



MATERIAL SAFETY DATA SHEET

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High Temp Adhesive
Part No. R6512CT Aerosol
Revision 1 ♦ December 6, 2006

EMERGENCY OVERVIEW

CONTENTS EXTREMELY FLAMMABLE AND UNDER PRESSURE. STORE BELOW 120°F, OUT OF SUNLIGHT, AND AWAY FROM HEAT SOURCES. DO NOT PUNCTURE OR INCINERATE. AVOID CONTACT WITH SKIN AND EYES. VAPOR HARMFUL. HARMFUL OR FATAL IF SWALLOWED. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

SECTION 1 • CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Chem-Pak, Inc.
242 Corning Way
Martinsburg, WV 25401 USA

SUPPLIER: R. J. Ackaway & Associates Inc.
756 Holcomb Bridge Road
Norcross, GA 30071

INFORMATION: 800-336-9828
EMERGENCY: 800-255-3924 (24 hr) Chem-Tel

SUPPLIER PHONE: 678-282-0178
SUPPLIER 24hr:

PRODUCT NUMBER: R6412CT
PRODUCT DESCRIPTION: High Temp Adhesive

SUPPLIER NUMBER:

PRODUCT TYPE: Aerosol
CAS NUMBER: Mixture
EMAIL: msds@chem-pak.com
WEBSITE: http://www.chem-pak.com

REVISION NUMBER: 1
REVISION DATE: December 6, 2006
PRINT DATE: December 6, 2006
PREPARED BY: Safety & Environmental Manager

SECTION 2 • COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS NUMBER	OSHA PEL	NIOSH REL	ACGIH PEL	IDLH	% WT
Cyclohexane	000110-82-7	300 ppm	300 ppm	100 ppm	1300 ppm	30-40
Liquefied Petroleum Gas	068476-85-7	1000 ppm	1000 ppm	1000 ppm	2000 ppm	30-40
Acetone	000067-64-1	1000 ppm	250 ppm	500 ppm	750 ppm	10-20
Carbon Dioxide	000124-38-9	5000 ppm	5000 ppm	5000 ppm	40000 ppm	< 10
VM&P Naphtha	064742-89-8	N/E	N/E	N/E	N/E	< 10

See Section 11 for LD50 and LC50 Species/Route Information.
See Sections 15 and 16 for Symbol Letters and R Phases.

SECTION 3 • HAZARD IDENTIFICATION

ROUTES OF ENTRY:

Skin Contact	☒	Skin Absorption	☐	Eye Contact	☒	Inhalation	☒	Ingestion	☐
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EFFECTS OF ACUTE EXPOSURE

EYE: Liquid contact may cause pain along with moderate eye irritation.

SKIN: Prolonged or repeated exposure may cause skin irritation. Repeated contact may cause drying or flaking of skin. May cause more severe response if confined to skin.

INGESTION: Due to being an aerosol, the product does not lend itself to ingestion. Should ingestion occur, it may cause irritation to membranes of the mouth, throat, and gastrointestinal tract resulting in vomiting and/or cramps. Aspiration of vomit into the lungs may cause inflammation, and possible chemical pneumonitis, bronchopneumonia, or pulmonary edema.

INHALATION: Prolonged or repeated overexposure is anesthetic. May cause irritation of the respiratory tract, or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion or death. Irritation of the mucous membranes, coughing, and dyspnoea are also possible.

OTHER HEALTH HAZARD DATA

EFFECTS OF CHRONIC EXPOSURE: Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage (sometimes referred to as "Solvent or Painter's Syndrome"). Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

MEDICAL CONDITIONS AGGRAVATED: May aggravate personnel with pre-existing disorders associated with any of the Target Organs.

