

SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information

Product Name: G1514 Thinner Product Code: G1514

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: Thinner

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 | 1 | Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5 |
| Reproductive toxin | 2 | Human or animal evidence possibly with other information |
| 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 | C2 | Acute toxicity > 1.00 but <= 10.0 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 |
| H318 | Causes serious eye damage |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |
| 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 |
| P310 | Immediately call a POISON CENTER or doctor/physician |
| 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 % |
|---------------------------------|------------|------------------------|
| Toluene | 108-88-3 | 20.00% - 30.00% |
| Aliphatic Petroleum Distillates | 64742-89-8 | 20.00% - 30.00% |
| Isobutyl Acetate | 110-19-0 | 10.00% - 20.00% |
| Ethyl-3-ethoxypropionate | 763-69-9 | 10.00% - 20.00% |
| Isopropyl Alcohol | 67-63-0 | 10.00% - 20.00% |
| Methyl Ethyl Ketone | 78-93-3 | 5.00% - 10.00% |
| n-Butanol | 71-36-3 | 5.00% - 10.00% |

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: -12 C (10 F)

LEL: 1.00

UEL: 12.00

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 |
|--|---|---|-----------------------|
| 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 |
| Aliphatic Petroleum Distillates 64742-89-8 | TWA: 500 ppm / 2000 mg/m3 (Z-1) TWA: 400 ppm / 1600 mg/m3 (p0) | TWA: 300 ppm | Not Established |
| Isobutyl Acetate 110-19-0 | TWA - 150 ppm (Z-1) TWA - 150 ppm (P-0) | TWA - 150 ppm TLV | Not Established |
| Ethyl-3-ethoxypropionate 763-69-9 | Not Established | Not Established | 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 |
| n-Butanol 71-36-3 | PEL 100 ppm - TWA VPEL 50 ppm - Ceiling (skin) | TLV 20 ppm - TWA | 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.

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:

| | |
|--|--|
| Appearance Clear Liquid Physical State Liquid Vapor Pressure 30.3 mm Hg @ 68 F Boiling Range 79 to 165 °C Lbs VOC/Gallon Solids 0.0 | Odor Solvent odor Vapor Density Heavier than air Evaporation Rate Slower than ether Specific Gravity (SG) 0.820 Lbs VOC/Gallon Less Water and Exempt Solvent 6.84 |
|--|--|

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.

Alkali metals, Aluminum, Halogens, Lead, Strong mineral acids, Strong oxidizing agents
Strong oxidizing agents, strong acids, strong bases
Strong oxidizing agents, strong acids, strong bases, nitrates
Copper, copper alloys, strong alkalis, strong oxidizing agents
Strong oxidizing agents

This mixture is likely to exhibit the following combustion products:

Carbon Dioxide, Carbon Monoxide
Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Component Toxicity

| | |
|------------|--|
| 64742-89-8 | Aliphatic Petroleum Distillates Oral LD50: 5,000 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rabbit) |
| 110-19-0 | Isobutyl Acetate Inhalation LC50: 23 mg/L (Rat) |
| 763-69-9 | Ethyl-3-ethoxypropionate Oral LD50: 5,000 mg/kg (Rat) Dermal LD50: 4,080 mg/kg (Rabbit) Inhalation LC50: 998 ppm (Ra) |
| 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) |
| 71-36-3 | n-Butanol Oral LD50: 790 mg/kg (Rat) Dermal LD50: 3,400 mg/kg (Rabbit) |

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 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 . |

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. |

71-36-3

n-Butanol

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), cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), blurred vision.

| | |
|--------------|---|
| Eye Contact | Can cause severe eye irritation. Symptoms include stinging tearing, and redness, and swelling of eyes. Can injure eye tissue. |
| 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 or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, burns, and other skin damage.. Passage of this material into the body through the skin is possible, and may add to toxic effects from breathing or swallowing. |

763-69-9

Ethyl-3-ethoxypropionate

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

| | |
|--------------|---|
| Eye Contact | Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of the eyes. |
| Ingestion | Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. |
| 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. |
| Skin Contact | Can cause skin irritation. Symptoms may include redness or burning of the skin, and other skin damage. |

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.

CAS Number

Description

% Weight

Carcinogen Rating

None

N/A

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|-------------------------------------|
| Section 12 - Ecological Information |
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Component Ecotoxicity

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 24 h other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 8.00 mg/l - 6 mg/l - 48 h

Immobilization EC50 - Daphnia magna (Water

Toxicity to algae 245.00 mg/l - 24 h 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.

