

MATERIAL SAFETY DATA SHEET

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Spectrum Adhesives Corporate 5611 Universal Drive, Memphis, TN 38118

EMERGENCY PHONE: 800-535-5053

Corporate: 901-795-1943

Customer Service: 800-454-4583

Product Name/Code: CP-0519

Issue Date: 06-06-2011

Section 2: HAZARDS IDENTIFICATION

HMIS Rating:

Health - 1 Fire - 0 Physical Hazards - 0 Chronic *

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

*The customer is responsible for determining the PPE code for this material

EMERGENCY OVERVIEW

Appearance/Odor: Opaque, white liquid with little or no odor.

Potential Health Effects: See Section 11 for more information

WARNING! MAY CAUSE ALLERGIC RESPIRATION AND SKIN REACTION

Potential acute health affects

Eye: May cause eye irritation.

Skin: May cause irritation on prolonged or repeated contact. May cause sensitization by skin contact.

Ingestion: Not expected to be harmful under normal conditions of use.

Inhalation: May cause sensitization by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential chronic health effects:

Chronic effects: Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that preexisting respiratory and skin disorders may be aggravated by exposure.

Carcinogenicity: Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Target organs: Review Sections 2 and 11 for any additional assessments.

Over-exposure signs/symptoms:

Inhalation: Adverse symptoms may include the following: wheezing and breathing difficulties, asthma.

Ingestion: No specific data.

Skin: Adverse symptoms may include the following: irritation, redness.

Eyes: No specific data.

Medical conditions aggravated by over-exposure: Pre-existing respiratory and skin disorders may be aggravated by over-exposure to this product.

See section 11 for more detailed information on health effects and symptoms.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	WT%
Formaldehyde	50-00-0	0.1 – 1.0

** Any applicable Canadian trade secret numbers will be listed in Section 15.

Section 4: FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Skin Contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation: Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately, 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. In the event of any complaints or symptoms, avoid further exposure.

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 immediately.

Protection of first aid personnel: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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.

See section 11 for more detailed information on health effects and symptoms.

Section 5: FIRE FIGHTING MEASURES

Flammability of the product: In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media:

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not suitable: None known.

Special exposure hazards: 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.

Hazardous Combustion Products: Decomposition products may include the following materials: Carbon oxides, nitrogen oxides.

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.

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or 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. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or on clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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. Solubility in water of urea resins can vary from infinite to insoluble depending on manufacturing procedure and age. Warm water helps in washing up resins with limited solubility.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name

Formaldehyde

Occupational exposure limits

ACGIH TLV CEILING

0.37 mg/m³ 0.3 ppm

OSHA PEL 8-hr TWA

0.75 ppm

OSHA PEL STEL (15 mins)

2 ppm

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures: 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.

Engineering measures: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust, ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measure: 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.

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respiratory 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 dust.

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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Color: Opaque, white.

Odor: Little or none.

Odor Threshold: Not available.

Physical State: Liquid.

Vapor Pressure: Approx. 22 mm HG at 25° C (77° F)

Vapor density: Not available.

pH: 7.7 – 8.0 @ 25° C (77° F)

Relativity density: 1.295-1.305

Boiling Point: Approx. 102° C (216° F)

Flash Point: Not applicable.

Evaporation Rate: Approx. 0.3 (n-Butyl acetate=1).

Solubility: Soluble.

Partition Coefficient (n-octanol/water): Not available.

Auto-ignition Temperature: Not applicable.

Flammable limits: Lower: Not applicable Upper: Not applicable

Typical % Solids: 68.00% (m)

Section 10: STABILITY AND REACTIVITY

Stability: Hazardous polymerization may occur under certain conditions of storage or use.

Materials to avoid: Reactive or incompatible with the following materials: oxidizing materials, acids.

Hazardous decomposition products: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, aldehydes (including formaldehyde), hydrogen cyanide particulate matter, other organic compounds.

Section 11: TOXICOLOGY INFORMATION

Acute toxicity

Ingredient name

Formaldehyde

LD50	Oral	Rat	800mg/kg
LC50	Inhalation	Rat	0.578 mg/l 250 ppm/2 h
LD50	Dermal	Rabbit	270 mg/kg

Other Toxicological Information

Carcinogenicity

Conclusion/Summary

The National Toxicology Program (NTP) has listed formaldehyde as “reasonably anticipated to be a human carcinogen”. The International Agency for Research on Cancer (IARC) has concluded that formaldehyde is “carcinogenic to humans”. U.S. OSHA regulates formaldehyde as a potential human carcinogen. See the OSHA Formaldehyde Workplace Standard at 29 CFR 1920.1048 (the “OSHA Standard”). Safe handling and use instructions are provided in this MSDS and in the OSHA Standard. OSHA has identified 0.5 ppm, calculated as an eight-hour time-weighted average (“TWA”) concentration, as the “Action Level”. Please review and understand the guidance contained in this MSDS, and refer to the OSHA Standard for regulatory requirements that might be applicable to your operation and use. Many studies and other evaluations have been performed concerning formaldehyde’s potential to cause cancer. To review some of these studies and for further information go to www.osha.gov/SLTC/formaldehyde; <http://monographs.iarc.fr>; <http://ntp-server.niehs.nih.gov>; <http://epa.gov/iris/subst/0419.htm>; and other authoritative websites.

Classification

Ingredient name

Formaldehyde

ACGIH	Suspected human carcinogen
IARC	IARC Group 1, carcinogenic to humans
NTP	Possible
OSHA	OSHA cancer potential
EU	Limited evidence of a carcinogenic effect

Section 12: ECOLOGICAL INFORMATION

Environmental effects

No known significant effects or critical hazards.

Aquatic ecotoxicity

Ingredient name

Formaldehyde

Fresh water	Acute LC50 1.41 mg/l/4 d	Rainbow trout, Donaldson trout
Fresh water	Acute LC50 1/51 mg/l/4 d	Bluegill

California Prop. 65: WARNING: This product contains a chemical known to the State of California to cause cancer. Formaldehyde 50-00-0.

Canada

WHMIS (Canada)

Class D-2A: Material causing other toxic effects (very toxic).

Canadian lists

Canadian NPRI: None required

International regulations

Chemical Inventories

Europe inventory Not Determined.

Australia inventory (AICS) All components are listed or exempted.

China Inventory (IECSC) Not Determined.

Japan Inventory (ENCS) Not Determined.

Japan Inventory (ISHL) Not Determined.

Korea Inventory (KECI) All components are listed or exempted.

New Zealand Inventory (NZIoC) Not Determined.

Philippines Inventory (PICCS) Not Determined.

United States Inventory (TSCA 8b) All components are listed or exempted

Canada Inventory At least one component is not listed in DSL but all such components are listed in NDSL.

Section 16: OTHER INFORMATION

DISCLAIMER

Spectrum Adhesives, inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. SPECTRUM ADHESIVES, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, SPECTRUM ADHESIVES, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.