

Material Safety Data Sheet

For Coatings, Resins and Related Materials

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals

24 Hour Emergency: 1-800-123-4567 CHEMTREC: 1-800-424-9300

National Response in Canada CANUTEC: 613-996-6666

Outside U.S. and Canada Chemtrec: 202-483-7616

Section 1 - Chemical Product / Company Information

Product Name:	27X37, CLEAR WOOD FINISH GLOSS	Revision Date:	03/05/2012
Identification Number:	010	Print Date:	11/16/2012
Product Use/Class:	CLEAR WOOD FINISH/BRUSHING LACQUER	NSN:	
Manufacturer:	Deft, Inc. (CAGE CODE 33461) 17451 Von Karman Ave Irvine, Ca. 92614	Information Phone:	(949) 474-0400
		Emergency Phone:	(800) 424-9300

Section 2 - Hazards Identification

*** Emergency Overview ***: Flammable liquid. Harmful by inhalation, in contact with skin, and if swallowed. May cause burns to the eyes and skin. May cause irritation to the respiratory tract. Contact with eyes or skin causes irritation.

Effects Of Overexposure - Eye Contact: Exposure to liquid, aerosol, or vapors may cause irritation, tearing, redness, and swelling accompanied by a stinging sensation. Direct eye contact may cause irritation. Exposure may cause conjunctivitis. Contact with eyes may cause blurred vision. Mists and vapors may cause severe eye irritation. May cause swelling of the conjunctiva, corneal injury, or burns to the eye.

Effects Of Overexposure - Skin Contact: Direct skin contact may cause irritation. Symptoms may include drying and cracking of skin, swelling, redness, rash, pain, burning, and skin burns. Prolonged or repeated skin contact may cause dermatitis, drying, and defatting due to the solvent properties. Contact with skin may cause blistering. Repeated or prolonged contact may cause dry skin. Exposure may cause skin burns.

Effects Of Overexposure - Inhalation: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes) & acute nervous system depression characterized by the following progressive steps: headache, nausea, weakness, dizziness, staggering gait, confusion, fatigue, drowsiness, unconsciousness, or coma. Exposure may cause pulmonary edema. Prolonged, repeated or high exposures may cause central nervous system depression leading to headaches, nausea, drowsiness, dizziness, and possibly narcosis. In extreme cases, may cause loss of consciousness. Exposure may cause liveliness, a light-headed feeling, and giddiness followed by nausea, weakness, fatigue, and drowsiness. Inhalation may cause headaches, difficult breathing, and loss of consciousness. May cause irregular heartbeats, a tight feeling in the chest, respiratory depression, and narcosis. Exposure to high concentrations or overexposure to one or more components may cause respiratory depression or failure, difficult breathing, chest constriction, loss of consciousness, or death. A component may cause hypotension, loss of reflexes, stupor, diarrhea, nausea, vomiting, gastrointestinal pain, and respiratory depression that may lead to death.

Effects Of Overexposure - Ingestion: Ingestion may cause gastrointestinal irritation, abdominal pain, nausea, vomiting, and diarrhea. May result in possible corrosive action in the mouth, stomach tissue, and digestive tract. Vomiting may cause aspiration of the solvent, resulting in chemical pneumonitis. Lung inflammation or other lung injury may occur if isopropanol enters the lungs through vomiting or swallowing.

Effects Of Overexposure - Chronic Hazards: Prolonged contact will cause drying and cracking of the skin, due to defatting action. Skin sensitization, asthma, or other allergic responses may develop. Exposure to concentrated vapors may cause heart arrhythmias, especially those with preexisting heart conditions. Symptoms of overexposure may occur for up to 48 hours after the original exposure occurred. Exposure to a component may cause kidney damage, coma, difficult breathing, liver damage, blood abnormalities (breakage of red blood cells), blood in the urine, or death. Overexposure to ETHYL BENZENE, a component of this formulation, has been shown to cause damage to the liver and kidneys in tests in laboratory animals. Overexposure to isopropanol has been suggested as a cause of mild and reversible liver effects in laboratory animals. Ethylbenzene, a component of this formulation, has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Isopropanol, a component of this formulation, has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Primary Route(s) Of Entry: Skin Contact, Inhalation, Eye Contact

