

MATERIAL SAFETY DATA SHEET

COMPASSIONATE ANALYTICS – DUAL COLOR THC TEST KIT

MSDS DATE: 11/25/2013

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EXTRACTION SOLUTION
MANUFACTURER: COMPASSIONATE ANALYTICS, INC.
ADDRESS: 1104 TOPAZ ST, VICTORIA BC, V8T2M7
EMERGENCY PHONE: 604-588-1160

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

MAIN INGREDIENT: ISOPROPANOL >70% ; OTHER NONHAZARDOUS INGREDIENTS

SYNONYMS: ISOPROPYL ALCOHOL, 2-PROPANOL

CAS NO: 67-63-0

TOXICOLOGICAL DATA ON INGREDIENTS: ISOPROPYL ALCOHOL: ORAL (LD50): ACUTE: 5045 MG/KG [RAT]. 3600 MG/KG [MOUSE]. 6410 MG/KG [RABBIT]. DERMAL (LD50): ACUTE: 12800 MG/KG [RABBIT].

SECTION 2 NOTES: CONTAINS OTHER INERT/NONHAZARDOUS INGREDIENTS

SECTION 3: HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:

Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer, permeator).

POTENTIAL CHRONIC HEALTH EFFECTS:

Slightly hazardous in case of skin contact (sensitizer). **CARCINOGENIC EFFECTS:** A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Classified Reproductive system/toxin/female, Development toxin [POSSIBLE]. The substance may be toxic to kidneys, liver, skin, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

SECTION 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

SECTION 5: FIRE-FIGHTING MEASURES

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 399°C (750.2°F)

Flash Points: CLOSED CUP: 11.667°C (53°F) - 12.778 deg. C (55 deg. F) (TAG)

Flammable Limits: LOWER: 2% UPPER: 12.7%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:

Highly flammable in presence of open flames and sparks, of heat. Flammable in presence of oxidizing materials. Nonflammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Explosive in presence of open flames and sparks, of heat.

Fire Fighting Media and Instructions:

Flammable liquid, soluble or dispersed in water. **SMALL FIRE:** Use DRY chemical powder. **LARGE FIRE:** Use alcohol foam, water spray or fog.

Special Remarks on Fire Hazards:

Vapor may travel considerable distance to source of ignition and flash back. **CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME.** Hydrogen peroxide sharply reduces the autoignition temperature of Isopropyl alcohol. After a delay, Isopropyl alcohol ignites on contact with dioxgenyl tetrafluoroborate, chromium trioxide, and potassium tert-butoxide. When heated to decomposition it emits acrid smoke and fumes.

Special Remarks on Explosion Hazards:

MATERIAL SAFETY DATA SHEET

COMPASSIONATE ANALYTICS – DUAL COLOR THC TEST KIT

MSDS DATE: 11/25/2013

Secondary alcohols are readily autooxidized in contact with oxygen or air, forming ketones and hydrogen peroxide. It can become potentially explosive. It reacts with oxygen to form dangerously unstable peroxides which can concentrate and explode during distillation or evaporation. The presence of 2-butanone increases the reaction rate for peroxide formation. Explosive in the form of vapor when exposed to heat or flame. May form explosive mixtures with air. Isopropyl alcohol + phosgene forms isopropyl chloroformate and hydrogen chloride. In the presence of iron salts, thermal decomposition can occur, which in some cases can become explosive. A homogeneous mixture of concentrated peroxides + isopropyl alcohol are capable of detonation by shock or heat. Barium perchlorate + isopropyl alcohol gives the highly explosive alkyl perchlorates. It forms explosive mixtures with trinitromethane and hydrogen peroxide. It produces a violent explosive reaction when heated with aluminum isopropoxide + crotonaldehyde. Mixtures of isopropyl alcohol + nitroform are explosive.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
Large Spill: Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

SECTION 7: HANDLING AND STORAGE

Precautions: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

Storage: Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection: Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Exposure Limits:

TWA: 983 STEL: 1230 (mg/m3) [Australia] TWA: 200 STEL: 400 (ppm) from ACGIH (TLV) [United States] [1999] TWA: 980 STEL: 1225 (mg/m3) from NIOSH TWA: 400 STEL: 500 (ppm) from NIOSH TWA: 400 STEL: 500 (ppm) [United Kingdom (UK)] TWA: 999 STEL: 1259 (mg/m3) [United Kingdom (UK)] TWA: 400 STEL: 500 (ppm) from OSHA (PEL) [United States] TWA: 980 STEL: 1225 (mg/m3) from OSHA (PEL) [United States] Consult local authorities for acceptable exposure limits.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance: Liquid.

Odor: Pleasant. Odor resembling that of a mixture of ethanol and acetone.

Taste: Bitter. (Slight.)

Molecular Weight: 60.1 g/mole

Color: Colorless.

pH (1% soln/water): Not available.

Boiling Point: 82.5°C (180.5°F)

Melting Point: -88.5°C (-127.3°F)

Critical Temperature: 235°C (455°F)

Specific Gravity: 0.78505 (Water = 1)

Vapor Pressure: 4.4 kPa (@ 20°C)

Vapor Density: 2.07 (Air = 1)

Volatility: Not available.

Odor Threshold: 22 ppm (Sittig, 1991) 700 ppm for unadapted panelists (Verschuren, 1983).

Water/Oil Dist. Coeff.: The product is equally soluble in oil and water; log(oil/water) = 0.1

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol, diethyl ether, n-octanol, acetone.

Solubility: Easily soluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone. Insoluble in salt solution. Soluble in benzene. Miscible with most organic solvents including alcohol, ethyl alcohol, chloroform.

SECTION 10: STABILITY AND REACTIVITY

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, Ignition sources, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

MATERIAL SAFETY DATA SHEET

COMPASSIONATE ANALYTICS – DUAL COLOR THC TEST KIT

MSDS DATE: 11/25/2013

Special Remarks on Reactivity: Reacts violently with hydrogen + palladium combination, nitroform, oleum, COCl₂, aluminum triisopropoxide, oxidants Incompatible with acetaldehyde, chlorine, ethylene oxide, isocyanates, acids, alkaline earth, alkali metals, caustics, amines, crotonaldehyde, phosgene, ammonia. Isopropyl alcohol reacts with metallic aluminum at high temperatures. Isopropyl alcohol attacks some plastics, rubber, and coatings. Vigorous reaction with sodium dichromate + sulfuric acid.

Special Remarks on Corrosivity: May attack some forms of plastic, rubber and coating

Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation.

Toxicity to Animals: WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 3600 mg/kg [Mouse]. Acute dermal toxicity (LD50): 12800 mg/kg [Rabbit]. Acute toxicity of the vapor (LC50): 16000 8 hours [Rat].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.

DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE]. May cause damage to the following organs: kidneys, liver, skin, central nervous system (CNS).

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Ecotoxicity in water (LC50): 100000 mg/l 96 hours [Fathead Minnow]. 64000 mg/l 96 hours [Fathead Minnow].

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations

SECTION 14: TRANSPORT INFORMATION

DOT Classification: CLASS 3: Flammable liquid.

Identification: Isopropyl Alcohol UNNA: 1219 PG: II

Special Provisions for Transport: Not available.

SECTION 15: REGULATORY INFORMATION

WHMIS (Canada):

CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):

R11- Highly flammable. R36- Irritating to eyes. S7- Keep container tightly closed. S16- Keep away from sources of ignition - No smoking. S24/25- Avoid contact with skin and eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 3

Reactivity: 0

Specific hazard:

PROTECTIVE EQUIPMENT:

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Compassionate Analytics, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Compassionate Analytics, Inc. has been advised of the possibility of such damages.

MATERIAL SAFETY DATA SHEET

COMPASSIONATE ANALYTICS – DUAL COLOR THC TEST KIT

MSDS DATE: 11/25/2013

1) YELLOW INDICATOR DYE

Manufacturer: Compassionate Analytics, Inc.

