MATERIAL SAFETY DATA SHEET

MSDS 0673

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Section 1 -- PRODUCT AND COMPANY IDENTIFICATION
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                                                    HMIS CODES
PRODUCT NAME
                                                   Health
                                                   Flammability
  Jim PR-1L or Clear PR-2L Low VOC
                                                   Reactivity
PRODUCT CODES
                                                   PPI
  55611, 55613, 55615, 55617, 55910, 55912, 55914, 55918, 55920, 55972,
  55981, 55982
CHEMICAL FAMILY
  Organic
USE
  PVC & CPVC Primer
                                         EMERGENCY TELEPHONE NO.
MANUFACTURER'S NAME
                                         Chemtrec 24 Hours
  The RectorSeal Corporation
  2601 Spenwick Drive
                                         (800)424-9300 USA
  Houston, Texas 77055 USA
                                         (703)527-3887 International
DATE OF VALIDATION
                                         TECHNICAL SERVICE TELEPHONE NO.
  April 19, 2012
                                         (800)231-3345 or (713)263-8001
DATE OF PREPARATION
  April 19, 2012
        Section 2 -- HAZARDS IDENTIFICATION
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EMERGENCY OVERVIEW
OSHA Hazards
Flammable liquid, Target Organ Effect, Irritant
TARGET ORGANS
Liver, KidneyLiver, Kidney
GHS CLASSIFICATION
PHYSICAL HAZARDS: Flammable Liquid, Category 2
HEALTH HAZARDS
Acute Toxicity:
Oral: Category 4
Dermal: Category 5
Inhalation: Category 4
Skin Corrosion/Irritation: Category 3
Serious Eye Damage/Eye Irritation: Category 2A
Skin Sensitization: Not Classified
Respiratory Sensitization: Not Classified
Germ Cell Mutagenicity: Not Classified
Carcinogenicity: See Section 11
Reproductive Toxicology: Not Classified
Target Organ Systemic Toxicity - Single Exposure: Category 3
Target Organ Systemic Toxicity - Repeated Exposure: Not Classified
Aspiration Toxicity: Not Classified
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GHS Label elements, including precautionary statements
Pictogram: Flammable, Harmful / Irritant
Signal Word: Danger
Hazard Statements:
H225 - Highly flammable liquid and vapor
H302 - Harmful if swallowed.
H313 - May be harmful in contact with skin.
H316 - Causes mild skin irritation.
H318 - Causes serious eye damage.
H319 - Causes serious eye irritation
H335 + H336 - May cause respiratory irritation, and drowsiness or dizziness.
Precautionary Statements:
P102 - Keep out of reach of children.
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P240 - Ground/Bond container and receiving equipment
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P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P262 - Do not get in eyes, on skin, or on clothing.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P362 - Take off contaminated clothing and wash before reuse.
EUH066 - Repeated exposure may cause skin dryness or cracking
Precautionary Statements - EU No. 1272/2008
Classification according to EU Directives 67/548/EEC or 1999/45/EC
For the full text of the R phrases mentioned in this Section, see Section 16
Symbol(s) Xi - Irritant
F - Highly flammable
R -phrase(s)
R11 - Highly flammable
R36 - Irritating to eyes
R66 - Repeated exposure may cause skin dryness or cracking
R67 - Vapors may cause drowsiness and dizziness
R-code(s) F; R11 - Xi; R36 - R66 - R67
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SUMMARY OF ACUTE HAZARDS
  Overexposure may cause coughing, shortness of breath, dizziness, central
nervous system depression, intoxication and collapse. It may cause
irritation to the respiratory tract and to other mucous membranes.
ROUTE OF EXPOSURE, SIGNS AND SYMPTOMS
INHALATION
  Overexposure may cause coughing, shortness of breath, dizziness, central
nervous system depression, intoxication and collapse. It may cause
irritation to the respiratorytract and to other mucous membranes.
EYE CONTACT
  Severely irritating. If not removed promptly, will injure eye tissue,
which can result in permanent damage.
SKIN CONTACT
  Frequent or prolonged contact may irritate and cause dermatitis. Low
order of toxicity.
INGESTION
  Low order of toxicity. Small amounts of the liquid aspirated into the
respiratory system during ingestion, or from vomiting, may cause
bronchiopneumonia or pulmonary edema.
SUMMARY OF CHRONIC HAZARDS
  Repeated or prolonged exposure may cause signs of central nervous system
depression and respiratory irritation. This material has been shown to
induce tumors in laboratory animals.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
  Individuals with pre-existing or chronic diseases of the eyes, skin,
respiratory system, cardiovascular system, gastrointestinal system, liver,
or kidneys may have increased susceptibility to excessive exposure.
Section 3 -- COMPOSITION/INFORMATION ON INGREDIENTS
INGREDIENT: Methyl Ethyl Ketone
PERCENTAGE BY WEIGHT: 20-85
CAS NUMBER: 78-93-3
EC# : 606-002-00-3
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INGREDIENT: Tetrahydrofuran
PERCENTAGE BY WEIGHT: 5-12
CAS NUMBER: 109-99-9
EC# : 603-025-00-0
INGREDIENT: Cyclohexanone
PERCENTAGE BY WEIGHT: 5-15
CAS NUMBER: 108-94-1
EC# : 606-010-00-7
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INGREDIENT: Acetone

