CHARLES PAINT RESEARCH INC

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: Product Code: MSDS Date:

Charles Paint Research Inc 2401 East 85th ST Kansas City, MO 64132

General Information: 816-523-7466 CHEMTREC: 800-424-9300

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

GHS Classification:

Flammable Liquids (Category 2) Eye Irritation (Category 2A) Skin irritation (Category 2) Specific target organ toxicity - single exposure (Category 1)

GHS Labeling



Signal Word: Danger

Hazard Statements:

Highly flammable liquid and vapor Causes serious eye irritation Causes skin irritation. Causes damage to organs

Precautionary Statements: *Prevention:*

Do not breathe mist/vapors/spray. Do not eat, drink or smoke when using this product. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces-no smoking. Keep container tightly closed. Take precautionary measure against static discharge. Use only non-sparking tools. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection *Response:* If exposed or concerned: Call a poison center/doctor. If eye irritation persists: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water shower. If skin irritation occurs: Get medical advice/attention. In case of fire: Use water fog, dry chemical, carbon dioxide, alcohol foam to extinguish. Take off contaminated clothing and wash it before reuse. **Storage:** Store in a well-ventilated place. Keep cool. Store locked up. **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

Potential Health Effects: See Section 11 for more information

This product does not contain carcinogens or potential carcinogens as listed by IARC, NTP, or ACGIH.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: See Section 12 for more information.

Section 3: COMPOSTION/INFORMATION ON INGREDIENTS

No.	Component CAS REG. NO.	Amount %	OSHA		ACGIH	
			TWA	STEL	TWA	STEL
1	Ethyl Acetate CAS #141-78-6	1-20	400 ppm	Not Availab Ie	400 ppm	Not Availab Ie
2	Ethyl Alcohol CAS #64-17-5	1-20	1000 ppm	Not Availab Ie	1000 ppm	Not Availab Ie
3	n-Butyl acetate CAS #123-86-4	1-20	150 ppm	200 ppm	150 ppm	200 ppm
4	Ethylene Glycol Monopropyl Ether CAS#2807-30-9	1-20	Not avail	Not Avail	Not avail	Not avail
5	1,2,4-trimethylbenzene CAS #95-63-6	1-20	25 ppm	Not Avail	25 ppm	Not Avail
6	3-ethyltoluene CAS #620-14-4	1-20	Not Avail	Not Avail	Not Avail	Not Avail
7	Light Hydrotreated Distillate 68410-97-9	>50%	5 mg/m ³	Not avail	5 mg/m ³	Not avail

Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

- **Inhalation:** If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain medical attention.
- **Ingestion:** Do not induce vomiting. Obtain medical attention.
- **Skin:** Remove contaminated clothing as needed. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. Seek medical attention.
- **Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.

Section 5: FIRE FIGHTING MEASURES

Flash Point: >50°F LEL: Not Available UEL: Not Available Auto Ignition Temperature: Not Available

Flammable properties

Flammable by OSHA criteria. Heat may cause the containers to explode. Runoff to sewer may cause fire or explosion hazard.

Suitable Extinguishing Media:

Water fog, dry chemical, carbon dioxide, alcohol foam

Unsuitable Extinguishing Media:

Water. Do no use water jet as an extinguisher, as this will spread the fire.

Products of Combustion:

Carbon dioxide, carbon monoxide

Protection of firefighters

Protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods In the event of fire and/or explosion do not breathe fumes.

HAZARD	HMIS	NFPA
Toxicity	2	2
Fire	3	3
Reactivity	0	0

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them.

Environmental Precautions: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Method for Containment: Extinguish all flames in the vicinity.

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Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

Methods for Clean-up: Use clean non-sparking tools to collect absorbed material. Dike large spills and place materials in salvage containers.

Section 7: HANDLING AND STORAGE

Handling: Vapors may form explosive mixtures with air. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. All equipment used when handling the product must be grounded. Use only in area provided with appropriate exhaust ventilation. Avoid prolonged exposure.

Storage: The pressure in sealed containers can increase under the influence of heat. Keep away from heat and sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in cool place. Refrigeration recommended. Store in a well-ventilated place. Keep container tightly closed. Keep in an area equipped with sprinklers.

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.

Personal Protective Equipment (PPE)

Respiratory Protection: A respiratory protection program that meets OSHA's 29CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. **Eye/Face Protection:** Eye protection such as chemical splash goggles and/or face shield must be worn. **Hand Protection:** Wear chemical resistant gloves such as Butyl rubber or Viton. **Body:** When skin contact is possible, protective clothing including apron, sleeves, boots, head and face

protection should be worn.

Other Protective Equipment:

Facilities storing or utilizing this material should be equipped with eyewash and/or shower facilities.

See section 3 for exposure limits.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance (Light Hydrotreated Distillate): Product is water-white liquid.

