

3. Hazards Identification

3.1 Emergency Overview

Appearance	Colored paste with solvent
odor	
Odor	Solvent

DANGER!
EXTREMELY FLAMMABLE LIQUID AND VAPOR
May be harmful if inhaled.
Can cause central nervous system depression.
May cause allergic skin and respiratory reactions.
Skin irritant.
May cause allergic skin reaction.
Eye irritant.

* HMIS Rating

HEALTH = 2 (moderate)
FLAMMABILITY = 4 (severe)
REACTIVITY = 0 (minimal)
CHRONIC = *

3.2 Potential Health Effects

* Immediate Hazards

INGESTION: Not expected to be harmful under normal conditions of use.
If accidentally swallowed, burns or irritation to
mucous membranes, esophagus or GI tract can result.

INHALATION: May be harmful if inhaled. Vapor may cause
irritation of nose, throat and lungs.
Can cause central nervous system depression.

SKIN: Causes irritation.

EYES: Causes irritation.

Isopropanol 67-63-0
Can cause central nervous system depression. Signs and symptoms
may include headache, dizziness, nausea, vomiting, unconsciousness and

even asphyxiation.
Acetone 67-64-1
Can cause central nervous system depression. Signs and symptoms
may include headache, dizziness, nausea, vomiting, unconsciousness and
even asphyxiation.
Methyl Ethyl Ketone 78-93-3
Can cause central nervous system depression. Signs and symptoms
may include headache, dizziness, nausea, vomiting, unconsciousness and
asphyxiation. Reports have associated repeated and prolonged
occupational overexposure to solvents with permanent brain and
nervous system damage. Intentional misuse by deliberately
concentrating and inhaling the contents may lead to addiction and
may be harmful or fatal.
Light Aliphatic Solvent Naphtha (petroleum) 64742-89-8
Can cause central nervous system depression. Signs and symptoms
may include headache, dizziness, nausea, vomiting, unconsciousness and
even asphyxiation.

* Delayed Hazards

Isopropanol 67-63-0
Suspect reproductive hazard. May cause reproductive disorders
based on animal data.
May cause liver damage based on animal data.
May cause kidney damage based on animal data.
-- See Footnote C.
Acetone 67-64-1
Ingestion may cause liver damage.
Ingestion may cause kidney damage.
-- See Footnote C.
Methyl Ethyl Ketone 78-93-3
Suspect reproductive hazard. May cause reproductive disorders
based on animal data.
Methyl ethyl ketone may potentiate (shorten the time of onset)
peripheral neuropathy caused by methyl n-butyl ketone or n-hexane.
Methyl ethyl ketone by itself has not been shown to cause
peripheral neuropathy.
-- See Footnote C.
Limestone 1317-65-3
Can cause lung damage. Pre-existing respiratory disorders may be
aggravated by exposure.
-- See Footnote C.
Rosin 8050-09-7
May cause allergic skin reaction.
-- See Footnote C.
Wood Flour
POTENTIAL CANCER HAZARD. Wood dust has been classified by IARC as
a carcinogen to humans (Group 1). This classification is based
primarily on IARC's evaluation of increased risk of occurrence of

adenocarcinomas in the nasal cavities and paranasal sinuses associated with exposure to wood dust. Wood dust is not listed by NTP nor regulated by OSHA as a carcinogen. Depending on species, may cause allergic skin and respiratory reactions. Footnote C: As of the date of issuance of this document, this material has not been listed by NTP, classified by IARC nor regulated by OSHA as a carcinogen.

4. First Aid Measures

INGESTION: If accidentally swallowed, dilute by drinking large quantities of water. Immediately contact poison control center or hospital emergency room for any other additional treatment directions.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a physician.

SKIN: Flush with plenty of water. Remove contaminated clothing. Call a physician if irritation persists.

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held apart during irrigation to insure water contact with entire surface of eyes and lids. Call a physician.

5. Fire Fighting Measures

Autoignition Temperature	Not available
Upper/Lower Flammable Limits	13/1%
Up/Lower Explosive Limits, % by Vol	Not available
Flash Point	-19 deg C

EXTREMELY FLAMMABLE.

Keep liquid and vapor away from heat, sparks, flame and other ignition sources including, but not limited to, pilot lights, heaters, cigarettes, electric motors and static discharge. Vapor is heavier than air and may settle in low places or travel outward to a source of ignition and flashback. In case of fire, use water spray, dry chemical, "alcohol" foam or CO2. Use water to keep fire-exposed containers cool.

