Safety Data Sheet

Issue Date: 26-Apr-2012 Revision Date: 24-Feb-2021 Version 1

1. IDENTIFICATION

Product identifier

Product Name Type M Dark Blue Ink

Other means of identification

SDS # USM-015

Product Code IU-M4D4, IU-M4DQT, IU-M4DQTH, IU-M4DGL

UN/ID No UN1210

Recommended use of the chemical and restrictions on use

Recommended Use Printing ink.

Details of the supplier of the safety data sheet

Manufacturer Address

Universal Stenciling & Marking Systems, Inc.

205 15th Avenue S.E. St. Petersburg, FL 33701 PH: 727-894-3027

Emergency telephone number

Emergency Telephone INFOTRAC: 1-800-535-5053

2. HAZARDS IDENTIFICATION

Appearance Dark blue liquid Physical state Liquid Odor Alcohol

Classification

| Acute toxicity - Inhalation (Vapors) | Category 4 |
|--------------------------------------|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Carcinogenicity | Category 1A |
| Flammable liquids | Category 3 |

Signal Word

Danger

Hazard statements

Harmful if inhaled
Causes skin irritation
Causes serious eye damage
May cause cancer



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

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Use explosion-proof equipment

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 Immediately call a poison center or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

If skin irritation occurs: Get medical advice/attention

Wash contaminated clothing before reuse

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

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS No | Weight-% |
|--|------------|----------|
| Ethanol | 64-17-5 | 29-36 |
| Glycol Ether EB | 111-76-2 | 19-20 |
| n-Propyl Alcohol | 71-23-8 | 11-15 |
| n-Propyl acetate | 109-60-4 | 2-4 |
| Cellulose nitrate | 9004-70-0 | 1-4 |
| Methylisobutyl ketone | 108-10-1 | 1-2 |
| Solvent naphtha (petroleum), light aliphatic | 64742-89-8 | <1 |
| N-Heptane | 142-82-5 | <1 |
| n-Butyl acetate | 123-86-4 | <1 |
| Toluene | 108-88-3 | Trace |
| Acetaldehyde | 75-07-0 | Trace |

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST AID MEASURES

Description of first aid measures

Eye ContactRinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.
Get immediate medical advice/attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If irritation persists or

feeling unwell, obtain medical advice.

Inhalation Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center

if individual's condition declines or if symptoms persist.

Ingestion Do not induce vomiting without medical advice. Rinse mouth thoroughly with water. Never

give anything by mouth to an unconscious person. Seek medical attention immediately.

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Most important symptoms and effects, both acute and delayed

Symptoms Causes skin irritation and serious eye damage. Harmful if inhaled. May be harmful in

contact with skin. May be harmful if swallowed. May cause irritation to the mucous

membranes and upper respiratory tract.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog or fine spray, carbon dioxide, dry chemical or foam.

Unsuitable Extinguishing Media Direct water stream may spread fire.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor. Vapors may travel to source of ignition and flash back.

Hazardous combustion products Carbon oxides.

Explosion Data

Sensitivity to Static Discharge May be ignited by heat, sparks or flames. Take precautionary measures against static

discharge.

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 Wear protective clothing as described in Section 8 of this safety data sheet. Remove all

sources of ignition & ventilate area. Evacuate unnecessary personnel.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an inert

(i.e. vermiculite, dry sand or earth) absorbent material.

Methods for Clean-UpUse clean non-sparking tools to collect absorbed material. Sweep up absorbed material

and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste

disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when handling this product. Use personal protection recommended in Section 8. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only with adequate ventilation. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use spark-proof tools and explosion-proof equipment. Keep container tightly closed. Take precautionary measures against static discharges. Avoid contact with skin, eyes or clothing.