PERCENTAGE BY WEIGHT: 0-25

CAS NUMBER: 67-64-1 EC# : 200-662-2

Section 4 -- FIRST AID MEASURES

If INHALED: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt

action is essential.

If on SKIN: Immediately flush with large amounts of water; use soap

if available. Remove contaminated clothing.

If in EYES: Immediately flush with large amounts of water for at least

15 minutes. Get prompt medical attention.

If SWALLOWED: If swallowed, DO NOT induce vomiting. Keep at rest. Get

prompt medical attention.

Section 5 -- FIRE FIGHTING MEASURES

CONDITIONS OF FLAMMABILITY

Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. SUITABLE EXTINGUISHING MEDIA

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Wear self contained breathing apparatus for fire fighting if necessary. HAZARDOUS COMBUSTION PRODUCTS

Hazardous decomposition products formed under fire conditions. - Carbon oxides $\operatorname{FURTHER}$ INFORMATION

Use water spray to cool unopened containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely flammable - very low flash point. Vapors are heavier than air and may travel along ground or to low spots at considerable distance to a source of ignition resulting in potential flashback. Burning liquid may float on water. Heat may build up pressure and rupture closed containers.

Section 6 -- ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Ventilate area with natural or explosion-proof, forced air ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

ENVIRONMENTAL PRECAUTIONS

Prevent further leakage or spillage if safe to do so. Avoid flushing into sewers, drains, waterways, and soil.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Use absorbent materials to prevent footing hazard and to contain, then collect and place in container for disposal according to local regulations (see section 13).

Section 7 -- HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Avoid prolonged or repeated contact with skin or clothing. If transferring this material to other containers, ground all containers to avoid static electricity buildup and discharge which may ignite flammable vapors. CONDITIONS FOR SAFE STORAGE

Do not store near heat, sparks, or open flames.

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain residues and vapors; treat as if full and observe all products precautions. Do not reuse empty containers.

KEEP OUT OF REACH OF CHILDREN.