PRIMARY HAZARDS: Sensory Irritation (acetone)



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CARCINOGEN DATA: None of the ingredients are considered carcinogenic by OSHA, IARC, NTP, NIOSH or ACGIH.
TARGET ORGANS: Eyes, skin, respiratory system, central nervous system, peripheral nervous system

OSHA HAZARD CLASSIFICATIONS

HEALTH HAZARD CLASSIFICATION			PHYSICAL HAZARD CLASSIFICATION		
Irritant	☒	Sensitizer	☐	Combustible	☐
Toxic	☐	Highly Toxic	☐	Flammable	☒
Corrosive	☐	Carcinogenic	☐	Compressed Gas	☒
				Explosive	☐
				Oxidizer	☐
				Organic Peroxide	☐
				Pyrophoric	☐
				Water Reactive	☐
				Unstable	☐

SECTION 4 • FIRST AID MEASURES

INGESTION: Do not induce vomiting! Immediately have the victim drink plenty of water. Do not give milk or digestible oils. Keep airways free. Contact a physician. Never give anything by mouth if victim is rapidly losing consciousness, unconscious, or convulsing.
SKIN: Remove with soap and water. Consult a physician if irritation continues. If large skin area is affected, remove contaminated clothing.
EYE: Immediately flush with plenty of clear water for at least 15 minutes. Make sure to flush under the eyelids. Consult a physician.
INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.
NOTES TO PHYSICIAN: Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmia (irregular beating) in persons exposed to high concentrations of n-Hexane. If used, monitor heart activity closely.

SECTION 5 • FIRE FIGHTING MEASURES

CONDITIONS OF FLAMMABILITY: Heat, sparks, flame, red hot metal
SUITABLE MEANS OF EXTINCTION: Water, CO₂, dry chemical, or universal aqueous film forming foam.
UNSUITABLE EXTINGUISHING MEDIA: N/A
FLASH POINT AND METHOD OF DETERMINATION: Propellant < 0 F, Tagged Closed Cup
FLAMMABLE LIMITS: Lower (LEL): 1.8% @ 25 C Upper (UEL): 9.5% @ 25 C
AUTOIGNITION TEMPERATURE: N/A
HAZARDOUS COMBUSTION PRODUCTS: Oxides of Carbon (CO, CO₂), smoke, and vapors as products of incomplete combustion.
EXPLOSION DATA - SENSITIVITY TO MECHANICAL IMPACT: N/A
EXPLOSION DATA - SENSITIVITY TO STATIC DISCHARGE: N/A
SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool fire exposed aerosol containers, as contents can rupture violently from heat developed pressure. Firemen should wear self-contained breathing apparatus.
SPECIAL FIRE AND EXPLOSION HAZARDS: Contents extremely flammable and under pressure.

SECTION 6 • ACCIDENTAL RELEASE MEASURES

CONTAINMENT PROCEDURES: Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content should be contained as any other solvent spill.
SPILL CLEANUP: Spills from aerosol cans are unlikely and are generally of small volume. Large spills are therefore not normally considered a problem. In case of actual rupture, avoid breathing vapors and ventilate area well. Remove sources of ignition and use non-sparking equipment. Soak up material with inert absorbent and place in safety containers for proper disposal.
SPECIAL INSTRUCTIONS: Aerosol products represent a limited hazard and will not spill or leak unless ruptured. In case of rupture contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilate provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned. See Section 13 for disposal.
REPORTING REQUIREMENTS: Spills due to the rupture of a single aerosol can are generally below any regulatory reporting requirements. However, if larger spills somehow result, the reporting requirements of all governing agencies should be observed.

SECTION 7 • HANDLING AND STORAGE

HANDLING: Avoid prolonged or repeated skin contact. Avoid breathing of vapors. Do not incinerate (burn) containers. Always replace overcap when not in use.
STORAGE: Storage of individual cans should be done in an area below 120F, and away from heat sources. Ensure can is in a secure place to prevent knocking over and accidental rupture. For storage of pallet quantities, compliance with NFPA 30B (Manufacture and Storage of Aerosol Products) is recommended. This product is classified as a Level 1 Aerosol.



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SECTION 8 ● EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES: Since this product is a mixture, an exposure value is not available. In determination of any exposure procedures, protection, or testing, use the lowest rated ingredient from Section 2.

ENGINEERING AND EXPOSURE CONTROLS: General ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system may be necessary to control air contamination below that of the lowest PEL rated ingredient from Section 2.

RESPIRATORY PROTECTION: A NIOSH approved respirator with an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. If respirators are needed, compliance with OSHA standard 29 CFR 1910.134 is necessary within the United States.

SKIN AND HAND PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing impervious to the ingredients listed in Section 2.

EYE PROTECTION: Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact with this material could occur, chemical splash proof goggles are recommended.

