



Material Safety Data Sheet
Material Name: Elmer's Multi-Purpose Spray Adhesive
MSDS ID: ELM-074
Issue Date: 02/09/12
Revision 1.0002

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*** * * Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION * * ***

Material Name: Elmer's Multi-Purpose Spray Adhesive

Manufacturer Information

Elmer's Products, Inc.
460 Polaris Parkway
Westerville, OH 43082

Emergency Phone Number:
Poison Control Center
1-888-516-2502

For additional product information, access our website at www.elmers.com or call 1-888-435-6377. To place an order, call 1-800-848-9400.

Trade Names/Synonyms

E421; E422; E451; E452; 60451; 61451

Product Use

adhesives

*** * * Section 2 - HAZARDS IDENTIFICATION * * ***

NFPA Ratings:

Health: 2 Fire: 4 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

EMERGENCY OVERVIEW

Color: white

Physical Form: liquid

Odor: minty odor

Major Health Hazards: eye irritation

Physical Hazards: Extremely flammable. Flash back hazard. Containers may rupture or explode if exposed to heat.

POTENTIAL HEALTH EFFECTS

Inhalation

Short Term: irritation, changes in body temperature, nausea, vomiting, fatigue, stomach pain, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, loss of coordination, blurred vision, kidney damage, liver damage, convulsions, unconsciousness, coma

Long Term: irritation, changes in body temperature, headache, drowsiness, dizziness, loss of coordination, blood disorders, nausea, vomiting, irregular heartbeat, kidney damage, liver damage, convulsions, unconsciousness, coma

Skin

Short Term: irritation

Long Term: irritation, tingling sensation

Eye

Short Term: irritation (possibly severe), blurred vision, tearing

Long Term: irritation, eye damage

Ingestion

Short Term: nausea, vomiting, diarrhea, headache, drowsiness, dizziness, loss of coordination, unconsciousness, stomach pain, kidney damage, liver damage

Long Term: kidney damage, liver damage

Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is a controlled product according to Canada's Controlled Product Regulation.

*** * * Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS * * ***

CAS	Component	Percent
107-83-5	2-METHYLPENTANE	35
67-64-1	ACETONE	20
75-28-5	ISOBUTANE	15
74-98-6	PROPANE	10
115-10-6	DIMETHYL ETHER	10
68551-19-9	ALKANES, C12-14-ISO-	5
109-66-0	PENTANE	5
71-43-2	BENZENE	<0.00070
75-07-0	ACETALDEHYDE	<0.00030
50-00-0	FORMALDEHYDE	<0.00030

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Hexane isomers,

Aliphatic hydrocarbon gases (Alkane [C1-C4]), Pentanes.

*** * * Section 4 - FIRST AID MEASURES * * ***

Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

Skin

If bonding occurs, immerse the bonded surfaces in warm soapy water. Peel or roll the surfaces apart using a blunt edge, such as a spatula or spoon handle. Do not pull surfaces apart with a direct opposing action. If burns occur, treat as thermal burns. Get medical attention, if needed.

Eyes

If bonding to tissues occurs, wash with large amounts of warm water. Cover both eyes with sterile bandages. The eye will open without further action. Do not pull surfaces apart with a direct opposing action. If burns occur, treat as thermal burns. Get medical attention.

Ingestion

If swallowed, get medical attention.

Note to Physicians

For inhalation, consider oxygen.

*** * * Section 5 - FIRE FIGHTING MEASURES * * ***

See Section 9 for Flammability Properties

Flammable Properties

Severe fire hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Containers may rupture or explode if exposed to heat.

Extinguishing Media

carbon dioxide, regular dry chemical

Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Sensitivity to Mechanical Impact

Not sensitive

Sensitivity to Static Discharge

Yes

***** Section 6 - ACCIDENTAL RELEASE MEASURES*****

Occupational spill/release

Avoid heat, flames, sparks and other sources of ignition. Do not touch spilled material. Stop leak if possible without personal risk. Small spills of the liquid component: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Spills with a large number of canisters: Reduce vapors with water spray. Remove sources of ignition. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

***** Section 7 - HANDLING AND STORAGE*****

Handling Procedures

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with eyes. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Since emptied containers retain material residue, follow safe handling/label warnings even after container is emptied. Do not cut, puncture, or weld on or near this container.

