G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME:----------> Aromatic 100

PRODUCT NUMBER(S)----------> 108800

TRADE NAMES/SYNONYMS----> Aromatic Hydrocarbons, Solvent Naphtha, Light Aromatic, Solvent naphtha (Petroleum) light aromatic

CAS-No: 64742-95-6 CHEMICAL FAMILY: Aromatic Hydrocarbon

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST
RECOMMENDED USE: Industrial: Use as a fuel, Lubricants, Use in coatings, Rubber production and processing, Use in cleaning agents, Use as an intermediate, Distribution of substance, Manufacture of substances.
USES ADVISED AGAINST: No information available

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.
Address: 40 VERONICA AVENUE
SOMERSET, NJ 08873
Telephone: 1-973-589-1450
Fax: 1-973-589-3072

1.4 Emergency Telephone Number
Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)
Flammable liquids (Category 3), H226
Skin corrosion/irritation (Category 2), H316
Carcinogenicity (Category 2), H351
Specific target organ toxicity (single exposure) (Category 3), Narcotic effects, H336
Specific target organ toxicity (single exposure) (Category 3). Respiratory irritation, H335
Aspiration hazard (Category 1), H304

Acute aquatic toxicity (Category 1), H401

2.2 GHS Label elements, including precautionary statements

Pictogram

GHS02 GHS08 GHS09

Signal word DANGER

Hazard statement(s)
H226 Flammable liquid and vapor.
H303 + H313 May be harmful if swallowed or in contact with skin.
H304 May be fatal if swallowed and enters airways.
H316 Causes mild skin irritation
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H370 Causes damage to organs (lung).
H401 Toxic to aquatic life.

Precautionary statement(s)
Prevention;
P210 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash hands, forearms and face thoroughly after handling.
P270 Do not eat drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P301 + P310+ 331 IF SWALLOWED: Immediately call a POISON CENTER or doctor/Physician. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P308 + 313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - Product can accumulate electrostatic charges that may cause fire by electrical discharges. Repeated exposure may cause skin dryness or cracking.

3. INGREDIENTS

3.1 SUBSTANCE:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Lt. Aromatic Naphtha	64742-95-6 EC-No.265-199-0 Index-No. 649-356-00-4 Reg.-No. 01-2119486773-24-XXXX	55-65	Flammable liquids (Category 3), H226 Skin corrosion/irritation (Category 2), H316 Carcinogenicity (Category 2), H351 STOT-SE (Category 3), Narcotic effects, H336 STOT-SE (Category 3), Respiratory system, H335 Aspiration hazard (Category 1), H304 Acute aquatic toxicity (Category 1), H401
Components:			
1,2,4-trimethyl benzene	95-63-6 EC-No.202-436-9 Index-No. 601-043-00-3 Reg.-No. 01-2119472135-42-XXXX	30-40	Flammable liquids (Category 3), H226 Acute toxicity, Inhalation (Category 4), H332 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 STOT-SE (Category 3), Respiratory system, H335 Aspiration hazard (Category 1), H304 Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 2), H411
Cumene	98-82-8	0.8-1.4	Flammable liquids (Category 3), H226

	EC-No.202-704-5		STOT-SE (Category 3), Respiratory system, H335
	Index-No. 601-024-00-X		Aspiration hazard (Category 1), H304
	Reg.-No. 01-2119473983-24-XXXX		Carcinogenicity (Category 2), H351
			Acute aquatic toxicity (Category 2), H401
			Chronic aquatic toxicity (Category 2), H411
Xylenes	1330-20-7	0-5	Flammable liquids (Category 3), H226
	EC-No. 215-535-7		Acute toxicity, Inhalation (Category 4), H332
	Index-No.601-022-00-9		Skin irritation (Category 2), H315
	Reg.-No. 01-2119488216-32-XXXX		Serious eye damage (Category 2B), H320
			STOT-SE (Category 3), Respiratory system, H332
			STOT-RE, Inhalation (Category 2), Central
			Nervous System, Liver, Kidney, H373
			Aspiration Hazard (Category 1), H304
			Acute aquatic toxicity (Category 2), H401

3.2 MIXTURE: Not applicable

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: AROMATIC 100

****FIRST AID*- Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.**

SKIN CONTACT: AROMATIC 100

****FIRST AID*- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts or water until no evidence of chemical remains (approximately 15-20 minutes). Do not use ointments. Get medical attention immediately.**

EYE CONTACT: AROMATIC 100

****FIRST AID*- Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flush. Get medical attention immediately.**

INGESTION: AROMATIC 100

****FIRST AID*- Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. If victim is drowsy or unconscious, place on the left side with head down. Immediately consult a physician or poison control center, treat symptomatically.**

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Eye: Causes eye irritation;

Skin: Irritating including redness, burning and drying. The degree of irritation depends on the amount of material applied to skin and the time until it is removed.