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Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------------------------------|-------------------------------|--|---|
| Ethanol 64-17-5 | STEL: 1000 ppm | TWA: 1000 ppm TWA: 1900 mg/m³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m³ | IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³ |
| Glycol Ether EB 111-76-2 | TWA: 20 ppm | TWA: 50 ppm TWA: 240 mg/m³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m³ (vacated) S* S* | IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m³ |
| n-Propyl Alcohol 71-23-8 | TWA: 100 ppm | TWA: 200 ppm TWA: 500 mg/m³ (vacated) TWA: 200 ppm (vacated) TWA: 500 mg/m³ (vacated) STEL: 250 ppm (vacated) STEL: 625 mg/m³ | IDLH: 800 ppm TWA: 200 ppm TWA: 500 mg/m³ STEL: 250 ppm STEL: 625 mg/m³ |
| n-Propyl acetate 109-60-4 | STEL: 150 ppm TWA: 100 ppm | TWA: 200 ppm TWA: 840 mg/m³ (vacated) TWA: 200 ppm (vacated) TWA: 840 mg/m³ (vacated) STEL: 250 ppm (vacated) STEL: 1050 mg/m³ | IDLH: 1700 ppm TWA: 200 ppm TWA: 840 mg/m³ STEL: 250 ppm STEL: 1050 mg/m³ |
| Methylisobutyl ketone 108-10-1 | STEL: 75 ppm TWA: 20 ppm | TWA: 100 ppm TWA: 410 mg/m³ (vacated) TWA: 50 ppm (vacated) TWA: 205 mg/m³ (vacated) STEL: 75 ppm (vacated) STEL: 300 mg/m³ | IDLH: 500 ppm TWA: 50 ppm TWA: 205 mg/m³ STEL: 75 ppm STEL: 300 mg/m³ |
| n-Butyl acetate 123-86-4 | STEL: 150 ppm TWA: 50 ppm | TWA: 150 ppm TWA: 710 mg/m³ (vacated) TWA: 150 ppm (vacated) TWA: 710 mg/m³ (vacated) STEL: 200 ppm (vacated) STEL: 950 mg/m³ | IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m³ STEL: 200 ppm STEL: 950 mg/m³ |
| N-Heptane 142-82-5 | STEL: 500 ppm TWA: 400 ppm | TWA: 500 ppm TWA: 2000 mg/m³ (vacated) TWA: 400 ppm (vacated) TWA: 1600 mg/m³ (vacated) STEL: 500 ppm (vacated) STEL: 2000 mg/m³ | IDLH: 750 ppm Ceiling: 440 ppm 15 min Ceiling: 1800 mg/m³ 15 min TWA: 85 ppm TWA: 350 mg/m³ |

| Toluene 108-88-3 | TWA: 20 ppm | TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m³ Ceiling: 300 ppm | IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³ |
|-------------------------|-----------------|---|---|
| Acetaldehyde 75-07-0 | Ceiling: 25 ppm | TWA: 200 ppm TWA: 360 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 180 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 270 mg/m³ | IDLH: 2000 ppm |

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Maintain eye

wash fountain and quick-drench facilities in work area. Local exhaust ventilation

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recommended.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use safety glasses or chemical splash goggles. Refer to 29 CFR 1910.133 for eye and face

protection regulations.

Skin and Body Protection Gloves are recommended. Refer to 29 CFR 1910.138 for appropriate skin and body

protection.

Respiratory Protection MSHA/ NIOSH-approved vapor respirator is recommended with handling in areas where

adequate ventilation is not available. Refer to 29 CFR 1910.134 for respiratory protection

requirements.

General Hygiene Considerations Avoid contact with skin, eyes and clothing. After handling this product, wash hands before

eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before

reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance Dark blue liquid Odor Alcohol

Color Dark blue Odor Threshold Not determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Not determined
Melting point / freezing point
Boiling point / boiling range
Flash point
Evaporation Rate
Flammability (Solid, Gas)
Not determined
30.88 °C / 87.6 °F
Not determined
Not determined
Not determined
Not determined

Flammability Limit in Air

Upper flammability or explosive Not determined

limits

Lower flammability or explosive Not determined

limits

Vapor Pressure
Not determined
Vapor Density
Heavier than air
.? (air = 1)

Relative Density
Water Solubility
Solubility in other solvents
Partition Coefficient
Not determined
Not determined
Not determined

Autoignition temperature
Decomposition temperature
Kinematic viscosity
Dynamic Viscosity
Explosive Properties
Oxidizing Properties
Not determined
Not determined
Not determined
Not determined
Not determined

Other information

VOC Content (%) 71-83

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, sparks and open flames.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact May be harmful in contact with skin.

Inhalation Harmful if inhaled.

