SAFETY DATA SHEET
CANADA COLORS & CHEMICALS LTD
152 KENNEDY ROAD SOUTH
BRAMPTON, ONTARIO, L6W 3G4
CANADA
(905) 459-1232

PRODUCT: ISOPROPYL ALCOHOL 99
CODE: 511501

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
MANUFACTURER: CANADA COLORS & CHEMICALS LTD.
152 KENNEDY ROAD SOUTH
BRAMPTON, ONTARIO
CANADA
L6W 3G4

PRODUCT NAME: ISOPROPYL ALCOHOL 99
PRODUCT CODE: 511501
CHEMICAL FORMULA: C3H8O.
CHEMICAL FAMILY: HYDROCARBON.
MOLECULAR WEIGHT: 60.10.
MATERIAL USE: SOLVENT.
EMERGENCY PHONE NO: (416)-444-2112.

SECTION 02: HAZARDS IDENTIFICATION

SIGNAL WORD: DANGER.
HAZARD STATEMENT: H226 HIGHLY FLAMMABLE LIQUID AND VAPOUR. H316 CAUSES MILD SKIN IRRITATION. H319 CAUSES SERIOUS EYE IRRITATION. H336 MAY CAUSE DROWSINESS OR DIZZINESS.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS CAS # WT. %
ISOPROPYL ALCOHOL 67-63-0 99

SECTION 04: FIRST AID MEASURES

GENERAL ADVICE: CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE. MOVE OUT OF DANGEROUS AREA.

IF INHALED: IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.
SECTION 04: FIRST AID MEASURES

IN CASE OF SKIN CONTACT: WASH OFF WITH SOAP AND PLENTY OF WATER, CONSULT A PHYSICIAN.
IN CASE OF EYE CONTACT: WASH EYES WITH COPIOUS AMOUNT OF WATER.
IF SWALLOWED: DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER, CONSULT A PHYSICIAN.

SECTION 05: FIRE FIGHTING MEASURES

FLAMMABILITY: FLAMMABLE IN THE PRESENCE OF A SOURCE OF IGNITION WHEN THE TEMPERATURE IS ABOVE THE FLASH POINT. KEEP AWAY FROM HEAT/SPARK/OPEN FLAME/HOT SURFACE. NO SMOKING.
EXTINGUISHING MEDIA: SUITABLE FOR SURROUNDING FIRE. CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM, WATER FOG.
HAZARDOUS COMBUSTION PRODUCTS: CARBON OXIDES.
UNUSUAL FIRE AND EXPLOSION HAZARDS: NO DATA AVAILABLE.
SPECIAL PROCEDURES: EVACUATE HAZARD AREA, WEAR FULL PROTECTIVE EQUIPMENT INCLUDING A SELF-CONTAINED BREATHING APPARATUS.

SECTION 06: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: USE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING VAPORS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. EVACUATE PERSONNEL TO SAFE AREAS. BEWARE OF VAPOURS ACCUMULATING TO FORM EXPLOSIVE CONCENTRATIONS. VAPOURS CAN ACCUMULATE IN LOW AREAS.
ENVIRONMENTAL PRECAUTIONS: PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP: CONTAIN SPILLAGE AND THEN COLLECT WITH ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WET-BRUSHING AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID BREATHING MIST OR VAPOUR. WEAR PROTECTIVE EQUIPMENT DURING HANDLING. USE ADEQUATE VENTILATION. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. TAKE MEASURES TO PREVENT THE BUILD UP OF ELECTROSTATIC CHARGE.
CONDITIONS FOR SAFE STORAGE: KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAMES. PROTECT CONTAINER FROM PHYSICAL DAMAGE. KEEP THE CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. STORE IN A COOL AND WELL-VENTILATED AREA.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>TWA</th>
<th>ACGIH TLV STEL</th>
<th>PEL</th>
<th>OSHA PEL STEL</th>
<th>REL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>200 ppm</td>
<td>400 ppm</td>
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<tr>
<td>ENGINEERING CONTROLS</td>
<td>GOOD VENTILATION SHOULD BE PROVIDED TO KEEP VAPOUR AND MIST CONCENTRATIONS BELOW THE EXPOSURE LIMITS.</td>
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<tr>
<td>SKIN AND BODY PROTECTION</td>
<td>COMPLETE SUIT PROTECTING AGAINST CHEMICALS. THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE. FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING.</td>
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<td>RESPIRATORY PROTECTION</td>
<td>USE NIOSH APPROVED SUPPLIED-AIR RESPIRATOR.</td>
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<tr>
<td>EYE/FACE PROTECTION</td>
<td>SPLASH PROOF CHEMICAL GOGGLES, FACE SHIELD.</td>
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<tr>
<td>HYGIENIC MEASURES</td>
<td>USE GOOD PERSONAL HYGIENE PRACTICES. WASH HANDS BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. PROMPTLY REMOVE SOILED CLOTHING AND WASH THOROUGHLY BEFORE REUSE. SHOWER AFTER WORK USING PLENTY OF SOAP AND WATER.</td>
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<tr>
<td>OTHER/TYPE</td>
<td>EYE WASH STATION AND SAFETY SHOWER SHOULD BE LOCATED NEAR THE WORK STATION.</td>
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</table>
SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: LIQUID.
ODOUR: ALCOHOL LIKE.
ODOUR THRESHOLD: NO DATA AVAILABLE.
PH: NO DATA AVAILABLE.
MELTING POINT (°C): NO DATA AVAILABLE.
FREEZING POINT (°C): -88 °C.
BOILING POINT: 82-83 °C.
FLASH POINT (°C), METHOD: 12 °C (CLOSED CUP).
EVAPORATION RATE: 1.5 (hBuAc), 1.
FLAMMABILITY (SOLIDS AND GASES): NOT APPLICABLE.
UPPER FLAMMABLE LIMIT (% BY VOL.): 12 % (V).
LOWER FLAMMABLE LIMIT (% BY VOL.): 2% (V).
VAPOUR PRESSURE: 6.020 Pa (20 °C).
VAPOUR DENSITY (AIR=1): 2.8 (20 °C).
SPECIFIC GRAVITY (WATER=1): 0.785.
SOLUBILITY IN WATER (% WW): COMPLETELY MISCEIBLE.
AUTO IGNITION TEMPERATURE: 425 (°C).
PARTITION COEFFICIENT: LOG POW: 0.05.
N-OCTANOL/WATER
DECOMPOSITION TEMPERATURE: NO DATA AVAILABLE.
VISCOSITY: NO DATA AVAILABLE.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: NO DATA AVAILABLE.
CHEMICAL STABILITY: STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
POSSIBILITY OF HAZARDOUS REACTIONS: VAPOURS MAY FORM EXPLOSIVE MIXTURE WITH AIR.
CONDITIONS TO AVOID: AVOID OPEN FLAMM PARTS OF THE SKIN.
INCOMPATIBLE MATERIALS: STRONG OXIDIZING AGENTS.
HAZARDOUS DECOMPOSITION: CARBON OXIDES.
PRODUCTS

