

# Material Safety Data Sheet

## K-GRIP 201

Maple Leaf Sales II, Inc.  
900 East Main  
Middleville, MI  
1-800-521-1133

**Emergency Number: 1-800-424-9300 (Chemtrec)**

MLS Number: MLS 660202  
MSDS Revision Date: 5/29/07

### Section 1 – Product Identification

K-GRIP 201 & 201R Foam & Fabric Spray Adhesive (Non-Flammable)

### Section 2 – Composition, Information on Ingredients

#### 1. Methylene Chloride

CAS# 75-09-2

% by Weight: 65

Vapor Pressure: 350 mm HG @ 20° C

SARA 313: Yes

Allowable Exposure Limit: Skin:15 min.

Exposure Limit (PPM MG/CU.M):

TLV-TWA: 50 / 174

OSHA-PEL: 25 / 87

OSHA-STEL 125 / 437

LFL: 16.0

UFL: 66.0

#### 2. Aliphatic Hydrocarbon Mixture

CAS# 64742-89-8

Exposure Limit (PPM MG/CU.M):

TLV-TWA: 400

#### 3. N-Heptane

CAS# 142-82-5

Exposure Limit (PPM MG/CU.M):

TLV-TWA: 400 / 1600

TLV-STEL: 500 / 2000

OSHA-PEL: 400 / 1600

OSHA-STEL: 500 / 2000

LFL: 1.0

UFL: 7.0

#### 4. Stoddard Solvent

CAS# 8052-41-3

Exposure Limit (PPM MG/CU.M):

TLV-TWA: 100 / 525

OSHA-PEL: 100 / 525

LFL: .8

LFL: Lower Flammability Limit Percent

UFL: Upper Flammability Limit Percent

STEL: Short Term Exposure Limit

SARA 313 = Yes: Chemical is subject to reporting requirements of Section 313 of Title III of SARA 40 CFR Part 372

#### HMS Information:

Health: 3\*, Flammability: 0, Reactivity: 0

Hazard Rating: 0 – Minimal 1 – Slight 2 – Moderate 3 – High 4 – Extreme \* – Chronic

### Section 3 – Hazards Identification

#### Effects of Short Term Overexposure:

##### Eye:

May cause eye irritation

##### Skin:

Primary skin irritant. May be absorbed through the skin in harmful amounts. May cause severe skin irritation.

##### Inhalation:

**MAY BE FATAL IF TOO MUCH IS BREATHED!**

Preexisting heart conditions may be aggravated by exposure to Methylene Chloride. Exposure to chlorinated solvents may result in liver and kidney, and heart sensitization. Overexposure may cause unconsciousness and possible death. May cause nose or throat irritation. High concentrations may cause acute central nervous system depression characterized by headaches, dizziness, nausea and confusion. Reduces the blood's oxygen-carrying capacity to the formation of carboxyhemoglobin. Reduced blood oxygen levels may be harmful to users, especially those with existing heart disease.

##### Ingestion:

Can cause gastrointestinal irritation, nausea, and vomiting. Aspiration of material into lung may cause chemical pneumonitis, which can be fatal.

#### Effects of Repeated Overexposure:

Reports have associated prolonged and repeated occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

**Significant Laboratory Data with Possible Relevance to Human Health:**

Methylene Chloride has been identified as a potential carcinogen by the International Agency for Research on Cancer (IARC Group 2B – Probable Human Carcinogen) and as a substance “Reasonable Anticipated to be a Carcinogen” by the National Toxicology Program (NTP Group 2). These classifications are based on animal studies (mice & rats) which indicated a dose related incidences in lung, liver and mammary tumors. Human epidemiological studies indicate that the potential carcinogenic effect of Methylene Chloride is dose dependent. This is supported by the observation of an increase incidence of liver cancer subsequent of high exposure (140 – 470 ppm) in a film production plant. Workers in another facility who were exposed to a much lower concentration (26 ppm) showed no increase in cause specific death.

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**Section 4 – First Aid Measures****Eye Contact:**

Flush with large amounts of water, lifting upper and lower lids occasionally. Continue for at least 15 minutes. Get medical attention.

**Skin Contact:**

Immediately flush the contaminated area with large amounts of water. Remove contaminated clothing as water is applied. Consult a physician.

**Inhalation:**

Remove to fresh air immediately. If breathing has stopped, give artificial respiration. Keep warm and quiet. Get medical attention immediately.