Telephone Number: 250-588-1160

2.) Ingredients

- **Concentration:** NI
- **Hazard Classes:** None found

Note: See section 16 for any additional information on Ingredients.

3.) Hazards Identification

May cause irritation to eyes, skin, mucous membranes, and respiratory tract. Harmful if swallowed.

4.) First Aid

EYE EXPOSURE: Wash the affected area of the eye for at least 5 minutes using the eye wash station. If an eye wash station isn't available, have the victim lay down, hold the eyelid open and pour water from the inner corner of the eye outward. Cover the eye(s) with dry gauze and then contact the appropriate emergency service for immediate followup. **SKIN EXPOSURE:** Wash exposed area with water. See physician if irritation develops. **INHALATION:** Move to fresh air. **INGESTION:** Contact Poison Center immediately and follow their instructions.

5.) Fire Fighting

Extinguishing Media: Water Spray, Dry Chemical, Alcohol Foam, Carbon Dioxide

Firefighting: Working product is not flammable. No special fire-fighting procedures required. Small, self-contained fire may be doused using extinguishing media suitable for surrounding materials. If the fire cannot be doused immediately, GET OUT, or wear FULL protective clothing and self-contained breathing apparatus.

Fire & Explosion Hazards: Emits irritant fumes under fire conditions;

Upper Explosive Limit: NA

Lower Explosive Limit: NA

Flash Point: None

Auto-Ignition Temperature: NI

6.) Cleanup

For powder spills, sweep up dust, avoid raising dust (dampen with water) and place in a bag for disposal. Wear protective gloves. For small liquid spills, absorb spill with suitable material, place in bag/container for disposal. Avoid inhalation or contacting with skin or eyes.

7.) Storage and Handling

Storage: Keep in tightly enclosed tubes, as provided. Keep in dry, well-ventilated area. Keep out of the reach of children.

Incompatibilities: Oxidizing agents. Will decompose on exposure to light

Hazardous Decomposition: When heated to decomposition, will emit toxic fumes of carbon monoxide, carbon dioxide and nitrogen oxides and sulfur oxides.

8.) Exposure Limits/Personal Protection

Exposure Limits:

Respiratory Protection: Not Required under Normal and Intended uses

Ventilation: When working with the powder, use only in well ventilated area or under a fume hood. Once the dye has entered into solution, general room ventilation is adequate. Keep tubes closed - only open tubes to add test solution, then immediately reseal with the cap.

Protective Gloves: Gloves approved for routine bench use are worn.

MATERIAL SAFETY DATA SHEET

COMPASSIONATE ANALYTICS – DUAL COLOR THC TEST KIT

MSDS DATE: 11/25/2013

Eye Protection:When working with the dye powder, wear safety goggles. Once the dye is in solution, wear safety glasses.

Other:Eye wash station should be in close proximity of use.

9.) Physical Data & Usage

Appearance & Odor:No information provided

Solubility In Water: NI

Reactivity In Water: NI

Evaporation Rate: NI

Volatility: NI

Vapor Density: NI

Vapor Pressure: NI

Boiling Point: NI

Melting Point: 147

C

Specific Gravity: NI

Usage:Component of test kit

Departments:Histology/Cytology,

10.) Stability and Reactivity

Stable:Yes

Hazardous Polymerization:No

NFPA: Health = Fire = Reactivity = Specific =

11.) Toxicological Information

Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.

Local effects: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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.

12.) Ecological Information

None Listed

13.) Cleanup & Disposal

Dispose according to local, state, provincial and/or federal regulations

14.) Transportation Information

None Listed

15.) SARA, CERCLA, RCRA Information

16.) Additional Information on Ingredients

MATERIAL SAFETY DATA SHEET

COMPASSIONATE ANALYTICS – DUAL COLOR THC TEST KIT

MSDS DATE: 11/25/2013

1) RED INDICATOR DYE

Manufacturer: Compassionate Analytics, Inc.