Inhalation: Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Can cause central nervous system (CNS) depression. Symptoms are loss of appetite, muscle weakness, dizziness, and drowsiness.

Ingestion: If swallowed, this material may irritate the mucous membranes of the mouth, throat and esophagus. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. It can be readily absorbed by the stomach and intestinal tract.

Typical symptoms are cardiovascular disorders, sweetish taste in the mouth, nausea, vomiting, loss of appetite, strong thirst, burning of eyes and bleeding from the nose. Damage may occur to the kidney, liver, skin, respiratory system and central nervous system.

Medical Conditions Aggravated by Exposure: Skin contact may aggravate an existing dermatitis and people with chronic respiratory conditions. Significant exposure may adversely affect people with pre-existing heart disorders making them more susceptible to irregular heartbeats.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Note to physicians: Exposure to high concentrations of this material may be associated with cardiac arrhythmias. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias. Other drugs with less arrhythmogenic potential should be considered.

5. FIRE FIGHTING MEASURES

Flash Point: 46°C (115°F) (TCC) **LEL %:0.9**
Auto-ignition: 485°C (905°F) **UEL %:6.2**
UNIFORM FIRE CODE: Combustible Liquid Class II

5.1 SUITABLE EXTINGUISHING MEDIA: Foam--> x CO2--> x Dry Chemical--

> x Water-fog--> x Other-->

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE.
Keep containers tightly closed. Combustible liquid; isolate from all sources of ignition. Above flash point, vapor-air mixtures are explosive within flammable limits. Closed containers may explode when exposed to extreme heat. Liquid floats on water.

CONDITIONS OF FLAMMABILITY: Flammable in the presence of a source of ignition when the temperature is above the flash point.

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS:

Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind. Do not enter fire area without structural fire fighter's protective equipment including NIOSH/MSHA approved self-contained breathing apparatus (SCBA) in positive pressure mode. Use water spray to knock down vapors. Use halon, carbon dioxide extinguisher or dry powder for small fires. Large fires are best controlled by alcohol foam, fog, and water spray. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Isolate for 1/2 mile in all directions if tank, rail car or tank truck is involved in fire. Extinguish only if fire can be stopped. Use flooding amounts of water as a fog; solid streams may be ineffective. Cool containers with flooding amounts of water from as far a distance as possible. Avoid breathing vapors; keep upwind. If fire is uncontrollable or containers are exposed to direct flame, water may be ineffective. Fire fighters should wear full protective clothing and NIOSH/MSHA approved self-contained breathing apparatus (SCBA) with full face-piece operated in the pressure demand or other positive pressure mode. Water may be used to flush spills away from exposures and to dilute spills to non-flammable mixtures. Do Not Use: Water in straight hose stream will scatter and spread fire and should not be used.
Shut off source. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Wear self-contained breathing apparatus for confined spaces and

where there is exposure to vapors. Use full fire-fighting protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Extremely Flammable; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

6.2 ENVIRONMENTAL PRECAUTIONS:
Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:
Methods for cleanup and containment:
Use explosion proof equipment. Shut off valves, contain spill, for small spills add non-flammable absorbent in spill area. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent.
Methods for disposal:
Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

REPORTABLE QUANTITY (RQ): Xylenes - 100 lbs; Cumene – 5000lbs. Blend (Calculated for Xylene) – 4545lbs.
The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local Emergency Planning Committee and the State Emergency Response Commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the National Response Center must be notified immediately at (800) 424-8802 or (202) 426-2675 in the metropolitan Washington, D.C. area (40 CFR 302.6).

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: This material presents a fire hazard. Liquid quickly evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and

drainage systems. Use non-sparking tools to open or close containers.