**Ingestion:**

If swallowed, do not induce vomiting. Call poison control center, hospital emergency room or physician immediately.

**Note to Physician:**

Do not give stimulants. Epinephrine or ephedrine may adversely affect the heart with fatal results.

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**Section 5 – Fire Fighting Measures**

NFPA Flammability Classification: N/A

Flashpoint: N/A

**Extinguishing Media:**

Use NFPA Class B Fire extinguishers (carbon dioxide, all purpose dry chemical or alcohol foam) designed to extinguish flammable liquid fires. Polymer foam is preferred for large fires.

**Unusual Fire and Explosion Hazards:**

During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

This product contains halogenated hydrocarbons; contact with aluminum may cause violent reaction and/or explosion.

Manufacturer's of Methylene Chloride report no flash point using the TOC, TCC, and COC methods. However, it is known that Methylene Chloride does have a flammable range of 14% (LFL) and 22% (UFL) and 25° C. These represent very high concentrations that would present very serious employee exposures relative to OSHA and ACHIG standards. Due to the lack of a typical flashpoint, some confusion exists regarding the assignment of HMIS flammability ratings. Some suppliers have suggested that a flammability rating of 1 should be assigned to Methylene Chloride. Others suggest that the lack of a true flashpoint requires that a zero flammability rating be assigned. Prevent circumstances which would result in Methylene Chloride concentrations within the flammable range as well as exposure of liquid or vapor to sources of ignition. Please keep in mind that the presence of other flammable substances in this or other product mixtures may alter the flashpoint and increase the flash fire risk and the HMIS flammability rating.

**Special Fire Fighting Procedures:**

Firefighters should wear self-contained breathing apparatus. Water may be ineffective, but may be used to cool exposed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

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**Section 6 – Accidental Release Measures****Steps to be Taken if Material is Released or Spilled:**

The use of a NIOSH/MSHA approved, TC19C, air-supplied breathing apparatus may be required. Consult with a qualified occupational health and/or safety professional.

Wear respirators, eye, hand, and body protection appropriate for the size of the spill and the exposures encountered.

**Waste Disposal:**

Dispose in accordance with federal, state and local regulations.

**Environmental Hazards:**

None known

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## Section 7 – Handling and Storage

### Precautions to be Taken in Handling and Storage:

Do not store above 115° F (46° C). Store large quantities in compliance with OSHA 29CFR1910.106

### Other Precautions:

Do not take internally. Close container after each use. THIS PRODUCT IS INTENDED TO BE USED ONLY BY THE PROFESSIONAL (INDUSTRIAL) APPLICATOR UNDER PROPERLY CONTROLLED CONDITIONS. A QUALIFIED OCCUPATIONAL HEALTH PROFESSIONAL SHOULD EVALUATE EXPOSURES TO THIS PRODUCT. THE USE OF THIS PRODUCT IN CONFINED AREAS MAY RESULT IN DANGEROUS AIRBORN CONCENTRATIONS. THIS MAY CAUSE THE SERIOUS HEALTH EFFECTS DESCRIBED IN SECTION 3 OF THIS MSDS.

Empty containers must not be washed and re-used for any purpose. Containers should be grounded and bonded to the receiving container. Do not weld, braze or cut on empty container. Never use pressure to empty. Drum is not a pressure vessel.

## Section 8 – Exposure Controls, Personal Protection

### Eye Protection:

Wear safety glasses meeting the specifications of ANSI z87.1 where no contact with the eye is anticipated. Chemical safety goggles meeting the specifications of ANSI z87.1 should be worn whenever there is a possibility of splashing or other contact with the eyes.

### Skin Protection:

Wear appropriate impermeable gloves (North – Silver Shield)

### Respiratory Protection:

Proper selection of respiratory protection depends upon many factors including duration/level of exposure and conditions of use. In general, exposure to organic chemicals (such as those contained in this product) may not require the use of respiratory protection if used in well-ventilated areas. In restricted ventilation areas, a NIOSH approved chemical cartridge respirator may be required. Under certain conditions, such as spraying, a mechanical prefilter may also be required. In confined areas, use a NIOSH/MSHA approved air supplied respirator. If the TLV's listed in Section 2 are exceeded, use a properly fitted NIOSH/MSHA approved respirator with an appropriate protection factor. Refer to OSHA 29 CFR 1910.134 "Respiratory Protection", and "Respiratory Protection – A Manual and Guideline, American Industrial Hygiene Assoc."