Ingestion May be harmful if swallowed.

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------------------------|-----------------------|------------------------|---|
| Ethanol 64-17-5 | = 7060 mg/kg(Rat) | - | = 124.7 mg/L (Rat)4 h |
| Glycol Ether EB 111-76-2 | = 470 mg/kg (Rat) | = 435 mg/kg(Rabbit) | = 486 ppm (Rat) 4 h = 450 ppm (Rat) 4 h |
| n-Propyl Alcohol 71-23-8 | = 1870 mg/kg(Rat) | = 4049 mg/kg(Rabbit) | > 13548 ppm (Rat) 4 h |
| Cellulose nitrate 9004-70-0 | > 5 g/kg (Rat) | - | - |
| n-Propyl acetate 109-60-4 | = 8700 mg/kg(Rat) | > 17756 mg/kg (Rabbit) | - |
| Methylisobutyl ketone 108-10-1 | = 2080 mg/kg(Rat) | = 3000 mg/kg(Rabbit) | 2000 - 4000 ppm (Rat) 4 h |
| n-Butyl acetate 123-86-4 | = 10768 mg/kg (Rat) | > 17600 mg/kg(Rabbit) | = 390 ppm (Rat) 4 h |

N-Heptane = 3000 mg/kg (Rabbit) $= 103 \text{ g/m}^3 \text{ (Rat) 4 h}$ 142-82-5 Solvent naphtha (petroleum), light = 3000 mg/kg (Rabbit) aliphatic 64742-89-8 Acetaldehyde = 660 mg/kg (Rat) = 3540 mg/kg (Rabbit) = 13000 ppm (Rat) 4 h 75-07-0 = 2600 mg/kg (Rat) = 12000 mg/kg (Rabbit) = 12.5 mg/L (Rat) 4 h Toluene 108-88-3

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

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

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye damage.

Carcinogenicity May cause cancer. Ethanol has been shown to be carcinogenic in long-term studies only

when consumed as an alcoholic beverage. Nitrate or nitrite ingested under conditions that

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result in endogenous nitrosation are considered IARC group 2A carcinogens.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|-----------------------------------|-------|---------------------|------------------------|------|
| Ethanol 64-17-5 | A3 | Group 1 | Known | Х |
| Glycol Ether EB 111-76-2 | A3 | Group 3 | | |
| Cellulose nitrate 9004-70-0 | | Group 2A | | Х |
| Methylisobutyl ketone 108-10-1 | A3 | Group 2B | | Х |
| Acetaldehyde 75-07-0 | A2 | Group 1 Group 2B | Reasonably Anticipated | Х |
| Toluene 108-88-3 | | Group 3 | | |

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 IARC components are "not classifiable as human carcinogens"

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

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

X - Present

Numerical measures of toxicity

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

 Oral LD50
 3,391.50 mg/kg

 Dermal LD50
 4,390.20 mg/kg

 Gas
 49.70 mg/L

 ATEmix (inhalation-dust/mist)
 6.69 mg/L

 ATEmix (inhalation-vapor)
 10.8592 mg/L

12. ECOLOGICAL INFORMATION

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Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