Storage Procedures

Store and handle in accordance with all current regulations and standards. Store below 49 C. Keep away from heat, sparks and flame. Avoid direct sunlight. See original container for storage recommendations. Keep separated from incompatible substances.

***** Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION*****

Component Exposure Limits

ACETONE (67-64-1)

ACGIH: 500 ppm TWA

750 ppm STEL

NIOSH: 250 ppm TWA; 590 mg/m³ TWA

OSHA: 1000 ppm TWA; 2400 mg/m³ TWA

OSHA 2400 mg/m³ STEL (The acetone STEL does not apply to the cellulose acetate
(Vacated): fiber industry. It is in effect for all other sectors); 1000 ppm STEL

750 ppm TWA; 1800 mg/m³ TWA

ISOBUTANE (75-28-5)

ACGIH: 1000 ppm TWA

NIOSH: 800 ppm TWA; 1900 mg/m³ TWA

PROPANE (74-98-6)

ACGIH: 1000 ppm TWA

NIOSH: 1000 ppm TWA; 1800 mg/m³ TWA
OSHA: 1000 ppm TWA; 1800 mg/m³ TWA
OSHA 1000 ppm TWA; 1800 mg/m³ TWA
(Vacated):

DIMETHYL ETHER (115-10-6)

AIHA: 1000 ppm TWA

PENTANE (109-66-0)

ACGIH: 600 ppm TWA

NIOSH: 120 ppm TWA; 350 mg/m³ TWA
610 ppm Ceiling (15 min); 1800 mg/m³ Ceiling (15 min)

OSHA: 1000 ppm TWA; 2950 mg/m³ TWA

OSHA 750 ppm STEL; 2250 mg/m³ STEL
(Vacated):

600 ppm TWA; 1800 mg/m³ TWA

BENZENE (71-43-2)

ACGIH: 0.5 ppm TWA
2.5 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

NIOSH: 0.1 ppm TWA
1 ppm STEL

OSHA: 10 ppm TWA (applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028); 1 ppm TWA
5 ppm STEL (see 29 CFR 1910.1028)
25 ppm Ceiling

OSHA 25 ppm Ceiling (unless specified in 1910.1028)
(Vacated):

50 ppm STEL (unless specified in 1910.1028, 10 min)
10 ppm TWA (unless specified in 1910.1028)

ACETALDEHYDE (75-07-0)

ACGIH: 25 ppm Ceiling

OSHA: 200 ppm TWA; 360 mg/m³ TWA

OSHA 150 ppm STEL; 270 mg/m³ STEL
(Vacated):

100 ppm TWA; 180 mg/m³ TWA

FORMALDEHYDE (50-00-0)

ACGIH: 0.3 ppm Ceiling

NIOSH: 0.016 ppm TWA
0.1 ppm Ceiling (15 min)

OSHA: 0.75 ppm TWA
2 ppm STEL (see 29 CFR 1910.1048)

OSHA (Vacated): 5 ppm Ceiling (unless specified in 1910.1048)
10 ppm STEL (unless specified in 1910.1048, 30 min)
3 ppm TWA (unless specified in 1910.1048)

Ventilation

Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face

Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Protective Clothing

Wear appropriate chemical resistant clothing.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Respiratory Protection

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

Respiratory protection is ranked in order from minimum to maximum.

Consider warning properties before use.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

*** * * Section 9 - PHYSICAL AND CHEMICAL PROPERTIES * * ***

Physical State: Aerosol	Appearance: white liquid
Color: white	Physical Form: liquid
Odor: minty odor	Odor Threshold: Not available
Melting Point: Not available	Boiling Point: -44 - -44 °C

Flash Point: -104 °C (PMCC)	Evaporation Rate: faster than, butyl acetate
LEL: 1.0 %	UEL: 18.0 %
Vapor Pressure: Not available	Vapor Density (air = 1): >1
Specific Gravity (water = 1): 0.6932	Water Solubility: negligible
Coeff. Water/Oil Dist: Not available	VOC: 64.3 % weight
VOC less Water and Exempt Solvents: 522 g/L	Volatility by Volume: 87.0 %
Volatility by Weight: 81.1 %	

***** Section 10 - STABILITY AND REACTIVITY*****

Chemical Stability

Stable at normal temperatures and pressure.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Containers may rupture or explode if exposed to heat.