6. Accidental Release Measures

Eliminate all ignition sources. Prevent entry into natural bodies of water.

7. Handling and Storage

7.1 Handling

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing. Wash thoroughly after handling.

INHALATION: Avoid breathing vapor. Use with adequate ventilation.

SKIN: Avoid contact with skin and clothing.

EYES: Avoid contact with eyes.

7.2 Storage

Store in a cool, dry place.
Keep containers tightly closed.
Keep away from heat, sparks, flame and other ignition sources.

8. Exposure Controls/Personal Protection

8.1 Exposure Controls

ENGINEERING CONTROLS: The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to determine whether or not your programs are adequate. If airborne contaminants are generated when the material is heated or

handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

8.2 Personal Protection

Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air in accordance with OSHA laws and regulations or other applicable standards or guidelines, including ANSI standards regarding respiratory protection. Use goggles if contact is likely. Wear impervious gloves as required to prevent skin contact.

8.3 Exposure Guidelines

Isopropanol 67-63-0
ACGIH TLV: 400 ppm (983 mg/m³) TWA; 500 ppm (1230 mg/m³) STEL
OSHA PEL: 400 ppm (980 mg/m³) TWA
REMANDED PEL: 400 ppm (980 mg/m³) TWA; 500 ppm (1225 mg/m³) STEL
OSHA 1989 PEL remanded, but in effect in some states

Acetone 67-64-1
ACGIH TLV: 500 ppm (1188 mg/m³) TWA; 750 ppm (1782 mg/m³) STEL
OSHA PEL: 1000 ppm (2400 mg/m³) TWA
REMANDED PEL: 750 ppm (1800 mg/m³) TWA; 1000 ppm (2400 mg/m³) STEL
OSHA 1989 PEL remanded, but in effect in some states

Methyl Ethyl Ketone 78-93-3
ACGIH TLV: 200 ppm (590 mg/m³) TWA; 300 ppm (885 mg/m³) STEL
OSHA PEL: 200 ppm (590 mg/m³) TWA
REMANDED PEL: 200 ppm (590 mg/m³) TWA; 300 ppm (885 mg/m³) STEL
OSHA 1989 PEL remanded, but in effect in some states

Limestone 1317-65-3
ACGIH TLV: 10 mg/m³ TWA, inhalable particulate
OSHA PEL: 5 mg/m³ TWA, respirable particulates; 15 mg/m³ TWA total dust

Rosin 8050-09-7
ACGIH TLV: NONE ESTABLISHED
OSHA PEL: NONE ESTABLISHED

Nitrocellulose 9004-70-0
ACGIH TLV: NONE ESTABLISHED
OSHA PEL: NONE ESTABLISHED

Light Aliphatic Solvent Naphtha (petroleum) 64742-89-8
ACGIH TLV: NONE ESTABLISHED
OSHA PEL: NONE ESTABLISHED

Wood Flour
ACGIH TLV: 5 mg/m³ TWA; 10 mg/m³ STEL (softwood)
OSHA PEL: TWA-15 mg/m³ (total dust); 5 mg/m³ (respirable)
REMANDED PEL: 5 mg/m³ TWA; 10 mg/m³ STEL (all soft and hard woods)

OSHA 1989 PEL remanded, but in effect in some states
OTHER: ACGIH TLV: 1 mg/m³ TWA (certain hardwoods)

9. Physical and Chemical Properties

Percent Volatiles	24%
pH @ 25 C	Not applicable
Specific Gravity	1.5
Appearance	Colored paste with solvent
odor	
Autoignition Temperature	Not available
Solvent (Ref. to H.I. Section)	Acetone < 10% by weight
Boiling Point	56 TO 96 deg C
Vapor Density (Air=1)	> 1
Vapor Pressure, mm Hg @ 20 C	Not available
Upper/Lower Flammable Limits	13/1%
Up/Lower Explosive Limits, % by Vol	Not available
Flash Point	-19 deg C
Freezing Point	Not available
Odor	Solvent
Odor Threshold, ppm	Not available
Solubility in Water	Negligible

10. Stability and Reactivity

Normally stable as defined in NFPA 704-12(4-3.1).

