1. IDENTIFICATION

Product Name: Ink, 750ml Black MEK
Product No.: 302-1001-002
Identification No.: 1210
Identified uses: Printing ink.
Supplier: Citronix
2241 S. Watson Rd. Bldg 200 Ste 111
Arlington
Texas 76010
Tel: 817-633-3200
Fax: 817-633-3207
info@citronix.com
Emergency Telephone: CHEMTREC – (800)-424-9300 (U.S. calls) 001-703-527-3887 (International calls)

2. HAZARD(S) IDENTIFICATION

Appearance: Liquid
Color: Black.
Odor: Ketonic.
GHS Pictogram: Danger

Signal Word: Danger
Hazard Statements:
- H225: Highly flammable liquid and vapour.
- H319: Causes serious eye irritation.
- H336: May cause drowsiness or dizziness.
- H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements:
- P210: Keep away from open flames and hot surfaces. - No smoking.
- P271: Use only outdoors or in a well-ventilated area.
- P280: Wear protective clothing and gloves.
- P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P313: Get medical advice/attention.
- P501: Dispose of contents/container in accordance with local regulations.

GHS Classification:
Physical and Chemical Hazards: Flam. Liq. 2 - H225
Human health: Eye Irrit. 2 - H319;STOT SE 3 - H336
Environment: Aquatic Chronic 3 - H412

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

WHMIS Label:
- Flammable Liquid.
- Materials Causing Other Toxic Effects.
**Ink, 750ml Black MEK**

**Controlled Product Classification**
This Product has been classified according to the hazard criteria of the Controlled Products Regulations and the MSDS contains all required information.

**Human Health**

See section 11 for additional information on health hazards.

**Inhalation**
Vapours may cause headache, fatigue, dizziness and nausea.

**Ingestion**
May cause nausea, headache, dizziness and intoxication.

**Skin Contact**
Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

**Eye Contact**
Irritating to eyes.

**Route Of Entry**
Ingestion. Skin absorption. Inhalation.

**Medical Symptoms**
NERVOUS SYSTEM. Drowsiness, dizziness, disorientation, vertigo. Mild intoxication (incl. fatigue, lassitude, irritability, headache, nausea).

**Environment**
The product contains a substance which may cause long term adverse effects in the aquatic environment.

**Physical And Chemical Hazards**
Vapours are heavier than air and may travel along the floor and in the bottom of containers.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-METHYLPROPAN-2-OL</td>
<td>&lt; 1%</td>
<td>75-65-0</td>
<td>200-889-7</td>
<td>Flam. Liq. 2 - H225; Acute Tox. 4 - H332; Eye Irrit. 2 - H319; STOT SE 3 - H335</td>
</tr>
<tr>
<td>BUTANONE</td>
<td>50-70%</td>
<td>78-93-3</td>
<td>201-159-0</td>
<td>Flam. Liq. 2 - H225; Eye Irrit. 2 - H319; STOT SE 3 - H336</td>
</tr>
<tr>
<td>C.I. SOLVENT BLACK 29</td>
<td>5-10%</td>
<td>61901-87-9</td>
<td></td>
<td>Aquatic Chronic 2 - H411</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>10-30%</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>Flam. Liq. 2 - H225</td>
</tr>
</tbody>
</table>

**Composition Comments**
The product contains organic solvents.
4. FIRST-AID MEASURES

Description of first aid measures

General Information
NOTE! Keep affected person away from heat, sparks and flames!

Inhalation
Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion
NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! DO NOT INDUCE VOMITING! Get medical attention immediately!

Skin Contact
Remove affected person from source of contamination. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye Contact
Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Immediately transport to hospital or eye specialist.

Most important symptoms and effects, both acute and delayed

General Information
The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation
Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion
May cause nausea, headache, dizziness and intoxication.

Skin Contact
Prolonged contact may cause redness, irritation and dry skin.

Eye Contact
May cause severe irritation to eyes.

Indication of any immediate medical attention and special treatment needed

Notes To The Physician
No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

5. FIRE-FIGHTING MEASURES

Flash point (°C) -6°C CC (Closed cup).

Extinguishing Media
Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Water spray.

Hazardous combustion products
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards
Take precautionary measures against static discharges.