Materials to Avoid

acids, amines, bases, oxidizing materials, reducing agents

Decomposition Products

hydrocarbons, oxides of carbon, oxides of sulfur

Possibility of Hazardous Reactions

Will not polymerize.

***** Section 11 - TOXICOLOGICAL INFORMATION*****

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

ACETONE (67-64-1)

Oral LD50 Rat 5800 mg/kg

ISOBUTANE (75-28-5)

Inhalation LC50 Rat 658 mg/L 4 h

PROPANE (74-98-6)

Inhalation LC50 Rat 658 mg/L 4 h

DIMETHYL ETHER (115-10-6)

Inhalation LC50 Rat 308.5 mg/L 4 h

PENTANE (109-66-0)

Inhalation LC50 Rat 364 g/m³ 4 h; Dermal LD50 Rabbit 3000 mg/kg; Oral
LD50 Rat >2000 mg/kg

BENZENE (71-43-2)

Inhalation LC50 Rat 13050-14380 ppm 4 h; Oral LD50 Rat 1800 mg/kg

ACETALDEHYDE (75-07-0)

Oral LD50 Rat 1930 mg/kg

FORMALDEHYDE (50-00-0)

Oral LD50 Rat 500 mg/kg; Inhalation LC50 Rat 0.578 mg/L 4 h

RTECS Acute Toxicity (selected)

The components of this material have been reviewed, and RTECS publishes the following endpoints:

ACETONE (67-64-1)

Inhalation: 50100 mg/m³/8 hour Inhalation Rat LC50; 50100 mg/m³ Inhalation Rat LC50

Oral: 5800 mg/kg Oral Rat LD50; 5800 mg/kg Oral Rat LD50

Skin: >9400 uL/kg Skin Guinea pig LD50

ISOBUTANE (75-28-5)

Inhalation: 570000 ppm/15 minute(s) Inhalation Rat LC50; 57 pph/15 minute(s) Inhalation
Rat LC50; 658000 mg/m³/4 hour Inhalation Rat LC50

PROPANE (74-98-6)

Inhalation: >800000 ppm/15 minute(s) Inhalation Rat LC50

DIMETHYL ETHER (115-10-6)

Inhalation: 308 gm/m³ Inhalation Rat LC50; 309 gm/m³/4 hour Inhalation Rat LC50;
164000 ppm/4 hour Inhalation Rat LC50

PENTANE (109-66-0)

Inhalation: 364 gm/m³/4 hour Inhalation Rat LC50

Oral: >2000 mg/kg Oral Rat LD50

Acute Toxicity Level

ACETONE (67-64-1)

Moderately inhalation
Toxic:

Slightly ingestion
Toxic:

ISOBUTANE (75-28-5)

Non Toxic: inhalation

DIMETHYL ETHER (115-10-6)

Slightly inhalation

Toxic:

PENTANE (109-66-0)

Non Toxic: inhalation

BENZENE (71-43-2)

Highly dermal absorption

Toxic:

Moderately ingestion

Toxic:

Slightly inhalation

Toxic:

ACETALDEHYDE (75-07-0)

Moderately inhalation, ingestion

Toxic:

Slightly dermal absorption

Toxic:

FORMALDEHYDE (50-00-0)

Highly inhalation

Toxic:

Toxic: dermal absorption, ingestion

Component Carcinogenicity**ACETONE (67-64-1)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

BENZENE (71-43-2)

ACGIH: A1 - Confirmed Human Carcinogen

IARC: Monograph 100F [in preparation]; Supplement 7 [1987]; Monograph 29 [1982]
(Group 1 (carcinogenic to humans))

OSHA: Cancer hazard - see 29 CFR 1910.1028

NTP: Known Human Carcinogen

ACETALDEHYDE (75-07-0)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 100E [in preparation] (associated with consumption of alcoholic
beverages) (Group 1 (carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

FORMALDEHYDE (50-00-0)

ACGIH: A2 - Suspected Human Carcinogen

IARC: Monograph 100F [in preparation]; Monograph 88 [2006]; Monograph 62

[1995]; Supplement 7 [1987] (Group 1 (carcinogenic to humans))

OSHA: Irritant and potential cancer hazard - see 29 CFR 1910.1048

NTP: Known Human Carcinogen

Irritation

eye irritation

RTECS Irritation

The components of this material have been reviewed, and RTECS publishes the following endpoints:

ACETONE (67-64-1)

500 ppm Eyes Human; 186300 ppm Eyes Human mild; 10 uL Eyes Rabbit mild;
20 mg/24 hour Eyes Rabbit moderate; 20 mg Eyes Rabbit severe; 500 mg/24
hour Skin Rabbit mild; 395 mg/open Skin Rabbit mild

Local Effects

2-METHYLPENTANE (107-83-5)

Irritant: inhalation, skin, eye

ACETONE (67-64-1)

Irritant: inhalation, skin, eye

ISOBUTANE (75-28-5)

Irritant: inhalation

DIMETHYL ETHER (115-10-6)

Irritant: inhalation, skin, eye

PENTANE (109-66-0)

Irritant: inhalation, skin

BENZENE (71-43-2)

Irritant: inhalation, skin, eye

ACETALDEHYDE (75-07-0)

Irritant: inhalation, skin, eye

FORMALDEHYDE (50-00-0)

Irritant: skin, eye

Corrosive: inhalation, skin, eye, ingestion

Target Organs

2-METHYLPENTANE (107-83-5)

central nervous system

ACETONE (67-64-1)

central nervous system

ISOBUTANE (75-28-5)

central nervous system

PROPANE (74-98-6)

central nervous system

DIMETHYL ETHER (115-10-6)

central nervous system

PENTANE (109-66-0)

central nervous system

BENZENE (71-43-2)

immune system (blood), central nervous system

ACETALDEHYDE (75-07-0)

immune system (sensitizer), central nervous system

FORMALDEHYDE (50-00-0)

immune system (sensitizer)

Medical Conditions Aggravated by Exposure

respiratory disorders, skin disorders and allergies

RTECS Tumorigenic

The components of this material have been reviewed, and RTECS publishes data for one or more components.

RTECS Mutagenic

The components of this material have been reviewed, and RTECS publishes data for one or more components.

RTECS Reproductive Effects

The components of this material have been reviewed, and RTECS publishes data for one or more components.

Additional Data

Stimulants such as epinephrine may induce ventricular fibrillation. Alcohol may enhance the toxic effects.

***** Section 12 - ECOLOGICAL INFORMATION *****

Component Analysis - Aquatic Toxicity**ACETONE (67-64-1)**

Fish: 96 Hr LC50 Oncorhynchus mykiss: 4.74 - 6.33 mL/L; 96 Hr LC50 Pimephales promelas: 6210 - 8120 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 8300 mg/L

Invertebrate: 48 Hr EC50 Daphnia magna: 10294 - 17704 mg/L [Static]; 48 Hr EC50 Daphnia magna: 12600 - 12700 mg/L

PENTANE (109-66-0)

Fish: 96 Hr LC50 Oncorhynchus mykiss: 9.87 mg/L; 96 Hr LC50 Pimephales promelas: 11.59 mg/L; 96 Hr LC50 Lepomis macrochirus: 9.99 mg/L

Invertebrate: 48 Hr EC50 Daphnia magna: 9.74 mg/L

BENZENE (71-43-2)

Fish: 96 Hr LC50 Pimephales promelas: 10.7-14.7 mg/L [flow-through]; 96 Hr LC50

Oncorhynchus mykiss: 5.3 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 22.49 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 28.6 mg/L [static]; 96 Hr LC50 Pimephales promelas: 22330-41160 µg/L [static]; 96 Hr LC50 Lepomis macrochirus: 70000-142000 µg/L [static]

Algae: 72 Hr EC50 Pseudokirchneriella subcapitata: 29 mg/L

Invertebrate: 48 Hr EC50 Daphnia magna: 8.76 - 15.6 mg/L [Static]; 48 Hr EC50 Daphnia magna: 10 mg/L

ACETALDEHYDE (75-07-0)

Fish: 96 Hr LC50 Pimephales promelas: 28.0-34.0 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 53 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 1.8-2.4 mg/L [static]; 96 Hr LC50 Pimephales promelas: 39.8-46.8 mg/L [static]

Algae: 120 Hr EC50 Nitzschia linearis: 237 - 249 mg/L

Invertebrate: 48 Hr EC50 Daphnia magna: 3.64 - 6.15 mg/L [Static]; 48 Hr EC50 Daphnia magna: 48.3 mg/L

FORMALDEHYDE (50-00-0)

Fish: 96 Hr LC50 Pimephales promelas: 22.6 - 25.7 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 1510 µg/L [static]; 96 Hr LC50 Brachydanio rerio: 41 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 0.032 - 0.226 mL/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 100 - 136 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.2 - 29.7 mg/L [static]

Invertebrate: 48 Hr LC50 Daphnia magna: 2 mg/L; 48 Hr EC50 Daphnia magna: 11.3 - 18 mg/L [Static]

***** Section 13 - DISPOSAL CONSIDERATIONS*****

Disposal Methods

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001.