### Ventilation:

Provide general dilution and local exhaust ventilation in sufficient volume and pattern to keep concentrations of hazardous ingredients listed in Section 2 below the lowest exposure limit stated. Remove decomposition products that are generated when welding, cutting, or brazing objects coated with this product. Refer to "Industrial Ventilation – A Manual of Recommended Practice" ACGIH.

### Other Protective Equipment:

Eyewash facility, safety shower

## Section 9 – Physical and Chemical Properties

Boiling Range: 102° F (39° C) – 289° F (143° C)

Vapor Density: Heavier than Air

Volatile (% Volume): 71

Evaporation Rate: Slower than Diethyl Ether

VOC (Less water and NPRS\*): 2.23 Lb/Gal.

\*Negligibly Photochemically Reactive Materials

VOC (Less water): 268 G/L Calculated

Weight Lb/Gal.: 9.5

VOC (Solids): 3.49 Lb/Gal. / 419 G/L Calculated

Specific Gravity: 1.1

All physical data determined at 68° F (20° C) 760 mm Hg.

## Section 10 – Stability and Reactivity

### Stability:

Avoid open flames, welding arcs or other high temperature sources which induce thermal decomposition.

### Conditions to Avoid:

Avoid excessive heat (>115° F / 46° C) and sources of ignition.

### Incompatibility (Materials to Avoid):

Aluminum

Strong acids or alkaline materials

Oxidizing materials

This product contains halogenated hydrocarbons which may react with aluminum. Avoid contact with aluminum in situations in which pressures may be elevated or in which reactions may be enclosed. Do not use spray equipment systems containing aluminum parts.

### Hazardous Decomposition Products:

Burning, including when heated by welding or cutting, will produce smoke, carbon monoxide and carbon dioxide. In addition, phosgene, formaldehyde, hydrogen chloride, chlorine may be generated.

### Hazardous Polymerization:

Will not occur

Conditions to Avoid:

This product contains halogenated hydrocarbons which may decompose to form hydrogen chloride, chlorine, and phosgene when in contact with hot surfaces, open flames, and U.V. radiation. Do not use this material near welding operations.

**Section 11 – Toxicological Information**

No information available.

**Section 12 – Ecological Information**

No information available.

**Section 13 – Disposal Considerations**

See Section 6

**Section 14 – Transport Information**

Proper Shipping Name (Description/Size):

IATA (Air):

Adhesives, Not Regulated for Bulk Containers

DOT (HM-181) (Domestic Surface):

Adhesives, Not Regulated for Bulk Containers

**Section 15 – Regulatory Information**

All ingredients in this product are listed on the US TSCA Inventory.

All ingredients in this product are listed on the Canadian Domestic Substance List.

WARNING: This Product Contains:

Methylene Chloride;

A chemical known to the State of California to cause cancer

Methylene Chloride

Aliphatic Hydrocarbon Mixture

N-Heptane

Stoddard Solvent

CAS# 75-09-2

CAS# 6472-89-8

CAS# 142-82-5

CAS# 8052-41-3

TSCA (8a CAIR)

DSL

TSCA (8a PAIR)

DSL

TSCA (8a PAIR)

TSCA (8d)

TSCA (8d)

DSL

DSL

Detail Inventory List Description

TSCA – Toxic Substances Control Act

8a CAIR – Comprehensive Assessment Information Rules

8a PAIR – Preliminary Assessment Information Rules

8d – Health and Safety Reporting Rules

DSL – Canadian Domestic Substance List

**Section 16 – Other Information**

Disclaimer of Warranty and Other Comments:

The information contained herein is, to the best of our knowledge and belief, accurate. However, because the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all federal, state, and local laws and regulations.

The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and to develop work practice procedures for a safe work environment. Maple Leaf Sales II, Inc. specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Maple Leaf Sales II, Inc. products. Maple Leaf Sales II, Inc. further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

Abbreviations:

ACGIH: American Conference of Governmental & Industrial Hygienists.

TWA: Time Weighted Average

OSHA: Occupational Safety & Health Administration

STEL: Short Term Exposure Limit

NIOSH: National Institute for Occupational Safety and Health

ppm: parts per million

IARC: International Agency for Research on Cancer

mg/cum: milligrams per cubic meter of air

NTP: National Toxicology Program

N/D: Not Determined

TLV: Threshold Limit Value (ACGIH)

N/A: Not Applicable

PEL: Permissible Exposure Limit (OSHA)

HMIS: Hazardous Materials Identification System