Physical state: Liquid.
Form: Liquid.
Color: Colorless.
Odor: Hydrocarbon
Odor threshold: Not available.
pH: Not available.
Vapor pressure (Light Hydrotreated Distillate): 10 torr @ 68°F (20°C), ASTM D2879
Vapor density: Not available.
Boiling point (Light Hydrotreated Distillate): > 245 °F (> 118.3 °C)

Melting point/Freezing point: Not available. Solubility (water): Not available. Specific gravity (Light Hydrotreated Distillate): 0.727 Relative density: Not available. Flash point: See section 5. Flammability limits: See section 5. Auto-ignition temperature: See section 5. Evaporation rate(Light Hydrotreated Distillate): 0.987 ASTM D1901 Pour point(Light Hydrotreated Distillate): -70 °F (-56.7 °C) ASTM D97 Viscosity: Not available.

Section 10: STABILITY AND REACTIVITY

Stability: This material is considered stable at ambient temperatures 70°C (21°C).

Condition to Avoid: Strong oxidizing agents, heat, flames, sparks, acids, alkalis.

Hazardous Decomposition: Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Reactions: This product will not undergo polymerization.

Section 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

Component Analysis LD50 Ethyl Alcohol (64-17-5) Oral LD50 Rat: 7060 mg/kg

> Ethyl Acetate (141-78-6) Oral LD50 Rat: 5620 mg/kg Dermal LD50 Rabbit>20 gm/kg Dermal LD50 Rabbit>18000 mg/kg Inhalation mouse LC50=45 gm/m3/2H Inhalation, rat LC50=200 gm/m3 Oral mouse LD50=4100 mg/kg Oral rabbit LD50=4935 mg/kg Oral rat LD50=5620 mg/kg

n-butyl acetate (123-86-4) LD50 Oral - rat - 10,700 - 14,130 mg/kg LC50 Inhalation - rat - 4 h - > 21.0 mg/l LD50 Dermal - rabbit - 17,600 mg/kg

1,2,4-trimethylbenzene (95-63-6) LD50 Oral - rat - 5,000 mg/kg LC50 Inhalation - rat - 4 h - 18,000 mg/m3

3-ethyltoluene (620-14-4) LC50 - Pimephales promelas (fathead minnow) - 6.9 mg/l - 96.0 h

Ethylene Glycol Monopropyl Ether (CAS#2807-30-9) Oral LD-50 (rat) 3,089 mg/kg Oral LD-50 (mouse) 1,774 mg/kg Inhalation LC-50 (rat) 6 h > 2132 ppm (highest concentration obtainable) Dermal LD-50 (rabbit) 1,337 mg/kg Skin Irritation (rabbit) slight Skin Irritation (guinea pig) slight Eye irritation (rabbit) strong Skin Sensitization (guinea pig) none

CHRONIC EFFECTS:

Component

Light Hydrotreated Distillate (CAS #68410-97-9) Carcinogenic Effects: Not Available Mutagenic Effects: Not Available Teratogenic Effects: Not Available Developmental Toxicity: Not Available

Target Organs: **Routes of exposure** Inhalation. Ingestion. **Eyes** Avoid contact with eyes. Causes eye irritation. **Skin** Avoid contact with the skin. Contact with skin may cause irritation. **Inhalation** Prolonged inhalation may be harmful.

Ethyl Alcohol (64-17-5)

Carcinogenic Effects: A4 - Not classifiable for human or animal by ACGIH.

Mutagenic Effects: Not Available.

Teratogenic Effects: Not Available.

Developmental Toxicity: Ethyl alcohol is a developmental toxin when consumed during pregnancy **Target Organs**: When consumed, ethyl alcohol can target the respiratory system, skin, eyes, CNS, liver, blood, and reproductive system. **Inhalation**: May cause irritation to the mucous membranes of the upper respiratory tract. Exposure over 1000 ppm may cause headache, drowsiness, lassitude, loss of appetite, inability to concentrate, throat irritation **Ingestion**: Can cause depression of Central Nervous System, nausea, vomiting, diarrhea, intoxication, and in acute cases, death **Eye**: Liquid and vapor may cause irritation. Splashes may cause temporary pain and blurred vision **Skin**: May cause irritation, cracking, flaking, and defatting of skin on prolonged contact **Chronic Exposure**: Prolonged skin contact causes drying and cracking of skin. May affect nervous system, liver, blood, reproductive system. **Signs and Symptoms**: Headache, drowsiness, lassitude, loss of appetite, inability to concentrate, irritation of throat/eye/skin, depression of central nervous system, nausea, vomiting, diarrhea, skin defatting.

Ethyl Acetate (141-78-6)

Carcinogenicity: ACGIH A4 – Not Classifiable as a Human Carcinogen

Neurotoxicity: This product contains ethyl acetate, a central nervous system target.

Mutagenicity: Cytogenetic analysis hamster fibroblast 9g/L Sex Chromosome Loss/Non-disjunction S Cerevisiae 24400ppm

Reproductive: No information available for product.

Developmental: No information available for product.