* Incompatibilities:

Oxidizers, acids or bases.

* Decomposition products may include:

Oxides of carbon and nitrogen by thermal decomposition.

* Hazardous polymerization:

Will not occur.

* Other Hazards:

None known to Borden.

11. Toxicological Information

See Section 3 Hazards Identification information.

Isopropanol 67-63-0

LC50: rat=16000 ppm/8H (Sax)

LD50: orl-rat=5.8 g/kg (Merck); skn-rbt=13 g/kg (Sax)

Acetone 67-64-1

LC50: Not available

LD50: oral-rat=5800 mg/kg (RTECS); skin-rabbit=20 gm/kg (RTECS)

Methyl Ethyl Ketone 78-93-3

LC50: Not available

LD50: orl-rat=6.86 ml/kg (Merck)

Limestone 1317-65-3

LC50: Not available

LD50: Not available

Rosin 8050-09-7

LC50: Not available

LD50: Not available

Nitrocellulose 9004-70-0

LC50: Not available

LD50: Not available

Light Aliphatic Solvent Naphtha (petroleum) 64742-89-8

LC50: Not available

LD50: Not available

Wood Flour

LC50: Not available

LD50: Not available

12. Ecological Information

Not determined.

13. Disposal Considerations

Dispose of according to local, state/provincial, and federal requirements.

Empty container: May contain explosive vapors. DO NOT cut, puncture or weld on or nearby.

14. Transport Information

14.1 U.S. Department of Transportation (DOT)

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the appropriate regulations to properly classify your shipment for transportation.
ORM-D Consumer Commodity.

14.2 Canadian Transportation of Dangerous Goods (TDG)

Not determined.

15. Regulatory Information (Selected Regulations)

15.1 U.S. Federal Regulations

* OSHA Hazard Communication Standard 29CFR1910.1200

This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200 "Hazard Communication" Standard.

* SARA Title III: Section 311/312

Fire hazard
Immediate health hazard
Delayed health hazard

* SARA Title III Section 313 and 40 CFR Part 372

This product contains the following toxic chemical(s) subject to the

reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

Methyl Ethyl Ketone 78-93-
3 9.00%
Zinc Compounds
N982 1.00%

* TSCA Section 8(b) Inventory

All reportable chemical substances are listed on the TSCA Inventory.
We rely on certifications of compliance from our suppliers for chemical substances not manufactured by Borden.

15.2 Canadian Regulations

* Workplace Hazardous Materials Information System (WHMIS)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.
CLASS D, DIV 2A, 2B
CLASS B, DIV 2

* Canadian Environmental Protection Act (CEPA)

All reportable chemical substances are listed on the Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.

* National Pollutant Release Inventory (NPRI)

This product contains the following chemical(s) subject to the reporting requirements of the Canadian Environmental Protection Act
(CEPA) subsection 16(1), National Pollutant Release Inventory.
Isopropyl alcohol 67-63-
0 2.00%
Acetone 67-64-
1 9.00%

	Methyl ethyl ketone	78-93-
3	9.00%	
	Butyl benzyl phthalate	85-68-
7	1.00%	
	Zinc (and Its Compounds)	7440-66-
6	1.00%	

 16. Other Information

MSDS covers items:
 U.S.: P9830, P9831, P9832, P9833, P9834, P9835, P9836, P9841
 Canada: 69830, 69831, 69832, 69833, 69834, 69835, 69836, 69841
 HL (Cautions Required): Products bearing the HL Health Label
 (Cautions Required) Seal of The Art & Creative Materials
 Institute,
 Inc. (ACMI) are certified to be properly labeled in a program of
 toxicological evaluation by a medical expert. This program is
 reviewed by ACMI's Toxicological Advisory Board. These products
 are
 certified by ACMI to be labeled in accordance with the chronic
 hazard
 labeling standard, ASTM D-4236 and Federal Law, P.L. 100-695.

 * User's Responsibility

The OSHA Hazard Communication Standard 29CFR 1910.1200 and the
 Workplace
 Hazardous Materials Information System (WHMIS) require that the
 information
 contained on these sheets be made available to your workers.
 Educate and
 train your workers regarding OSHA and WHMIS precautions. Instruct
 your
 workers to handle this product properly. Consult with appropriate
 experts
 to guard against hazards associated with use of this product and
 its
 ingredients.

 * Disclaimer

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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