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       Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION
INGREDIENT
                  UNITS
Methyl Ethyl Ketone
    ACGIH TLV 200 ppm
    OSHA PEL 200 ppm
       STEL 300 ppm
Tetrahydrofuran
    ACGIH TLV
               50 ppm
    OSHA PEL 200 ppm
       STEL 250 ppm
Cyclohexanone
    ACGIH TLV
               20 ppm (skin)
    OSHA PEL
               50 ppm
Acetone
    ACGIH TLV 500 ppm
    OSHA PEL 1000 ppm
      STEL 750 ppm
RESPIRATORY PROTECTION (SPECIFY TYPE): In confined poorly ventilated areas,
  use NIOSH/MSHA approved air purifying or supplied air purifying or
  supplied air respirators.
VENTILATION - LOCAL EXHAUST: Acceptable
SPECIAL: Explosion-proof equipment.
MECHANICAL (GENERAL): Preferable
OTHER: N/A
PROTECTIVE GLOVES: Wear rubber gloves.
EYE PROTECTION: Chemical splash goggles (ANSI Z-87.1 or equivalent)
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Coveralls recommended.
WORK/HYGIENIC PRACTICES: Where use can result in skin contact, wash exposed
  areas thoroughly before eating, drinking, smoking, or leaving work area.
  Launder contaminated clothing before reuse.
       Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES
BOILING POINT:
                                151 F (66 C) @ 760mm Hg
SPECIFIC GRAVITY (H20 = 1):
                                <1.0
VAPOR PRESSURE (mm Hg):
                               140 @ 68 F (20 C)
MELTING POINT:
                                N/A
VAPOR DENSITY (AIR = 1):
EVAPORATION RATE (ETHYL ACETATE = 1): 6
APPEARANCE/ODOR:
                                Clear or Purple Liquid/Pungent Odor
SOLUBILITY IN WATER:
                                Soluble
VOC LEVEL: 550 g/L per SCAQMD Test Method 316A
FLASH POINT
                                4.1 F (-17 C) SETA CC
LOWER EXPLOSION LIMIT
                                1.8%
UPPER EXPLOSION LIMIT
                                11.8%
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       Section 10 -- STABILITY AND REACTIVITY
CHEMICAL STABILITY: Stable under recommended storage conditions.
POSSIBILITY OF HAZARDOUS REACTIONS: Can form potentially explosive peroxides
upon long standing in air. Vapors may form explosive mixture with air. CONDITIONS TO AVOID: Heat, sparks, open flames, and strong oxidizing,
  acidic and basic conditions.
MATERIALS TO AVOID: Oxidizers, acids and bases.
HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO2, HCl and fragmented hydrocarbons.
HAZARDOUS POLYMERIZATION: Will not occur.
Section 11 -- TOXICOLOGY INFORMATION
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CHRONIC HEALTH HAZARDS
  No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.
  Tetrahydrofuran - The National Toxicology Program has reported that
  exposures of mice and rats to THF vapor levels up to 1800 ppm 6hr/day, 5
  days/week for their lifetime caused an incidence of kidney tumors in male
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for human health are unclear at this time, and may be related to "species
  specific" effects. Elevated incidences of tumors in humans have not been
  reported for THF.
TOXICOLOGY DATA
Ingredient Name
  Methyl Ethyl Ketone
              Oral-Rat LD50:2737 mg/kg
              Inhalation-Rat LC50:23,500 mg/m3/8H
  Tetrahydrofuran
              Oral-Rat LD50:1650 mg/kg
              Inhalation-Rat LC50:21,000 ppm/3H
  Cyclohexanone
              Oral-Rat LD50:1535 mg/kg
              Inhalation-Rat LC50:8000 ppm/4H
  Acetone
                     Oral-Rat LD50: 5800 mg/kg
              Inhalation-Rat LC50: 50,100mg/m3
_______
       Section 12 -- Ecological Information
ECOLOGICAL DATA
Ingredient Name
Methyl Ethyl Ketone
              Food Chain Concentration Potential: None
              WATERFOWL TOXICITY: N/A
              BOD: 214%
              AQUATIC TOXICITY: 5640 mg/l/48 hr/bluegill/TLm/fresh water
  Tetrahydrofuran
              Food Chain Concentration Potential: None
              WATERFOWL TOXICITY: N/A
              BOD: N/A
              AQUATIC TOXICITY: N/A
  Cyclohexanone
              Food Chain Concentration Potential: None
              WATERFOWL TOXICITY: N/A
              BOD: N/A
              AQUATIC TOXICITY: N/A
  Acetone
              Food Chain Concentration Potential: None
              WATERFOWL TOXICITY: N/A
              BOD: N/A
              AQUATIC TOXICITY: LC50/96-hour for fish > 100 mg/l
  _____
       Section 13 -- DISPOSAL CONSIDERATIONS
Waste Classification: RCRA classified hazardous waste. Dispose of absorbed
  materials and liquid waste in approved, controlled incineration facility
  in accordance with all local, state and federal regulations.
Disposal Method: Incineration
Section 14 -- TRANSPORTATION INFORMATION
DOT: UN1993, Flammable Liquid, N.O.S. (Methyl Ethyl Ketone & Tetrahydrofuran),
  Class 3, PG II, ERG#127. Quarts and less: Consumer Commodity,
  ORM~D
OCEAN (IMDG): UN1993, Flammable Liquid, N.O.S. (Methyl Ethyl Ketone & Tetrahydrofuran),
  Class 3, PG II, EMS-No: F-E, S-D
  Quarts and less: UN1993, Flammable Liquid, N.O.S. (Methyl Ethyl Ketone & Tetrahydrofuran),
  Class 3, PG II, Limited Quantities or Ltd Qty
AIR (IATA): UN1993, Flammable Liquid, N.O.S. (Methyl Ethyl Ketone & Tetrahydrofuran),
  Class 3, PG II, ERG#127.
WHMIS (CANADA): Class B-2
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rats and liver tumors in female mice. The significance of these findings

Section 15 -- REGULATORY INFORMATION

REGULATORY DATA Ingredient Name

Methyl Ethyl Ketone

SARA 313 Yes
TSCA Inventory Yes
CERCLA RQ 5,000 lb.
RCRA Code U159

Tetrahydrofuran

SARA 313 No
TSCA Inventory Yes
CERCLA RQ 1,000 lb.
RCRA Code U213

Cyclohexanone

Acetone

SARA 313 No
TSCA Inventory Yes
CERCLA RQ 5,000 lb.
RCRA Code U057

SARA 313 No
TSCA Inventory Yes

SARA 313 No
TSCA Inventory Yes
CERCLA RQ 5,000 lb.
RCRA Code U002

Section 16 -- OTHER INFORMATION

Text of R phrases mentioned in Section 2

R11 - Highly flammable R36 - Irritating to eyes

R66 - Repeated exposure may cause skin dryness or cracking

R67 - Vapors may cause drowsiness and dizziness

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made. Consult RectorSeal for further information: (713) 263-8001