Aliphatic Petroleum Distillates

Toxicity to Fish LC50 (Oncorhynchus mykiss (rainbow trout)): 8.2 mg/l
Exposure time: 96 h

Toxicity to daphnia and EC50 (Daphnia magna (Water flea)): 4.5 mg/l
other aquatic invertebrates Exposure time: 48 h

Toxicity to algae EC50 (Pseudokirchneriella subcapitata (green algae)):
3.7 mg/l
Exposure time: 96 h

Ecotoxicology Assessment

Acute aquatic toxicity: Toxic to aquatic life.

Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

Persistence and Biodegradability

Biodegradability: Concentration: 49.2 mg/l
Biodegradation :77%
Testing Period: 2 d
Exposure Time: 28 d
GLP: yes
Result: Readily biodegradable

Bioaccumulative Potential

Partition coefficient: n-octanol/water: Low Pow: 2.13-4.85 (25 C)

Mobility in Soil: No data available

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

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) -
55.3 mg/l - 96 h
(OECD Test Guideline 203)
static test LC50 - Pimephales promelas (fathead minnow) -
45.3 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - > 479.7 mg/l -
48 h
other aquatic
invertebrates
Immobilization
(OECD Test Guideline 202)

Immobilization EC50 - Daphnia magna (Water flea) - 785 mg/l -
48 h
(OECD Test Guideline 202)

Toxicity to algae Growth inhibition EC50 - Selenastrum capricornutum (green
algae) - > 114.86
mg/l - 72 h
(OECD Test Guideline 201)

Toxicity to bacteria Growth inhibition IC50 - other microorganisms - > 5,000
mg/l - 16 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
An environmental hazard cannot be excluded in the event of unprofessional
handling or disposal.
Harmful to aquatic life.

Isopropyl Alcohol

12.1 Toxicity

Toxicity to fish

9,640.00 mg/l - 96 h

LC50 - Pimephales promelas (fathead minnow) -

Toxicity to daphnia and
24 h

other aquatic

invertebrates

EC50 - Daphnia magna (Water flea) - 5,102.00 mg/l -

Immobilization EC50 - Daphnia magna (Water flea) -

6,851 mg/l - 24 h

Toxicity to algae

2,000.00 mg/l - 72 h

EC50 - Desmodesmus subspicatus (green algae) - >

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

minnow)- 400 mg/l -96 h

mortality NOEC - Cyprinodon variegatus (sheepshead

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

n-Butanol

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1,840 mg/l
- 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 1,983 mg/l - 48 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 24 h

- 921 mg/l

Bioconcentration factor (BCF): 0.38

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> |
|---------------|-----------------------------|------------------|----------------------|---------------------|
| G1514 | Paint Related Material | 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 20 to 30 %

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.

n-Butanol 71-36-3

Methyl Ethyl Ketone 78-93-3

Isopropyl Alcohol 67-63-0

Ethyl-3-ethoxypropionate 763-69-9

Isobutyl Acetate 110-19-0

Aliphatic Petroleum Distillates 64742-89-8

Toluene 108-88-3

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

n-Butanol 5 to 10 %

Methyl Ethyl Ketone 5 to 10 %

Isopropyl Alcohol 10 to 20 % Hazardous

Isobutyl Acetate 10 to 20 %

Toluene 20 to 30 %

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.

n-Butanol 5 to 10 %

Methyl Ethyl Ketone 5 to 10 %

Isopropyl Alcohol 10 to 20 %

Ethyl-3-ethoxypropionate 10 to 20 %

Isobutyl Acetate 10 to 20 %

Aliphatic Petroleum Distillates 20 to 30 %

Toluene 20 to 30 %

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

71-36-3

78-93-3

67-63-0

763-69-9

110-19-0

64742-89-8

108-88-3

WHMIS Classification B2 Flammable Liquid / D2A Very Toxic Material
- None

WHMIS Classification B2 Flammable Liquid / D2B Toxic Material
- None

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 | | 1 |
| PERSONAL PROTECTION | | H |

HMIS & NFPA Hazard Rating

Legend

* = Chronic Health Hazard

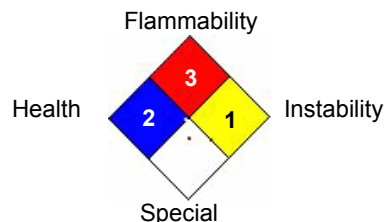
0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH

National Fire Protection Association (NFPA)



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Reviewer Revision

Date Prepared: 3/25/2016