Telephone Number: 250-588-1160

2.) Ingredients

- **Concentration:** NI
- **Hazard Classes:** None found

Note: See section 16 for any additional information on Ingredients.

3.) Hazards Identification

May cause irritation to eyes, skin, mucous membranes, and respiratory tract. Harmful if swallowed.

4.) First Aid

Complete an Incident Investigation Report Form if any first aid measures are taken. **EYE EXPOSURE:** Wash the affected area of the eye for at least 5 minutes using the eye wash station. If an eye wash station isn't available, have the victim lay down, hold the eyelid open and pour water from the inner corner of the eye outward. Cover the eye(s) with dry gauze and then contact the appropriate emergency service for immediate followup. **SKIN EXPOSURE:** Wash exposed area with water. See physician if irritation develops. **INHALATION:** Move to fresh air. **INGESTION:** Contact Poison Center immediately and follow their instructions.

5.) Fire Fighting

Extinguishing Media: Water Spray, Dry Chemical, Alcohol Foam, Carbon Dioxide

Firefighting: Working product is not flammable. No special fire-fighting procedures required. Small, self-contained fire may be doused using extinguishing media suitable for surrounding materials. If the fire cannot be doused immediately, GET OUT, or wear FULL protective clothing and self-contained breathing apparatus.

Fire & Explosion Hazards: Emits toxic fumes under fire conditions; i.e., sulfur oxides, carbon monoxide, carbon dioxide and nitrogen oxides.

Upper Explosive Limit: NA

Lower Explosive Limit: NA

Flash Point: None

Auto-Ignition Temperature: NI

6.) Cleanup

For powder spills, sweep up dust, avoid raising dust (dampen with water) and place in a bag for disposal. Wear protective gloves. For small liquid spills, absorb spill with suitable material, place in bag/container for disposal. Avoid inhalation or contacting with skin or eyes.

7.) Storage and Handling

Storage: Keep in tightly enclosed tubes, as provided. Keep in dry, well-ventilated area. Keep out of the reach of children.

Incompatibilities: Oxidizing agents. Will decompose on exposure to light

Hazardous Decomposition: When heated to decomposition, will emit toxic fumes of carbon monoxide, carbon dioxide and nitrogen oxides and sulfur oxides.

8.) Exposure Limits/Personal Protection

Exposure Limits:

Respiratory Protection: Not Required under Normal and Intended uses

Ventilation: When working with the powder, use only in well ventilated area or under a fume hood. Once the dye has entered into solution, general room ventilation is adequate. Keep tubes closed - only open tubes to add test solution, then immediately reseal with the cap.

MATERIAL SAFETY DATA SHEET

COMPASSIONATE ANALYTICS – DUAL COLOR THC TEST KIT

MSDS DATE: 11/25/2013

Protective Gloves:Gloves approved for routine bench use are worn.

Eye Protection:When working with the dye powder, wear safety goggles. Once the dye is in solution, wear safety glasses.

Other:Eye wash station should be in close proximity of use.

9.) Physical Data & Usage

Appearance & Odor:No information provided

Solubility In Water: NI

Reactivity In Water: NI

Evaporation Rate: NI

Volatility: NI

Vapor Density: NI

Vapor Pressure: NI

Boiling Point: NI

Melting Point: 147

C

Specific Gravity: NI

Usage:Component of test kit

Departments:Histology/Cytology,

10.) Stability and Reactivity

Stable:Yes

Hazardous Polymerization:No

NFPA: Health = Fire = Reactivity = Specific =

11.) Toxicological Information

May contain trace amounts of cresidine precursor, a cancer-suspect agent. Handle with care.

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.

12.) Ecological Information

None Listed

13.) Cleanup & Disposal

Dispose according to local, state, provincial and/or federal regulations

14.) Transportation Information

None Listed

15.) SARA, CERCLA, RCRA Information

16.) Additional Information on Ingredients