SECTION 9 ● PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: N/D
SPECIFIC GRAVITY (H₂O=1): . . . 0.713 g/cc
VAPOR PRESSURE: Approx 70 psig
VAPOR DENSITY: N/D
PHYSICAL STATE: Liquid Under Pressure
PERCENT VOLATILE: 88% Wt (81% Vol) Max
PERCENT VOC: 70% Wt (67% Vol) Max
VISCOSITY: N/D
APPEARANCE: Clear Liquid

MELTING/FREEZING POINT: . . . N/D
COEFF. OF WATER/OIL DIST.: . . . N/D
pH: Neutral
EVAPORATION RATE: Rapid
WATER SOLUBILITY: N/D
VOLATILITY: 3.986 lbs/gal (0.479 g/cc)
MIR VALUE: 0.952
ODOR THRESHOLD: N/D
ODOR: Slight

SECTION 10 ● STABILITY AND REACTIVITY

CONDITIONS OF INSTABILITY: . N/Av
STABILITY: Stable
HAZARD POLYMERIZATION: . . . Not expected to occur
MATERIAL INCOMPATIBILITY: . Strong oxidizers, chlorine dioxide
CONDITIONS OF REACTIVITY: . Heat, sparks, flame, red hot metal
DECOMPOSITION PRODUCTS: . Oxides of carbon and silicon.

SECTION 11 ● TOXICOLOGICAL INFORMATION

LD50 AND LC50 SPECIES/ROUTE INFORMATION:

INGREDIENT	ORAL LD50	DERMAL LD50	INHALATION LC50
Cyclohexane	12705 mg/kg, rat	>2000 mg/kg, rabbit	14 mg/l /4hr, rat
Liquefied Petroleum Gas	N/Av	N/Av	57.43% v/v, mice
Acetone	5800 mg/kg, rat	20000 mg/kg, rabbit	76 mg/m ³ /4hr, rat
Carbon Dioxide	N/Av	N/Av	N/Av
VM&P Naphtha	N/Av	N/Av	N/Av

IRRITANCY OF PRODUCT: The following ingredients are considered Eye Irritants: Acetone. The following are considered Skin Irritants: Cyclohexane.

SENSITIZATION TO PRODUCT: N/A
REPRODUCTIVE TOXICITY: . . . N/Av
TERATOGENICITY: N/Av
MUTAGENICITY: N/Av
SYNERGISTIC PRODUCTS: . . . N/Av

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SECTION 12 • ECOLOGICAL INFORMATION

ECOTOXICITY:

INGREDIENT	FISH LC50	DAPHNIA EC50	ALGAL IC50	BACTERIAL EC50
Cyclohexane	34 mg/l /96 hr	3.78 mg/l /48 hr	>500 mg/l /72 hr	200 mg/l /4 min
Liquefied Petroleum Gas	N/Av	N/Av	N/Av	N/Av
Acetone	8300 mg/l /96 hr	12600 mg/l /48 hr	7500 mg/l /8 day	530 mg/l /8 day
Carbon Dioxide	150 g/l /48 days	N/Av	N/Av	N/Av
VM&P Naphtha	N/Av	N/Av	N/Av	N/Av

MOBILITY: N/Av

PERSISTENCE: N/Av

DEGRADIBILITY: N/Av

BIOACCUMULATION: N/Av

OTHER ECOLOGIC DATA: Do not allow to enter waters, waste water, or soil. This product contains Hexane which is toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

EFFECT ON OZONE LAYER: ... This product does not contain any ozone depleting ingredients.

SECTION 13 • DISPOSAL CONSIDERATIONS

Hazard characteristics and regulatory waste stream classification can change with product use and location. 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 the time of disposition. All waste material must be disposed of in compliance with the respective national, federal, state, and/or local regulations. In the United States, an aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c)(6)), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations.