| Chemical name Algae/aquatic plants Fish Crustacea Ethanol 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 10800: 24 h Daphnia r EC50 2: 48 h Daphnia r EC50 2: 48 h Daphnia mg/L EC50 2: 48 h Daphnia mg/L LC50 static Glycol Ether EB 111-76-2 2950: 96 h Lepomis macrochirus mg/L LC50 1490: 96 h Lepomis macrochirus mg/L LC50 1490: 96 h Lepomis macrochirus mg/L LC50 static 1000: 48 h Daphnia mg/L 24 magna mg/L EC50 1698 - 1940: 24 magna mg/L EC50 1698 - | magna mg/L 4221: 48 h |
|--|--------------------------|
| 64-17-5 promelas mg/L LC50 flow-through 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static Glycol Ether EB 2950: 96 h Lepomis macrochirus mg/L LC50 1490: 96 h Lepomis macrochirus mg/L LC50 static 1000: 48 h Daphnia m EC50 2: 48 h Daphnia EC50 2: 48 h Daphnia EC50 1480: 96 h Lepomis macrochirus mg/L LC50 static 1000: 48 h Daphnia m EC50 1698 - 1940: 24 magna mg/L EC50 1698 - 1940: 24 magna mg/L EC50 static 1000: 48 h Daphnia m | magna mg/L 4221: 48 h |
| mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static Glycol Ether EB 2950: 96 h Lepomis macrochirus 111-76-2 mg/L LC50 1490: 96 h Lepomis macrochirus mg/L LC50 static magna mg/L EC50 1698 - 1940: 24 n-Propyl Alcohol 4480: 96 h Pimephales promelas 3642: 48 h Daphnia m | |
| Pimephales promelas mg/L LC50 static 1000: 48 h Daphnia mg/L LC50 111-76-2 1000: 48 h Daphnia mg/L LC50 1490: 96 h Lepomis macrochirus mg/L LC50 1490: 96 h Lepomis macrochirus mg/L LC50 static magna mg/L E m | g/L LC50 |
| Static Static Glycol Ether EB 2950: 96 h Lepomis macrochirus 1000: 48 h Daphnia m EC50 1490: 96 h Lepomis EC50 1698 - 1940: 24 macrochirus mg/L LC50 static magna mg/L E n-Propyl Alcohol 4480: 96 h Pimephales promelas 3642: 48 h Daphnia m | |
| Clycol Ether EB 2950: 96 h Lepomis macrochirus 1000: 48 h Daphnia m 111-76-2 mg/L LC50 1490: 96 h Lepomis EC50 1698 - 1940: 24 macrochirus mg/L LC50 static magna mg/L EC50 1698 - 1940: 24 magna mg/L EC50 static magna mg/L EC50 1698 - 1940: 24 magna mg/L EC50 static magna mg/L EC50 1698 - 1940: 24 magna mg/L EC50 static magna mg/L EC50 1698 - 1940: 24 magna mg/L EC50 1698 - 1940: 24 magna mg/L EC50 static magna mg/L EC50 1698 - 1940: 24 magna | |
| 111-76-2 mg/L LC50 1490: 96 h Lepomis macrochirus mg/L LC50 static magna mg/L EC50 1698 - 1940: 24 n-Propyl Alcohol 4480: 96 h Pimephales promelas 3642: 48 h Daphnia m | |
| macrochirus mg/L LC50 static magna mg/L E n-Propyl Alcohol 4480: 96 h Pimephales promelas 3642: 48 h Daphnia m | |
| n-Propyl Alcohol 4480: 96 h Pimephales promelas 3642: 48 h Daphnia m | • |
| | |
| 71-23-8 mg/L LC50 flow-through EC50 3339 - 3977: 48 | |
| magna mg/L EC5 | |
| n-Propyl acetate 56 - 64: 96 h Pimephales promelas 318: 24 h Daphnia m | |
| 109-60-4 mg/L LC50 static 56 - 64: 96 h EC50 | 3 3 |
| Pimephales promelas mg/L LC50 | |
| flow-through | |
| Methylisobutyl ketone 400: 96 h Pseudokirchneriella 496 - 514: 96 h Pimephales 170: 48 h Daphnia m | agna mg/L |
| 108-10-1 subcapitata mg/L EC50 promelas mg/L LC50 flow-through EC50 | |
| n-Butyl acetate 674.7: 72 h Desmodesmus 100: 96 h Lepomis macrochirus 72.8: 24 h Daphnia m | iagna mg/L |
| 123-86-4 subspicatus mg/L EC50 mg/L LC50 static 17 - 19: 96 h EC50 | |
| Pimephales promelas mg/L LC50 | |
| flow-through 62: 96 h Leuciscus idus mg/L LC50 static | |
| N-Heptane 375.0: 96 h Cichlid fish mg/L LC50 10: 24 h Daphnia ma | agna mg/l |
| 142-82-5 EC50 | agria mg/L |
| Solvent naphtha (petroleum), light 4700: 72 h Pseudokirchneriella | |
| aliphatic subcapitata mg/L EC50 | |
| 64742-89-8 | |
| Acetaldehyde 237 - 249: 120 h Nitzschia linearis 28.0 - 34.0: 96 h Pimephales 3.64 - 6.15: 48 h Dapl | |
| 75-07-0 mg/L EC50 promelas mg/L LC50 flow-through mg/L EC50 Static 4 | |
| 39.8 - 46.8: 96 h Pimephales Daphnia magna mg | g/L EC50 |
| promelas mg/L LC50 static 53: 96 h | |
| Lepomis macrochirus mg/L LC50 static 1.8 - 2.4: 96 h Oncorhynchus | |
| mykiss mg/L LC50 static | |
| Toluene 12.5: 72 h Pseudokirchneriella 12.6: 96 h Pimephales promelas 11.5: 48 h Daphnia m | agna mg/l |
| 108-88-3 subcapitata mg/L EC50 static 433: mg/L LC50 static 15.22 - 19.05: 96 h EC50 5.46 - 9.83: 48 | 0 0 |
| 96 h Pseudokirchneriella Pimephales promelas mg/L LC50 magna mg/L EC5 | |
| subcapitata mg/L EC50 flow-through 5.89 - 7.81: 96 h | |
| Oncorhynchus mykiss mg/L LC50 | |
| flow-through 5.8: 96 h | |
| Oncorhynchus mykiss mg/L LC50 | |
| semi-static 50.87 - 70.34: 96 h | |
| Poecilia reticulata mg/L LC50 static | |
| 54: 96 h Oryzias latipes mg/L LC50 static 28.2: 96 h Poecilia reticulata | |
| mg/L LC50 semi-static 11.0 - 15.0: | |
| 96 h Lepomis macrochirus mg/L | |
| LC50 static 14.1 - 17.16: 96 h | |
| Oncorhynchus mykiss mg/L LC50 | |
| static | |

