

SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION**Company Address:**8125 Cobb Center Drive
Kennesaw, GA 30152Product Information: 800-TECH-401
Customer Service: 800-645-5244Emergency: (Chemtrek) 800-424-9300
Revision Date: April 28, 2010**Product Identification****CircuitWorks® Water Soluble Tacky Flux****Product Code: ES3299, ES199****SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	UN number	IDLH	Classification			CAS#	Wt. % Range
			H	F	R		
distillates (petroleum)	-	-	0	1	0	64742-46-7	10 - 50

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 3: HAZARDS IDENTIFICATION

OSHA/HCS status: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Emergency Overview: NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED. No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.. Use only with adequate ventilation.

Potential Acute Health Effects:**Eyes:** Causes severe eye irritation.**Skin:** Causes skin irritation.**Ingestion:** May be fatal if swallowed.**Inhalation:** Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.**Pre-Existing Medical Conditions Aggravated by Exposure:** None known.**Over-exposure signs/symptoms:****Inhalation :** No specific data.**Ingestion :** No specific data.**Skin :** No specific data.**Eyes:** No specific data.**SECTION 4: FIRST AID MEASURES**

Eyes: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: >140C Open Cup **LEL/UEL:** Not established (% by volume in air)

Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Fire Fighting Instructions: In a fire or if heated, a pressure increase will occur and the container may burst. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large Spills: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small Spills: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 7: HANDLING AND STORAGE

Handling: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

KEEP OUT OF REACH OF CHILDREN.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTIONExposure Guidelines:

CHEMICAL NAME	United States Exposure Limits	Canada Exposure Limits	Mexico Exposure Limits
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Consult local authorities for acceptable exposure limits.

Work/Hygienic Practices: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection :

- Respiratory :** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eyes:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

NFPA and HMIS Codes:

	NFPA	HMIS
Health	0	0
Flammability	1	1
Reactivity	0	0
Personal Protection	-	-

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Yellowish-brown. Hazy [Light] Viscous liquid.

Odor: Ethereal. [Slight]

pH: NA

Vapor Pressure: Not available

Vapor Density: Not available

Boiling Point: Not available

Solubility in Water: NA

Specific Gravity: (Water =1) Not available

Evaporation Rate: <1 (Butyl acetate=1)

Melting Point: NA

Percent Volatile: NA

SECTION 10: STABILITY AND REACTIVITY

Stability - This product is stable. Conditions to Avoid: No specific data.. Incompatibility: No specific data.

Products of Decomposition: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Polymerization: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

<u>Acute toxicity</u>	Conclusion/Summary : Not available.
<u>Chronic toxicity</u>	Conclusion/Summary : Not available.
<u>Irritation / Corrosion</u>	Conclusion/Summary : Not available.
<u>Sensitizer</u>	Conclusion/Summary : Not available.
<u>Cancer Information</u>	Conclusion/Summary : Not available.
<u>Mutagenicity</u>	Conclusion/Summary : Not available.
<u>Teratogenicity</u>	Conclusion/Summary : Not available.
<u>Developmental effects</u>	Conclusion/Summary : Not available.
<u>Fertility effects</u>	Conclusion/Summary : Not available.

SECTION 12: ECOLOGICAL INFORMATION**Environmental Impact Information**

No known significant effects or critical hazards. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

REPORTING

US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is: **1-800-424-8802**

SECTION 13: DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any byproducts should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. **Disposal should be in accordance with applicable regional, national and local laws and regulations.**

SECTION 14: TRANSPORTATION INFORMATION

Proper Shipping Name	UN Number	Class	Sub Risk	Label PG	Pkg Code	Max Intsr	Qty
Air and Ground Shipments:	Not Regulated						

SECTION 15: REGULATORY INFORMATION**SECTION 313 SUPPLIER NOTIFICATION**

This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

This information should be included on all MSDSs copied and distributed for this material.

HCS Classification : Not regulated.

U.S. Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted.
 TSCA 8(a) PAIR: Carboxylic acids, C6-18 and C5-15-di-
 United States inventory (TSCA 8b): All components are listed or exempted.
 TSCA 8(d) H and S data reporting: Carboxylic acids, C6-18 and C5-15-di-: 2006
 SARA 302/304/311/312 extremely hazardous substances: No products were found.
 SARA 302/304 emergency planning and notification: No products were found.
 SARA 302/304/311/312 hazardous chemicals: No products were found.
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
 Clean Water Act (CWA) 307: No products were found.
 Clean Water Act (CWA) 311: No products were found.
 Clean Air Act (CAA) 112 accidental release prevention: No products were found.
 Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
 Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations:

Connecticut Carcinogen Reporting: None of the components are listed.
 Connecticut Hazardous Material Survey: None of the components are listed.
 Florida substances: None of the components are listed.
 Illinois Chemical Safety Act: None of the components are listed.
 Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.
 Louisiana Reporting: None of the components are listed.
 Louisiana Spill: None of the components are listed.
 Massachusetts Spill: None of the components are listed.
 Massachusetts Substances: None of the components are listed.
 Michigan Critical Material: None of the components are listed.
 Minnesota Hazardous Substances: None of the components are listed.
 New Jersey Hazardous Substances: None of the components are listed.
 New Jersey Spill: None of the components are listed.
 New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
 New York Acutely Hazardous Substances: None of the components are listed.
 New York Toxic Chemical Release Reporting: None of the components are listed.
 Pennsylvania RTK Hazardous Substances: None of the components are listed.
 Rhode Island Hazardous Substances: None of the components are listed.

California Prop. 65:

No products were found.

WHMIS:

Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists:

CEPA Toxic substances: None of the components are listed.
 Canadian ARET: None of the components are listed.
 Canadian NPRI: None of the components are listed.
 Alberta Designated Substances: None of the components are listed.
 Ontario Designated Substances: None of the components are listed.
 Quebec Designated Substances: None of the components are listed.

Canada inventory:

Not determined.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

International lists: Australia inventory (AICS): All components are listed or exempted.
 China inventory (IECSC): All components are listed or exempted.
 Japan inventory: Not determined.
 Korea inventory: All components are listed or exempted.
 New Zealand Inventory of Chemicals (NZIoC): Not determined.
 Philippines inventory (PICCS): Not determined.

SECTION 16: OTHER INFORMATION

Normal ventilation for standard manufacturing practices is usually adequate. Local exhaust should be used when large amounts are released.

To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.