SECTION 14 • TRANSPORTATION INFORMATION

DOT SHIPPING INFORMATION (United States)

PROPER SHIPPING NAME: . Consumer Commodity

HAZARD CLASS: ORM-D

PACKAGING GROUP: None

UN or ID NUMBER: None

TDG SHIPPING INFORMATION (Canada)

PROPER SHIPPING NAME: . Aerosols, Flammable Ltd Qty

HAZARD CLASS: 2.1

PACKAGING GROUP: -

UN or ID NUMBER: UN1950

IMDG SHIPPING INFORMATION (International Ocean)

PROPER SHIPPING NAME: . Aerosols, Limited Quantity

CLASS: 2

PACKAGING GROUP: -

SUBSIDIARY RISK(S): -

UN or ID NUMBER: UN1950

PACKING INSTRUCTIONS: . P003

EmS NO.: F-D, S-U

STOWAGE: Category A

MFAG NO.: 620

ICAO/IATA SHIPPING INFORMATION (International Air)

PROPER SHIPPING NAME: Consumer Commodity

HAZARD CLASS: 9

PACKAGING GROUP: None

UN or ID NUMBER: ID8000

ADR SHIPPING INFORMATION (European Union)

PROPER SHIPPING NAME: Aerosols, Limited Quantity

ADR CLASS: 2

PACKAGING GROUP: -

UN or ID NUMBER: UN1950

CLASSIFICATION CODE: . LQ1

HAZARD ID NO.: -

NMFC DESCRIPTION (United States)

ITEM DESCRIPTION: Adhesives, NOI

ITEM NO.: 4620 Sub 5

CLASS: 55

NORTH AMERICAN EMERGENCY RESPONSE GUIDE

ID NUMBER: 8000

GUIDE NUMBER: 171

SECTION 15 • REGULATORY INFORMATION

UNITED STATES - FEDERAL:

INGREDIENT	CAS NO	TSCA	RCRA	CERCLA	SARA 313	CAA	CWA
Cyclohexane	110-82-7	✓	U056	1000#	37 %	-	1000#
Liquefied Petroleum Gas	68476-85-7	✓	-	-	-	-	-
Acetone	67-64-7	✓	U002	5000#	-	-	-
Carbon Dioxide	124-38-9	✓	-	-	-	-	-
VM&P Naphtha	64742-89-8	✓	-	-	-	-	-

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UNITED STATES - STATES:

INGREDIENT	CA	DE	FL	MA	PA	MN	NJ	NY	WA
Cyclohexane	-	✓	✓	2,4,5,6 F8 F9	E	AO	✓	✓	✓
Liquefied Petroleum Gas	-	-	-	-	-	-	-	-	-
Acetone	-	✓	✓	2,4,5,6 F8 F9	E	ANO	✓	✓	✓
Carbon Dioxide	-	-	✓	2,4	-	ANO	-	-	✓
VM&P Naphtha	-	-	-	-	-	-	-	-	-

CANADA:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. All of the components in this product are listed on the Domestic Substances List (DSL).

WHMIS Classification: A, B5, D2B

EUROPEAN UNION:

INGREDIENT	EINECS	SYMBOL	RISK PHRASES	SAFETY PHRASES
Cyclohexane	203-806-2	F, Xn, Xi, N	11-38-50/53-65-67	2-9-16-33-60-61-62
Liquefied Petroleum Gas	270-704-2	F+	12	9-16
Acetone	200-662-2	F, Xi	11-36-66-67	2-9-16-26
Carbon Dioxide	204-696-9	—	—	—
VM&P Naphtha	265-192-2	—	—	2-23-24-62

SECTION 16 • OTHER INFORMATION



Canadian Hazard Symbols



European Hazard Symbols

HMIS and NFPA RATINGS:

	HEALTH	FLAMMABILITY	REACTIVITY	SPECIAL
HMIS RATING	1	4	0	B
NFPA RATING	1	4	0	-

R and S PHASES (European Union):

CODE	RISK or SAFETY PHRASE
R12	Extremely Flammable
R36/38	Irritating to the eyes and skin
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65	Harmful: May cause lung damage if swallowed
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness
S2	Keep out of the reach of children
S9	Keep container in a well-ventilated place
S16	Keep away from sources of ignition - No smoking
S23	Do not breath vapour
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical attention
S29	Do not empty into drains
S33	Take precautionary measures against static discharges
S60	This material and its container must be disposed of as hazardous waste
S61	Avoid release to the environment.
S62	If swallowed, do not induce vomiting: see medical advice immediately and show container or label

DISCLAIMER OF LIABILITY:

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REVISIONS:

Revision 1 - 12/06/2006 Original