SECTION 11: TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>LC50</th>
<th>LD50</th>
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</thead>
<tbody>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>INHALATION-RAT- 16000 ppm -</td>
<td>ORAL-RAT- &gt;5000 MG/KG</td>
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ACUTE TOXICITY:
ORAL LD50: SEE ABOVE.
INHALATION LC50: SEE ABOVE.
DERMAL LD50: RABBIT - 12800 MG/KG.
OTHER INFORMATION ON ACUTE TOXICITY: NO DATA AVAILABLE.

TOXICITY:
SKIN CORROSION / IRRITATION: RABBIT - MILD SKIN IRRITATION.
SERIOUS EYE DAMAGE / EYE IRRITATION: RABBIT-EYE IRRITATION -24h.
RESPIRATORY OR SKIN SENSITIZATION: NO DATA AVAILABLE.
GERM CELL MUTAGENICITY: NO DATA AVAILABLE.
Carcinogenicity:
IAEC: 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.
DOES NOT IMPAIR FERTILITY, NOT A DEVELOPMENTAL TOXICANT.

REPRODUCTIVE TOXICITY:
STOT - SINGLE EXPOSURE: MAY CAUSE DROWSINESS OR DIZZINESS.
STOT - REPEAT EXPOSURE: NO DATA AVAILABLE.
ASPIRATION HAZARD: MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.

POTENTIAL HEALTH EFFECTS:
INHALATION - MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS. INGESTION - MAY BE HARMFUL IF SWALLOWED. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. EYES - MAY CAUSE EYE IRRITATION. SKIN - MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. MAY CAUSE SKIN IRRITATION.

SIGNS AND SYMPTOMS OF EXPOSURE:
CENTRAL NERVOUS SYSTEM DEPRESSION, PROLONGED OR REPEATED EXPOSURE CAN CAUSE NARCOSIS, SKIN IRRITATION. OVER EXPOSURE MAY CAUSE MILD, REVERSIBLE LIVER EFFECTS. ASPIRATION MAY LEAD TO, LUNG EDEMA, PNEUMONIA.
SECTION 12: ECOLOGICAL INFORMATION

PERSISTENCE AND DEGRADABILITY........ READILY BIODEGRADABLE.
BIOACCUMULATIVE POTENTIAL............ NO BIOACCUMULATION IS TO BE EXPECTED.
TOXICITY.................................. EC50 - DAPHNIA MAGNA (WATER FLEA) - 1.50 MG/L - 48H. TOXICITY TO FISH: LC50-
PRIMPALE (FATHEAD MINNOW) - 96450 MG/L - 96H.
MOBILITY IN SOIL......................... DISSOLVES IN WATER. IF THE PRODUCT ENTERS SOIL, ONE OR MORE
CONSTITUENTS WILL OR MAY BE MOBILE AND MAY CONTAMINATE GROUND
WATER.
OTHER ADVERSE EFFECTS............... NO DATA AVAILABLE.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL CONSIDERATIONS:
WASTE DISPOSAL.......................... INCINERATION INCLUDING ENERGY RECOVERY OF WASTE MATERIAL IN A
PERMITTED FACILITY IN ACCORDANCE WITH LOCAL, STATE OR PROVINCIAL AND
FEDERAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER............................... 1219.
TDG CLASSIFICATION.................... 3.
PACKING GROUP........................... II.
SPECIAL SHIPPING INSTRUCTIONS...... REFER TO TRANSPORTATION OF DANGEROUS GOOD REGULATIONS.

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION................... B2, D2B.
HPR COMPLIANCE.......................... THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD
CRITERIA OF THE HPR AND THE SDS CONTAINS ALL THE INFORMATION
REQUIRED BY THE HPR.

SECTION 16: OTHER INFORMATION

N.A.P.= NOT APPLICABLE
N.A.V.= NOT AVAILABLE
PREPARED BY............................. Regulatory Affairs
PREPARATION DATE...................... MAR 23/2016