Advice on general occupational hygiene:
Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 "Flammable and Combustible Liquids" and National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. A refrigerated room is preferable for materials with a flash point temperature lower than 21°c (70°F). DANGER! Do not open containers unless contents are at room temperature 25°C (77°F) or below. Recommended storage temperature: 15 - 25°C. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally. Storage class (TRGS 510): Flammable liquids

CONTAINER WARNINGS: Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

⑧. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Lt. Aromatic Naphtha	64742-95-6 EC-No.265-199-0	55-65	19ppm TWA (ExxonMobil) Vapor

Index-No. 649-356-00-4		
Reg.-No. 01-2119486773-24-XXXX		
Components:		
1,2,4-trimethylbenzene 95-63-6	30-40	25ppm TWA (NIOSH)
EC-No.202-436-9		
Index-No. 601-043-00-3		
Reg.-No. 01-2119472135-42-XXXX		
Cumene 98-82-8	0.8-1.4	50ppm TWA (ACGIH)
EC-No.202-704-5		50ppm TWA (NIOSH)
Index-No. 601-024-00-X		50ppm TWA (OSHA)
Reg.-No. 01-2119473983-24-XXXX		
Xylenes 1330-20-7	0-5	100ppm TWA (ACGIH)
EC-No. 215-535-7		150ppm STEL (ACGIH)
Index-No.601-022-00-9		100ppm TWA (NIOSH)
Reg.-No. 01-2119488216-32-XXXX		150ppm STEL (NIOSH)
		100ppm TWA (OSHA)

Key: (PEL) = Permissible Exposure Limit OSHA
(TLV) = Threshold Limit Value OSHA & ACGIH
(STEL) = Short Term Exposure Limit ACGIH
(WEEL) = USA. Workplace Environmental Exposure Levels
(TWA) = Time Weighted Average
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health
N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION:
The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the

Mine Safety and Health Administration (NIOSH-MSHA):
For known vapor concentrations use a NIOSH/MSHA air purifying respirator with full face-piece and organic vapor cartridge for exposures >1 <10 times ACGIH TWA. For exposures greater than 10 times ACGIH TWA of for unknown vapor

concentrations use positive pressure self contained breathing apparatus with full face-piece. Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

BODY CLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance.
Glove Material: Butyl Rubber
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

HYGIENE: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION: Use safety eyewear with splash-guards or face shield. Emergency shower and eyewash should be easily accessible to the work area.

⑨. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Aromatic 100 64742-95-6

APPEARANCE:	**Clear volatile liquid**
COLOR:	**Colorless**
ODOR:	**Aromatic odor**
ODOR THRESHOLD:	**0.07ppm**
pH:	**No data available**
MOLECULAR WEIGHT:	**121**
FREEZING POINT:	**-14°C (7°F)**
BOILING POINT:	**161°C - 171°C (322°F - 340°F)**
SPECIFIC GRAVITY:	**0.874**
DENSITY (25°C):	**0.873 g/ml (20°C)**
VAPOR PRESSURE:	**2.02mmHg @ 20°C (68.0°F)**
VAPOR DENSITY:	**4.2**
WATER SOLUBILITY:	**Slightly soluble**
PARTITION COEFFICIENT N-OCTANOL/WATER	**No data available**
FLASH POINT:	**46°C (115°F) - closed cup**
EVAPORATION RATE (BUTYL ACETATE=1):	**0.27**
UPPER FLAMMABILITY LIMIT:	**6.2% (V)**
LOWER FLAMMABILITY LIMIT:	**0.9% (V)**
AUTO INGNITION TEMPERATURE:	**485°C (905°F)**
DECOMPOSITION TEMPERATURE:	**No data available**

VISCOSITY:	**0.9cSt@25°C**
EXPLOSIVE PROPERTIES:	**No data available**
OXIDIZING PROPERTIES:	**No data available**

9.2 OTHER INFORMATION:

Bulk Density	**7.25lbs/gal.**

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable ( ) Stable (X)

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form explosive mixtures with air.
HAZARDOUS POLYMERIZATION: May occur ( ) Will not occur (X)

10.4 CONDITIONS TO AVOID: Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame.

10.5 INCOMPATIBLE MATERIALS: Strong oxidants such as caustic soda, liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid hydrogen peroxide. Copper or copper alloys.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, Smoke, Carbon Monoxide and Carbon Dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Causes eye irritation;

Skin> Irritating including redness, burning and drying. The degree of irritation depends on the amount of material applied to skin and the time until it is removed.

Inhalation> Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Can cause central nervous system (CNS) depression. Symptoms are loss of appetite, muscle weakness, dizziness, and drowsiness.

