MATERIAL SAFETY DATA SHEET

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SECTION 1: MATERIAL IDENTIFICATION

Product Name: Testmix CP0202

Synonyms: Toluene, 1-Phenylpropanol, 1-Phenylethanol, and 2-phenylethanol in Isopropanol and Iso-octane. Isopropanol is also known as Isopropyl Alcohol and 2-propanol. Iso-octane is also known as 2,2,4-Trimethylpentane and Isobutyltrimethylmethane.

SECTION 2: COMPOSITION

An ampoule/vial containing the following:

Component	CAS Number	Approximate Concentration	NTP Carcinogen Status	IARC Carcinogen Status
Toluene	108-88-3	250 ul/l	not listed	not listed
1-Phenylpropanol	93-54-9	2 ml/l	not listed	not listed
1-Phenylethanol	1517-69-7	2 ml/l	not listed	not listed
2-Phenylethanol	60-12-8	2 ml/l	not listed	not listed
Isopropanol	67-63-0	2.5%	not listed	not listed
Iso-Octane	540-84-1	97.5%	not listed	not listed

WARNING: This product contains Toluene [CAS# 108-88-3] a chemical known to the State of California to cause birth defects or other reproductive harm**.**

NOTE: Unless otherwise noted, the information below pertains only to the Isopropanol and Iso-octane solvent in the ampoule/vial.

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview: Colorless liquid. Flash Point: -12 deg C. Flammable liquid and vapor. Vapor may cause a flash fire. Harmful or fatal if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage. May cause respiratory and digestive tract irritation. May cause eye and skin irritation. May cause central nervous system depression and kidney damage. Target Organs: kidneys, central nervous system, liver, respiratory system, eyes, skin

Potential Health Effects

Inhalation: Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma.

Ingestion: Aspiration hazard. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. May cause central nervous system depression.

Skin Contact: May cause skin irritation with itching and redness. Prolonged or repeated skin contact may cause defatting and dermatitis.

Eye Contact: May cause irritation, redness, and pain.

Carcinogen Status: NTP: Not listed IARC: Not listed

SECTION 4: FIRST AID INFORMATION

Inhalation: Get medical attention immediately. Remove to fresh air. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Ingestion: If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention immediately. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person.

Skin Contact: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical aid if irritation develops or persists.

Eye Contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Do NOT allow victim to rub or keep eyes closed.

SECTION 5: FIRE-FIGHTING INFORMATION

Fire: Flash point (closed cup): -12C (10F)
Autoignition temperature: 399C (750F)
Flammable limits in air % by volume: Lower = 1.0 Upper = 12.7
NFPA Rating: health-2; flammability-3; reactivity-0

Explosion: Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition source and flash back. Sealed containers may rupture when heated. Contact with strong oxidizers may cause fire. Sensitive to static discharge.

Fire Extinguishing Media: Dry chemical, foam or carbon dioxide. Water may be ineffective. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Use proper personal protective equipment as indicated in Section 8. Ventilate area of leak or spill. Remove all sources of ignition. Absorb spill with inert material (e.g. vermiculite, sand or earth), scoop up with a nonsparking tool, then place into a suitable container for disposal. Do not flush to sewer!

SECTION 7: HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Keep container tightly closed. Avoid contact with heat, sparks and flame. Do not get on skin or in eyes. Avoid ingestion and inhalation.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTIVE EQUIPMENT

Airborne Exposure Limits:

Iso-Octane (CAS# 540-84-1)	United States - OSHA Permissible Exposure Limit (PEL): 500 ppm (TWA) for petroleum distillates United States - ACGIH Threshold Limit Value (TLV): 300 ppm (TWA)
Isopropanol (CAS# 67-63-0)	United States - OSHA Permissible Exposure Limit (PEL): 400 ppm (TWA); 500 ppm (STEL) United States - ACGIH Threshold Limit Value (TLV): 400 ppm (TWA); 500 ppm (STEL) Australia: Time-weighted average 400 ppm (980 mg/m3), short term exposure limit 500 ppm, 1993 The Netherlands: MAC-TGG 400 ppm (980 mg/m3), Skin, JAN1999

Personal Protective Equipment
Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Maintain eye wash fountain and quick-drench facilities in work area.
Skin Protection: Wear impervious gloves, apron, and/or clothing.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Use a NIOSH or European Standard EN 149 approved respirator when necessary.