Specific Hazards

Special Fire Fighting Procedures
Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities. Use water to keep fire exposed containers cool and disperse vapors. Move container from fire area if it can be done without risk.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Wear protective clothing as described in Section 8 of this material safety data sheet.

Environmental Precautions
Do not discharge into drains, water courses or onto the ground.

Spill Clean Up Methods
Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Clean-up personnel should use respiratory and/ or liquid contact protection. Runoff or release to sewer, waterway or ground is forbidden. Small spillages: Collect with absorbent, non-combustible material into suitable containers. Large spillages: Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Inform Authorities if large amounts are involved.

Reference to other sections
Wear protective clothing as described in Section 8 of this material safety data sheet. See section 11 for more detailed information on health effects and symptoms. For waste disposal, see section 13.
7. HANDLING AND STORAGE

Handling
Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Risk of vapor concentration on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented.

Storage
Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>STD</th>
<th>TWA (8-hrs)</th>
<th>STEL (15 min)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-METHYLPROPAN-2-OL</td>
<td>ACGIH</td>
<td>100 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-METHYLPROPAN-2-OL</td>
<td>PEL</td>
<td>100 ppm</td>
<td>300 mg/m3</td>
<td></td>
</tr>
<tr>
<td>BUTANONE</td>
<td>ACGIH</td>
<td>200 ppm</td>
<td>300 ppm</td>
<td></td>
</tr>
<tr>
<td>BUTANONE</td>
<td>PEL</td>
<td>200 ppm</td>
<td>590 mg/m3</td>
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<tr>
<td>ETHANOL</td>
<td>ACGIH</td>
<td></td>
<td>1000 ppm</td>
<td>A3</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>PEL</td>
<td>1000 ppm</td>
<td>1900 mg/m3</td>
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</table>

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>IDLH</th>
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</thead>
<tbody>
<tr>
<td>2-METHYLPROPAN-2-OL</td>
<td>1600 ppm</td>
</tr>
<tr>
<td>BUTANONE</td>
<td>3000 ppm</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>3300 ppm</td>
</tr>
</tbody>
</table>

ACGIH=American Conference of Governmental Industrial Hygienists.
A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.
A4: Not Classifiable as a Human Carcinogen.

Protective Equipment

Process Conditions
Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

Engineering Measures
Well-ventilated area.

Respiratory Equipment
No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Occupational Exposure Limit

Hand Protection
Protective gloves must be used if there is a risk of direct contact or splash. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye Protection
Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection
Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures
DO NOT SMOKE IN WORK AREA! Promptly remove any clothing that becomes wet or contaminated. Wash promptly if skin becomes wet or contaminated. Use appropriate hand lotion to prevent defatting and cracking of skin. When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

Environmental Exposure Controls
Keep container tightly sealed when not in use.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>Ketonic</td>
</tr>
<tr>
<td>Solubility</td>
<td>Slightly soluble in water. Soluble in: Organic solvents.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>~75-85°C @ 760 mm Hg</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.859 @ 20°C</td>
</tr>
<tr>
<td>Vapor density (air=1)</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>&lt;1 BuAc=1</td>
</tr>
<tr>
<td>Viscosity</td>
<td>3.75-4.25 cP @ 25°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>-6°C CC (Closed cup).</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
There are no known reactivity hazards associated with this product.

Stability
Stable under normal temperature conditions.
Not available.

Conditions To Avoid
Avoid contact with strong oxidisers.

Materials To Avoid
Strong oxidizing substances.

Hazardous Decomposition Products

11. TOXICOLOGICAL INFORMATION

Toxicological information
No information available.

Acute toxicity:
Acute Toxicity (Oral LD50) Not determined.
Acute Toxicity (Dermal LD50) Not determined.
Acute Toxicity (Inhalation LC50) Not determined.

Germ cell mutagenicity:
Genotoxicity - In Vitro Not determined.

Carcinogenicity:
Carcinogenicity Not determined.

Reproductive Toxicity:
Reproductive Toxicity - Fertility Not determined.
Reproductive Toxicity - Development Not determined.

Specific target organ toxicity - single exposure:
STOT - Single exposure No information available.

Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure
No information available.

Aspiration hazard:
Not anticipated to present an aspiration hazard based on chemical structure.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

Acute Fish Toxicity
Avoid discharge to the aquatic environment.