Ingestion> If swallowed, this material may irritate the mucous membranes of the mouth, throat and esophagus. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. It can be readily absorbed by the stomach and intestinal tract.
Typical symptoms are cardiovascular disorders, sweetish taste in the mouth, nausea, vomiting, loss of appetite, strong thirst, burning of eyes and bleeding

from the nose. Damage may occur to the kidney, liver, skin, respiratory system and central nervous system.

Medical Conditions Aggravated by Exposure> Skin contact may aggravate an existing dermatitis and people with chronic respiratory conditions. Significant exposure may adversely affect people with pre-existing heart disorders making them more susceptible to irregular heartbeats.

ACUTE TOXICITY:

The effects of overexposure shown in Section III are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50 (Rat)	Skin LD50 (Rabbit)	Inhalation LC50
Aromatic 100	3492mg/kg (OECD Test 401)	>3160mg/kg (OECD Test 402)	>6193mg/m3/4hr (OECD Test 403)
1,2,4Trimethyl-benzene	6000mg/kg		18000mg/m3/4hr
Xylenes	4300mg/kg		6700ppm/4hr
Cumene	2260mg/kg	12300uL/kg	10000mg/m3/7hr

<u>AROMATIC 100</u> –
SKIN CORROSION/IRRITATION: Mildly irritating to skin with prolonged exposure. Based on test data for the material. (OECD Test Guideline 404)
SERIOUS EYE DAMAGE/EYE IRRITATION: May cause mild, short-lasting discomfort to eyes. Based on test data for the material. (OECD Test Guideline 405)
RESPIRATORY SENSITIZATION: Not a sensitizer in humans or animals. Based on test data for the material. (OECD Test Guideline 406)

SKIN SENSITIZATION: Not expected to be a skin sensitizer.
MUTAGENIC EFFECTS: Not expected to be a germ cell mutagen, Based on test data for the material. (OECD Test Guidelines 471, 475, 476, and 479))

CARCINOGEN STATUS – IARC: Group 1, 2 and 2B: Possibly carcinogenic to humans
ACGIH: Not classifiable as a human carcinogen.
NTP: Reasonably anticipated to be a human carcinogen
OSHA: Suspected Carcinogen
REPRODUCTIVE TOXICITY: Not expected to be a reproductive toxicant. Based on test data for the material. (OECD Test Guidelines 414 and 416)

TERATOGENICITY: No data available
Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): May cause drowsiness and dizziness. May be irritating to the respiratory system.

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): No expected to cause organ damage from prolonged and repeated exposure. Based on test data of structurally similar materials

ASPIRATION HAZARD: All components may be fatal if swallowed and enters airways.
11.2 ADDITIONAL INFORMATION: No data available

<u>1,2,4-TRIMETHYLBENZENE</u> –
SKIN CORROSION/IRRITATION: No data available
SERIOUS EYE DAMAGE/EYE IRRITATION: No data available.
RESPIRATORY OR SKIN SENSITIZATION: No data available.
MUTAGENIC EFFECTS: No data available
CARCINOGEN STATUS:
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.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
REPRODUCTIVE TOXICITY: No data available
Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): no data available
Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): no data available
ASPIRATION HAZARD: May be fatal if swallowed and enters
11.2 ADDITIONAL INFORMATION; Prolonged or repeated exposure can cause:, narcosis, Bronchitis, Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

<u>CUMENE</u> –
SKIN CORROSION/IRRITATION: Skin - Rabbit Result: No skin irritation（OECD Test Guideline 404)
SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)

RESPIRATORY OR SKIN SENSITIZATION: Guinea pig Result: Did not cause sensitization on laboratory animals. (OECD Test Guideline 406)
MUTAGENIC EFFECTS: Mutagenicity (micronucleus test) Mouse - male and female Result: negative
CARCINOGEN STATUS:
IARC: 2B - Group 2B: Possibly carcinogenic to humans (Cumene)
NTP: Reasonably anticipated to be a human carcinogen (Cumene)
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
REPRODUCTIVE TOXICITY: No data available
Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): May cause respiratory irritation.
Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): no data available

ASPIRATION HAZARD: May be fatal if swallowed and enters
11.2 ADDITIONAL INFORMATION; Central nervous system depression, Dermatitis, Gastrointestinal disturbance, Damage to the lungs. Liver injury may occur., Kidney injury may occur.