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid
Odor: Gasoline-like odor
Solubility: Slightly (~2%)
Specific Gravity: 0.68 (Water = 1)
pH: Not available.
Molecular Formula: Not applicable - mixture
Molecular Weight: Not applicable - mixture

Boiling Point: 97C (207F)
Melting Point: -100C (-148F)
Vapor Density: 3.8 (Air=1)
Vapor Pressure (mm Hg): 42 @ 20C (68F)
Evaporation Rate: 3.6 (Butyl Acetate = 1)
% Volatiles by Volume: 100

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable at room temperature in sealed containers.
Hazardous Decomposition Products: Carbon dioxide and carbon monoxide may form when heated to decomposition.
Hazardous Polymerization: Will not occur.
Incompatibilities: Strong oxidizers, heat, and sources of ignition.
Conditions to Avoid: Incompatibles.

SECTION 11: TOXICOLOGICAL INFORMATION

RTECS#: SA3320000 for CAS# 540-84-1 (Iso-Octane)
LD50/LC50: Not available.
Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Mutagenicity: Not available

RTECS#: NT8050000 for CAS# 67-63-0 (Isopropanol)
LD50/LC50:
Oral, mouse: LD50 = 3.600 mg/kg;
Oral, rat: LD50 = 5,045 mg/kg;
Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Mutagenicity: Not available

SECTION 12: ECOLOGICAL INFORMATION

Environmental Fate: When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released to water, this material is expected to quickly evaporate. This material may bioaccumulate to some extent. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life between 1 and 10 days.
Environmental Toxicity: Not available

SECTION 13: DISPOSAL GUIDELINES

Dispose in compliance with federal, state, and local regulations. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

USEPA RCRA waste number D001.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

SECTION 14: TRANSPORT INFORMATION

Ship in accordance with all applicable local, State, Federal, and International transportation regulations.
The following is a summary only. Check regulations for complete information:

United States (Land, D.O.T.)
Proper Shipping Name: Flammable Liquid, n.o.s. (Octanes, Isopropyl Alcohol)
Hazard Class: 3
UN/NA: : UN1993
Packing Group: II

International (Air, I.C.A.O.)
Proper Shipping Name: Flammable Liquid, n.o.s. (Octanes, Isopropyl Alcohol)
Hazard Class: 3
UN/NA: UN1993
Packing Group: II

SECTION 15: REGULATORY INFORMATION

US Federal
TSCA: Both CAS# 540-84-1 and 67-63-0 are listed on the TSCA inventory.
OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.
SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No Reactivity: No

US State
Both CAS# 540-84-1 and 67-63-0 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
California Proposition 65: Not regulated.

Other Regulations
EC Classification: F – Highly Flammable, Xi - Irritant
EC Risk and Safety Phrases:
Risk Phrases:
R 11 Highly flammable.
R 36 Irritating to eyes.
R 67 Vapors may cause drowsiness and dizziness

Safety Phrases:
S 16 Keep away from sources of ignition - No smoking.
S 24/25 Avoid contact with skin and eyes.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 33 Take precautionary measures against static discharges.
S7 Keep container tightly closed.
S 9 Keep container in a well-ventilated place.

WHMIS Classification: B2, D2B

Inventory Status: Listed on EINECS and Canadian DSL

SECTION 16: OTHER INFORMATION

NOTE: Unless otherwise noted, the information above pertains only to the Isopropanol and Iso-octane solvent in the ampoule/vial.

This MSDS was prepared in accordance with ANSI Z400.1-1993 and 91/155/EEC recommended formats.

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