Component Waste Numbers

ACETONE (67-64-1)

RCRA: waste number U002 (Ignitable waste)

BENZENE (71-43-2)

RCRA: waste number U019 (Ignitable waste, Toxic waste)
0.5 mg/L regulatory level

ACETALDEHYDE (75-07-0)

RCRA: waste number U001 (Ignitable waste)

FORMALDEHYDE (50-00-0)

RCRA: waste number U122

***** Section 14 - TRANSPORT INFORMATION*****

US DOT Information

Shipping Name: Aerosols

Hazard Class: 2.1

UN/NA #: UN1950

Required Label(s): 2.1

TDG Information

Shipping Name: Aerosols

Hazard Class: 2.1

UN #: UN1950

Required Label(s): 2.1

***** Section 15 - REGULATORY INFORMATION*****

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

ACETONE (67-64-1)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

PENTANE (109-66-0)

TSCA 12b: Section 4, 1 % de minimis concentration

BENZENE (71-43-2)

SARA 313: 0.1 % de minimis concentration

CERCLA: 10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule)

ACETALDEHYDE (75-07-0)

SARA 313: 0.1 % de minimis concentration

CERCLA: 1000 lb final RQ; 454 kg final RQ

TSCA 12b: Section 4, 0.1 % de minimis concentration

OSHA 2500 lb TQ

(safety):

FORMALDEHYDE (50-00-0)

SARA 500 lb TPQ

302/304:

100 lb EPCRA RQ

SARA 313: 0.1 % de minimis concentration

CERCLA: 100 lb final RQ; 45.4 kg final RQ

OSHA 1000 lb TQ

(safety):

SARA 311/312

Acute Health: Yes **Chronic Health:** No **Fire:** Yes **Pressure:** Yes **Reactive:** No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
2-METHYLPENTANE	107-83-5	No	Yes	Yes	Yes	Yes
ACETONE	67-64-1	Yes	Yes	Yes	Yes	Yes
ISOBUTANE	75-28-5	No	Yes	No	Yes	Yes
PROPANE	74-98-6	No	Yes	Yes	Yes	Yes
DIMETHYL ETHER	115-10-6	No	Yes	Yes	Yes	Yes
PENTANE	109-66-0	Yes	Yes	Yes	Yes	Yes
BENZENE	71-43-2	Yes	Yes	Yes	Yes	Yes
ACETALDEHYDE	75-07-0	Yes	Yes	Yes	Yes	Yes
FORMALDEHYDE	50-00-0	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Canada

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Canada WHMIS

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

2-METHYLPENTANE (107-83-5)

1 %

ACETONE (67-64-1)

1 %

PENTANE (109-66-0)

1 %

WHMIS Classification

D2B, B5.

Canadian Inventory

All identified components are listed on the DSL.

U.S. Inventory (TSCA)

All the components of this substance are listed on or are exempt from the inventory.

Component Analysis - Inventory

Component	CAS	US	CA
2-METHYLPENTANE	107-83-5	Yes	DSL
ACETONE	67-64-1	Yes	DSL
ISOBUTANE	75-28-5	Yes	DSL
PROPANE	74-98-6	Yes	DSL
DIMETHYL ETHER	115-10-6	Yes	DSL
PENTANE	109-66-0	Yes	DSL
ALKANES, C12-14-ISO-	68551-19-9	Yes	DSL
BENZENE	71-43-2	Yes	DSL
ACETALDEHYDE	75-07-0	Yes	DSL
FORMALDEHYDE	50-00-0	Yes	DSL

*** Section 16 - OTHER INFORMATION ***

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous

Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States or Canadian patent. No claim of any kind shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

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New MSDS: 1/19/2012

MSDS Update: 2/8/2012