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

| Chemical name | Partition coefficient |
|-----------------------|-----------------------|
| Ethanol | -0.32 |
| 64-17-5 | |
| Glycol Ether EB | 0.81 |
| 111-76-2 | |
| n-Propyl Alcohol | 0.34 |
| 71-23-8 | |
| Methylisobutyl ketone | 1.19 |
| 108-10-1 | |
| N-Heptane | 4.66 |
| 142-82-5 | |
| n-Butyl acetate | 1.81 |
| 123-86-4 | |
| Toluene | 2.7 |
| 108-88-3 | |
| Acetaldehyde | 0.5 |
| 75-07-0 | |

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

<u>US EPA Waste Number</u> D001

| Chemical name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|-----------------------|------|----------------------------|------------------------|------------------------|
| Methylisobutyl ketone | | Included in waste stream: | | U161 |
| 108-10-1 | | F039 | | |
| Acetaldehyde | | | | U001 |
| 75-07-0 | | | | |
| Toluene | U220 | Included in waste streams: | | U220 |
| 108-88-3 | | F005, F024, F025, F039, | | |
| | | K015, K036, K037, K149, | | |
| | | K151 | | |

| Chemical name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|---------------|---|------------------------|-------------------------------|------------------------|
| Toluene | | | Toxic waste | |
| 108-88-3 | | | 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. | |

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California Hazardous Waste Status

| Chemical name | California Hazardous Waste Status |
|-------------------|-----------------------------------|
| Ethanol | Toxic |
| 64-17-5 | Ignitable |
| n-Propyl Alcohol | Toxic |
| 71-23-8 | Ignitable |
| n-Propyl acetate | Toxic |
| 109-60-4 | Ignitable |
| Cellulose nitrate | Ignitable in ether and alcohol |
| 9004-70-0 | Reactive in ether and alcohol |
| N-Heptane | Toxic |
| 142-82-5 | Ignitable |
| n-Butyl acetate | Toxic |
| 123-86-4 | |
| Toluene | Toxic |
| 108-88-3 | Ignitable |
| Acetaldehyde | Toxic |
| 75-07-0 | Ignitable |