Degradability
There are no data on the degradability of this product.

Bioaccumulative potential
No data available on bioaccumulation.

Mobility:
The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

Results of PBT and vPvB assessment
Not Classified as PBT/vPvB by current EU criteria.

Other adverse effects
Not determined.

13. DISPOSAL CONSIDERATIONS

Waste Management
Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

Disposal Methods
Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

UN No. (DOT/TDG) 1210
UN No. (IMDG) 1210
UN No. (ICAO) 1210

DOT Proper Shipping Name PRINTING INK, FLAMMABLE OR PRINTING INK RELATED MATERIAL (INCLUDING PRINTING INK THINNING OR REDUCING COMPOUND), FLAMMABLE

TDG Proper Shipping Name PRINTING INK, FLAMMABLE OR PRINTING INK RELATED MATERIAL (INCLUDING PRINTING INK THINNING OR REDUCING COMPOUND), FLAMMABLE

DOT Hazard Class 3
DOT Hazard Label Flammable Liquid

TDG Class 3
TDG Label(s) 3
IMDG Class 3
ICAO Class 3

Transport Labels

DOT Pack Group II
IMDG Pack Group II
Air Pack Group II
Ink, 750ml Black MEK

Environmentally Hazardous Substance/Marine Pollutant
No.

EMS F-E, S-D
Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes
Not applicable.

15. REGULATORY INFORMATION

Regulatory Status (US)
This product is formulated with a Chromium Complex dyestuff. Trace amounts of Chromium VI and its compounds may be found at levels <10ppm (0.001%). Chromium VI ions are not intentionally introduced to this product, but may be present as an integral component of the dyestuff. Chromium VI is a chemical listed on California Prop. 65.

Regulatory References

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed.
CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The following ingredients are listed.
BUTANONE: 5,000 lbs (2270 Kg)
SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed.
SARA 313 Emission Reporting
The following ingredients are listed.
2-METHYLPROPAN-2-OL 0.01%
BUTANONE 68%
CAA Accidental Release Prevention
None of the ingredients are listed.
FDA – Essential Chemical
None of the ingredients are listed.
FDA – Precursor Chemical
None of the ingredients are listed.
OSHA Highly Hazardous Chemicals
None of the ingredients are listed.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed.
California Air Toxics “Hot Spots” (A-I)
None of the ingredients are listed.
California Air Toxics “Hot Spots” (A-II)
None of the ingredients are listed.
Massachusetts “Right To Know” List
The following ingredients are listed.
2-METHYLPROPAN-2-OL
BUTANONE
ETHANOL
Rhode Island “Right To Know” List
The following ingredients are listed.
2-METHYLPROPAN-2-OL
BUTANONE
ETHANOL
Minnesota “Right To Know” List
The following ingredients are listed.
2-METHYLPROPAN-2-OL
BUTANONE
ETHANOL
New Jersey “Right To Know” List
The following ingredients are listed.
2-METHYLPROPAN-2-OL
BUTANONE
ETHANOL
Pennsylvania "Right To Know" List
The following ingredients are listed.
2-METHYLPROPAN-2-OL
BUTANONE
ETHANOL

International Inventories
EU - EINECS/ELINCS
The following ingredients are listed.
2-METHYLPROPAN-2-OL
BUTANONE
ETHANOL
Canada – DSL/NDSL
All ingredients are listed or exempt.
US - TSCA
The following ingredients are listed.
2-METHYLPROPAN-2-OL
BUTANONE
CELLULOSE ACETATE BUTYRATE
ETHANOL
TEGO VARIPLUS CA
US – TSCA 12(b) Export Notification
None of the ingredients are listed.
Australia - AICS
All ingredients are listed or exempt.
Japan – MITI
All ingredients are listed or exempt.
Korea - KECI
All ingredients are listed or exempt.
China - IECSC
All ingredients are listed or exempt.
Phillippines – PICCS
All ingredients are listed or exempt.

16. OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABILITY</td>
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<tr>
<td>PHYSICAL</td>
<td>0</td>
</tr>
<tr>
<td>PERSONAL PROTECTION</td>
<td>B</td>
</tr>
</tbody>
</table>

Information Sources

Disclaimer
This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.