Target Organs: Ethyl acetate can target the respiratory system, skin, and eyes. **Eyes**: Causes eye irritation. Vapors may cause eye irritation. **Skin**: May cause skin irritation. Prolonged and/or repeated contact may cause irritation and/or dermatitis. **Ingestion** May cause irritation of the digestive tract. May cause liver and kidney damage. Ingestion of large amounts may cause central nervous depression. May cause headache, nausea, fatigue, and dizziness. **Inhalation**: May cause respiratory tract irritation. May be harmful if inhaled. Inhalation of high concentrations may cause narcotic effects. **Chronic**: Chronic inhalation may cause effects similar to those of acute inhalation. Chronic exposure may product anemia, leukocytosis, cloudy swelling, and fatty degeneration of the viscera.

n-butyl acetate (123-86-4)

Carcinogenic Effects: No component is identified by IARC, ACGIH, NTP, or OSHA **Mutagenic Effects**: Not Available

Teratogenic Effects: Developmental Toxicity - rat - Inhalation

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.

Developmental Toxicity: Not Available

Target Organs: **Inhalation** May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. Causes skin irritation. **Eyes** Causes eye irritation.

1,2,4-trimethylbenzene (95-63-6)

Carcinogenicity: No component identified as a carcinogen by IARC, ACGIH, NTP, or OSHA Mutagenicity: Genotoxicity in vitro - in vitro assay - S. typhimurium - with and without metabolic activation negative. Genotoxicity in vivo - rat - male and female - Intraperitoneal - negative Reproductive: Not available. Developmental: Not available. Target Organs: Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eves May cause eve irritation. 3-ethvltoluene (620-14-4) Carcinogenicity: No component identified as a carcinogen by IARC, ACGIH, NTP, or OSHA Mutagenicity: Not available. Reproductive: Not available. Developmental: Not available. Target Organs: Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. Ethylene Glycol Monopropyl Ether (CAS#2807-30-9) Carcinogenic Effects: No component identified as a carcinogen by IARC, ACGIH, NTP, or OSHA Mutagenic Effects: Not Available. Teratogenic Effects: Not Available Developmental Toxicity: Reproductive toxicity - rat - Inhalation Maternal Effects: Other effects. Specific Developmental Abnormalities: Musculoskeletal system. Reproductive toxicity - mouse - Oral Effects on Newborn: Stillbirth. Target Organs: May cause blood disorders based on animal data Skin corrosion/irritation Skin - rabbit Result: Mild skin irritation - 24 h Serious eye damage/eye irritation Eves - rabbit Result: Severe eye irritation - 24 h

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Ethyl Alcohol (64-17-5)

96 hour LC50 Oncorhynchus mykiss: 12,900 mg/L (flow-through) (30days old)
96 hour LC50 Pimephales promelas 14.2 mg/L
5 min EC50 Photobacterium phosphoreum: 35,470 mg/L
30 min EC50 Photobacterium phosphoreum: 34,634 mg/L
48 hour EC50 Daphnia magna: 9,268 mg/L
24 hour EC50 Daphnia magna: 10,800 mg/L

Ecotoxicity: Ethyl Acetate (141-78-6)

48 Hr EC50 Scenedesmus Subspicatus 3300 mg/L 96 Hr LC50 Pimephales promelas: 230mg/L [flow-through] 96 Hr LC50 Oncorhynchus mykiss: 484 mg/L [flow through] 5 min EC50 Photobacterium phosphoreum: 1180 mg/L 15 min EC50 Photobacterium phosphoreum: 5870 mg/L 2 Hr EC50 Pseudomonas fluorescens: 7400 mg/L

15 min EC50 Pseudomonas fluorescens: 1500 mg/L	
48 Hr EC50 Daphnia magna: 717 mg/L	

Ecotoxicity n-butyl acetate (123-86-4)

LC50 - Lepomis macrochirus (Bluegill) - 100 mg/l - 96 h EC50 - Daphnia magna (Water flea) - 72.8 - 205.0 mg/l - 24 h

Ecotoxicity: 1,2,4-trimethylbenzene (95-63-6)

LC50 - Pimephales promelas (fathead minnow) - 7.72 mg/l - 96.0 h Immobilization EC50 - Daphnia magna (Water flea) - 3.6 mg/l - 48 h

Ecotoxicity: 3-ethyltoluene (620-14-4) LC50 - Pimephales promelas (fathead minnow) - 6.9 mg/l - 96.0 h

Ecotoxicity: Ethylene Glycol Monopropyl Ether (2807-30-9) 96 h LC50 (fathead minnow) >91.3 mg/l NOEC: 91.3 mg/l 96 h LC50 (daphnid) > 91.3 mg/l NOEC: 91.3 mg/l 96 h LC-50 (snail) > 91.3 mg/l NOEC: 91.3 mg/l

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

Section 14: TRANSPORT INFORMATION

Proper Shipping Name: Paint related material Hazard Class: 3 Identification No.: UN1263 Packing Group: II Label: Flammable

Section 15: REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

SARA 302/304 The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

SARA 313: 1,2,4-Trimethylbenzene 95-63-6, Glycol Ether

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: Ethyl Acetate (141-78-6) 5,000 lbs, Butyl Acetate (123-86-4) 5,000 lbs

SARA 311/312 Hazard The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Acute, Chronic, Fire

Section 16: OTHER SUPPLEMENTAL INFORMATION

Prepared by: Charles Paint Research Inc on 6/10/14

Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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