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT

UN/ID No UN1210
Proper Shipping Name Printing ink

Hazard class 3
Packing Group III

IATA

UN number UN1210
Proper Shipping Name Printing ink

Transport hazard class(es) 3
Packing Group III

<u>IMDG</u>

UN number UN1210
Proper Shipping Name Printing ink

Transport hazard class(es) 3
Packing Group III

Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

| Chemical name | TSCA | TSCA Inventory | DSL/NDSL | EINECS/ELI | ENCS | IECSC | KECL | PICCS | AICS |
|--|------|----------------|----------|-------------------|------|-------|------|-------|------|
| | | Status | | NCS | | | | | |
| Ethanol | Χ | ACTIVE | X | X | X | X | X | X | X |
| Glycol Ether EB | Χ | ACTIVE | X | X | X | X | X | X | X |
| n-Propyl Alcohol | Х | ACTIVE | Х | X | X | Х | X | X | X |
| Cellulose nitrate | X | ACTIVE | X | | X | Х | Х | X | Х |
| n-Propyl acetate | Х | ACTIVE | Х | Х | X | X | Х | Х | X |
| Methylisobutyl ketone | Χ | ACTIVE | X | X | X | X | X | X | X |
| n-Butyl acetate | Х | ACTIVE | Х | X | X | Х | X | X | X |
| N-Heptane | Χ | ACTIVE | X | X | X | X | X | X | X |
| Solvent naphtha (petroleum), light aliphatic | Х | ACTIVE | X | X | | Х | X | X | Х |

| Acetaldehyde | Х | ACTIVE | Х | X | Х | Х | X | Х | X |
|--------------|---|--------|---|---|---|---|---|---|---|
| Toluene | Х | ACTIVE | X | X | X | X | X | X | X |

Legend:

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

DSL/NDSL - 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

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 | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|-----------------------|--------------------------|----------------|----------------------------------|
| Methylisobutyl ketone | 5000 lb | | RQ 5000 lb final RQ |
| 108-10-1 | | | RQ 2270 kg final RQ |
| n-Butyl acetate | 5000 lb | | RQ 5000 lb final RQ |
| 123-86-4 | | | RQ 2270 kg final RQ |
| Acetaldehyde | 1000 lb | | RQ 1000 lb final RQ |
| 75-07-0 | | | RQ 454 kg final RQ |
| Toluene | 1000 lb 1 lb | | RQ 1000 lb final RQ |
| 108-88-3 | | | RQ 454 kg final RQ RQ 1 lb final |
| | | | RQ |
| | | | RQ 0.454 kg final RQ |

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

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 | Weight-% | SARA 313 - Threshold |
|----------------------------------|----------|----------|----------------------|
| | | | Values % |
| Glycol Ether EB - 111-76-2 | 111-76-2 | 19-20 | 1.0 |
| Methylisobutyl ketone - 108-10-1 | 108-10-1 | 1-2 | 1.0 |
| Acetaldehyde - 75-07-0 | 75-07-0 | Trace | 0.1 |
| Toluene - 108-88-3 | 108-88-3 | Trace | 1.0 |

CWA (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 |
|-----------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| n-Butyl acetate | 5000 lb | | | Χ |
| Toluene | 1000 lb | X | X | Х |
| Acetaldehyde | 1000 lb | | | X |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

| Chemical name | California Proposition 65 | | |
|----------------------------------|---------------------------|--|--|
| Ethanol - 64-17-5 | Carcinogen | | |
| | Developmental | | |
| Methylisobutyl ketone - 108-10-1 | Carcinogen | | |
| | Developmental | | |
| Toluene - 108-88-3 | Developmental | | |
| Acetaldehyde - 75-07-0 | Carcinogen | | |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------------|------------|---------------|--------------|
| Ethanol 64-17-5 | Х | X | X |
| Glycol Ether EB 111-76-2 | X | X | X |
| n-Propyl Alcohol 71-23-8 | X | Х | X |
| n-Propyl acetate 109-60-4 | Χ | X | X |
| Cellulose nitrate 9004-70-0 | Х | Х | Х |
| Methylisobutyl ketone 108-10-1 | Χ | X | X |
| n-Butyl acetate 123-86-4 | Χ | X | X |
| N-Heptane 142-82-5 | Χ | X | X |
| Acetaldehyde 75-07-0 | Х | X | Х |
| Toluene 108-88-3 | Х | X | Х |

16. OTHER INFORMATION

NFPAHealth Hazards
Not determinedFlammability
Not determinedInstability
Not determinedSpecial Hazards
Not determinedHMISHealth Hazards
2Flammability
3Physical hazards
0Personal Protection
Not determined

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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.

End of Safety Data Sheet