XYLENES –
SKIN CORROSION/IRRITATION: Rabbit Result: Skin irritation - 24 h
SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Moderate eye irritation
RESPIRATORY OR SKIN SENSITIZATION: No data available.
MUTAGENIC EFFECTS: No information available.
CARCINOGEN STATUS:
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Xylene)
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.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
REPRODUCTIVE TOXICITY: No data available.
Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): no data available
Specific target organ toxicity (STOT-RE)- repeated exposure (Globally Harmonized System): Central nervous system depressant. Poisoning may also affect the nervous system, liver and kidneys.
AT INCREASED RISK FROM EXPOSURE: Pregnant women.
ASPIRATIO HAZARD: No data available
11.2 ADDITIONAL INFORMATION: Alcohol may enhance the toxic effects. Stimulants such as epinephrine or ephedrine may induce ventricular fibrillation.

12. ECOLOGICAL INFORMATION

12.1 AQUATIC TOXICITY (Acute):
Aromatic 100 -
Toxicity to Fish:
LC50 Onchorhynus mykiss (Rainbow trout) – 9.2mg/L – 96 h
Toxicity to daphnia and other aquatic crustaceans:
EC50 Daphnia magna (water flea)- 3.2mg/L – 48 h
Toxicity to Algae:
EC50 Skeletonema costatum - <1mg/L

1, 2, 4-Trimethylbenzene -
Toxicity to fish:
LC50 Pimephales promelas (fathead minnow) - 7720 µg/l Fresh water 96 h
LC50 Tilapia zillii (Redbelly Tilapia) - 22.4 mg/l Fresh water 96 h
Toxicity to daphnia and other aquatic invertebrates:
LC50 Cancer magister Zoeal (dinginess crab) 17000 µg/l Marine water 48 h
LC50 Elasmopus pectenicrus - 4910 µg/l Marine water 48 h
LC50 Palaemonetes pugio (Shrimp) - 5600 µg/l Marine water 48 h

Xylenes, mixed isomers -
Toxicity to fish:
LC50 Lepomis macrochirus –Juvenile (Bluegill) - 15700 µg/l Fresh water 96 h
LC50 Lepomis macrochirus (Bluegill 19000 µg/l Fresh water 96 h
LC50 Carassius auratus (goldfish) - 16940 µg/l Fresh water 96 h
Toxicity to daphnia and other aquatic invertebrates:
LC50 Palaemonetes pugio (shrimp) - 8500 µg/l Marine water 48 h

Cumene -
Toxicity to fish:
LC50 Oncorhynchus mykiss (rainbow trout) 2700 µg/l Fresh water 96 h
Toxicity to daphnia and other aquatic invertebrates:
EC50 Daphnia magna –Neonate (water flea) - 10600 µg/l Fresh water 48 h
EC50 Artemia sp. –Nauplii (Brine shrimp eggs) 7400 µg/l Fresh water 48 h

12.2 PERSISTANCE AND DEGRADABILITY:
Expected to be readily bio-degradable.

12.3 BIOACCUMULATIVE POTENTIAL: Light Aromatic Naphtha has the potential to bio-accumulate. Percent degraded in 28 days: 78%
1, 2, 4-Trimethylbenzene Log Pow 3.63 low potential
Xylenes, mixed isomers Log Pow 3.12 low potential
Cumene Log Pow 3.55 low potential
Bioconcentration Factor:
1, 2, 4-Trimethylbenzene 243
Xylenes, mixed isomers 8.1-25.9
Cumene 94.69

12.4 MOBILITY IN SOIL: This material is highly volatile and will rapidly partition to air. It is not expected to partition to soil or wastewater solids.

12.5 RESULTS OF PBT AND vPvB : PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Do not allow this material to run into surface waters, wastewater or soil.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product.

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.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID numbers are: Xylene U239, Cumene U055, D001 and D018
If the waste is a spent solvent, the appropriate spent solvent code should be used.
DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

Land Transport (DOT)
14.1 USDOT ID Number----------> UN1268
14.2 USDOT Shipping Name----------> Petroleum Distillates, n.o.s.
Naphtha Petroleum, (Light Aromatic)
14.3 USDOT Hazard Classification-------> 3 (Flammable Liquid)
14.4 USDOT Package Code----------> III
14.5 Marine Pollutant----------> No
14.6 Special precautions for user--------> Yes
Emergency Response Guide--------> 128
Reportable quantity----------> 4545.45 LBS - Xylenes

