Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - > 2,000.00 mg/l - 72 h

EC50 - Algae - > 1,000.00 mg/l - 24 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No bioaccumulation is to be expected (log Pow <= 4).

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

Methyl Ethyl Ketone

12.1 Toxicity

Toxicity to fish mortality NOEC - Cyprinodon variegatus (sheepshead minnow)- 400 mg/l -96 h
LC50 - Pimephales promelas (fathead minnow) - 3,130 - 3,320 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates LC50 - Daphnia magna (Water flea) - > 520 mg/l - 48 h

EC50 - Daphnia magna (Water flea) - 7,060 mg/l - 24 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

12.1 Toxicity

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - > 984 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 0.0014 mg/l - 48 h
Immobilization
(OECD Test Guideline 202)

Toxicity to algae Growth inhibition EC50 - Selenastrum capricornutum (green algae) - > 0.86 mg/l - 72 h
(OECD Test Guideline 201)

Toxicity to bacteria Respiration inhibition EC50 - Sludge Treatment - > 10 mg/l - 3 h
(OECD Test Guideline 209)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d
Result: 73.05 % - Readily biodegradable.
(OECD Test Guideline 301B)

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

Isobutyl Acetate

12.1 Toxicity

Toxicity to fish

LC50 - Leuciscus idus melanotus - 101 mg/l - 48 h

LC0 - Leuciscus idus melanotus - 70 mg/l - 48 h

Toxicity to daphnia and other aquatic invertebrates

LC50 - Daphnia magna (Water flea) - 250 mg/l - 24 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

Section 13 - Disposal Considerations

The provisions of Council Directive 91/689/EEC and subsequent Amendments and Decisions apply to wastes for the product as supplied.

Do not allow into drains or water courses.

Waste and emptied containers must be disposed of in accordance with:

- Control of Pollution Act of 1974,
- Special Waste Regulations 1996,
- Duty of Care Regulations 1992.

Waste should be recycled or disposed of through a licensed waste management facility .

Section 14 - Transport Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Paint	1263	II	3

Section 15 - Regulatory Information

According to the Directive (1999/45/EC), relating to the classification packaging and labelling of dangerous substances and preparations, the product is labelled as follows:

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING!

This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

108-88-3 Toluene 10 to 20 %

Carcinogenicity:

IARC: Group 2B: Possibly carcinogenic to humans

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

- None

Carcinogenicity:

IARC - No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH - No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA - No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP - No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

- Isobutyl Acetate 110-19-0
- Bis(2-ethylhexyl) terephthalate 6422-86-2
- Methyl Ethyl Ketone 78-93-3
- Isopropyl Alcohol 67-63-0
- Acetone 67-64-1
- Toluene 108-88-3
- Xylene (mixed isomers) 1330-20-7

Commonwealth of Massachusetts "Right to Know": This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

- Isobutyl Acetate 1 to 5 %
- Methyl Ethyl Ketone 1 to 5 %
- Isopropyl Alcohol 5 to 10 % Hazardous
- Acetone 5 to 10 %
- Toluene 10 to 20 %
- Xylene (mixed) 10 to 20 %

New Jersey Worker and Community Right To Know Hazardous Substance List: The following substances appear on the New Jersey Right To Know Hazardous Substance List.

- Isobutyl Acetate 1 to 5 %
- Bis(2-ethylhexyl) terephthalate 1 to 5 %
- Methyl Ethyl Ketone 1 to 5 %
- Isopropyl Alcohol 5 to 10 %
- Acetone 5 to 10 %
- Toluene 10 to 20 %
- Xylene (mixed) 10 to 20 %

Commonwealth of Pennsylvania Worker and Community Right-To-Know Act: This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List:

- 110-19-0
- 6422-86-2
- 78-93-3
- 67-63-0
- 67-64-1
- 108-88-3
- 1330-20-7

Country

Regulation

All Components Listed

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

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.

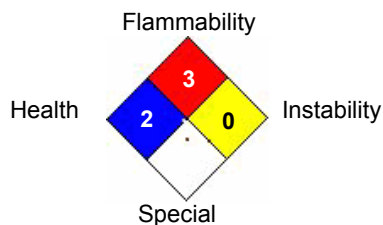
Section 16 - Other Information

Hazardous Material Information System (HMIS)

HEALTH	*	2
FLAMMABILITY		3
PHYSICAL HAZARD		0
PERSONAL PROTECTION		H

HMIS & NFPA Hazard Rating Legend
* = Chronic Health Hazard
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

National Fire Protection Association (NFPA)



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Reviewer Revision

Date Prepared: 2/23/2016