Sea Transport (IMDG)
14.1 ID Number----------> UN1268
14.2 Proper shipping name----------> PETROLEUM DISTILLATES, N.O.S.
Naphtha Petroleum, (Light Aromatic)
14.3 Hazard Classification----------> 3 (Flammable Liquid)
Label Codes----------> None
14.4 Package Code----------> III
14.5 Marine Pollutant----------> No
14.6 Special precautions for user----------> Yes
EMS-Number----------> F-E, S-E

Air Transport (IATA)
14.1 ID Number----------> UN1268
14.2 Proper shipping name----------> Petroleum Distillates, n.o.s.
Naphtha Petroleum, (Light Aromatic)
14.3 Hazard Classification----------> 3 (Flammable Liquid)
Label Codes----------> 3
14.4 Package Code----------> II
14.5 Environmental hazard----------> None
14.6 Special precautions for user----------> Yes

Quantity Limitations:
Cargo Aircraft----------> 220L
Passenger Aircraft----------> 60L

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed
SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Listed; components listed: 1, 2, 4−Trimethylbenzene 95−63−6 <32%; Xylene 1330−20−7 <2.2%; Cumene 98−82−8 <1.1%;

SECTION 311/312: Hazard Categorization (40 CFR 370) - Acute Health Hazard, Chronic Health Hazard, Fire Hazard.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)
SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Components Listed
Cumene CAS-No. 98-82-8 <1.1% Reportable Quantity: 5000 lbs
Xylenes CAS-No. 1330-20-7 <2.2% Reportable quantity: 100lbs.
Blend (Calaculated from Xylene) – 4545lbs.

Massachusetts Right to Know Components
1, 2, 4-Trimethylbenzene CAS-No. 95-63-6
Cumene CAS-No. 98-82-8
Xylenes CAS-No. 1330-20-7

Pennsylvania Right to Know Components
1, 2, 4-Trimethylbenzene CAS-No. 95-63-6
Cumene CAS-No. 98-82-8
Xylenes CAS-No. 1330-20-7

New Jersey Right to Know Components
1, 2, 4-Trimethylbenzene CAS-No. 95-63-6
Cumene CAS-No. 98-82-8
Xylenes CAS-No. 1330-20-7

California Prop. 65 Components
This product does contain chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Cumene CAS-No. 98-82-8 <1.1%

TSCA (Toxic Substance Control Act)
Aromatic 100 CAS 64742-95-6; 1, 2, 4 Trimethylbenzene CAS 95-63-6; Cumene CAS-No. 98-82-8; Xylenes CAS 1330-20-7 all components are listed on the TSCA Inventory

International Inventories:

Country or Region	Inventory Name	On inventory yes/no
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemicals Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory (NZioC)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	**Yes**
United States & Puerto Rico	Toxic Substances Control Act Inventory (TSCA)	Yes

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)
Hazard Rating:
4-Extreme
3-High
2-Moderate
1-Slight
0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=1 Fire=2 Reactivity=0
HMIS RATINGS (SCALE 0-4): Health=1 Fire=2 Reactivity=0 PPE=G

Hazard statement(s) from Section 2 and 3:
H226 Flammable liquid and vapor.
H303 + H313 May be harmful if swallowed or in contact with skin.
H304 May be fatal if swallowed and enters airways.
H316 Causes mild skin irritation

H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H370 Causes damage to organs (lung).
H401 Toxic to aquatic life.

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Prepared by----------> T.G. Fenstermaker Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygenists
AIHA - American Industrial Hygiene Association
ANSI - American Nation Standards Institute
API - American Petroleum Institute
CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act
DOT - U.S. Department of Transportation
EC-50 - Effective Concentration
EPA - U.S. Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARC - International Agency For Research On Cancer
LD-50 - Lethal Dose
MAK - Germany Maximum Concentration Values
MSHA - Mine Safety and Health Administration
NFPA - National Fire Protection Association
NIOSH - National Institute of Occupational Safety and Health
NOIC - Notice of Intended Change (Proposed change to ACGIH TLV)
NTP - National Toxicology Program
OPA - Oil Pollution Act of 1990
OSHA - U.S. Occupational Safety & Health Administration
PEL - Permissible Exposure Limit (OSHA)
RCRA - Resource Conservation and Recovery Act
REL - Recommended Exposure Limit (NIOSH)
SARA - Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA - Self-Contained Breathing Apparatus
STEL - Short-Term Exposure Limit (generally 15 minutes)
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average (8hr.)
WHMIS - Canadian Workplace Hazardous Materials Information System