Section 3 - Composition / Information On Ingredients

Component	CAS Number	Weight % Reporting Ranges
REFINED PETROLEUM DISTILLATE	8052-41-3	10-30
ISOBUTYL ISOBUTYRATE	97-85-8	7-13
SOLVENT NAPHTHA, LIGHT ALIPHATIC	64742-89-8	7-13
METHYL n-AMYL KETONE	110-43-0	7-13
2-BUTOXYETHANOL	111-76-2	5-10
NITROCELLULOSE	9004-70-0	5-10
1-BUTANOL	71-36-3	3-7
XYLENE	1330-20-7	1-5
ISOPROPANOL ANHYDROUS	67-63-0	1-5
2-BUTOXY ETHYL ACETATE	112-07-2	1-5
ETHYL BENZENE	100-41-4	0.5-1.5

ALL INGREDIENTS ARE ON THE TSCA INVENTORY LIST, UNLESS OTHERWISE NOTED IN SECTION 8.

Section 4 - First Aid Measures

First Aid - Eye Contact: If material gets into eyes, flush with water immediately for 15 minutes. Hold eyelids open to rinse out the entire eye. Consult a physician. Have eyes examined/treated by a physician if a burning sensation, redness, or itching develop. If symptoms develop (irritation) from airborne exposure, move to fresh air.

First Aid - Skin Contact: Remove contaminated clothing and shoes. In case of contact, immediately flush skin with plenty of water and wash affected areas thoroughly with soap and water for at least 15 minutes. If symptoms develop (such as irritation), consult a physician or get medical attention. Wash contaminated clothing thoroughly before reuse or discard. Seek medical attention if redness, a burning sensation, or itching occurs.

First Aid - Inhalation: Move to fresh air in case of accidental inhalation of vapors. Give oxygen or artificial respiration if needed. Asthmatic type symptoms may develop and maybe immediate or delayed by several hours. In the case of inhalation of aerosol/mist, consult a physician, if necessary. Contact a physician if a cough develops.

First Aid - Ingestion: Do not induce vomiting. Do not give anything to an unconscious person. Obtain medical help.

Section 5 - Fire Fighting Measures

Flash Point (°F): 53 TCC LOWER EXPLOSIVE LIMIT (%): UPPER EXPLOSIVE LIMIT (%): N.D.
N.D.

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Spray, Dry Sand, Dry Powder

Unusual Fire And Explosion Hazards: Keep containers tightly closed. Isolate from heat, sparks, electrical equipment and open flame. Fire or intense heat may cause violent rupture of packages. Application to hot surfaces requires special precautions. Toxic gases may form when product burns. Remove all sources of ignition. Do not use a cutting or welding torch near or on a drum of product, because vapors may ignite explosively, even if the drum is empty and contains only product residue.

Special Firefighting Procedures: In the event of fire, wear self-contained breathing apparatus. Firefighters should wear full protective clothing. Flammable. Cool fire-exposed containers using water spray.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Evacuate all non-essential personnel. Remove all sources of ignition. Ventilate area. Contain and remove spilled material with inert absorbent and non-sparking tools. Use personal protective equipment as necessary. Dike to prevent entering any sewer or waterway. Soak up with vermiculite or inert absorbent material and dispose of as hazardous waste.

Section 7 - Handling and Storage

Handling: Prevent prolonged breathing of vapors or spray mist. Avoid contact with eyes and skin. Do not take internally. Do not handle until the manufacturers safety precautions have been read and understood. Handle in accordance with good industrial hygiene and safety practice. Use only in ventilated areas. Open doors and windows. Use safety precautions with empty containers. Empty containers may contain hazardous materials (product residues) in the form of solids, liquids, or vapors. Avoid processes that might generate static electrical discharge. Be careful; do not handle the container or the material inside roughly. Keep product and empty containers away from heat, hot surfaces, open flame, and other sources of ignition. Do not re-use empty containers.

Storage: Store in buildings designed to comply with OSHA 1910.106. Avoid storing near high temperatures, fire, open flames, and spark sources. Keep containers upright to prevent leakage and tightly closed in a dry, cool, and well-ventilated place. Protect material from direct sunlight.

Section 8 - Exposure Controls / Personal Protection

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
REFINED PETROLEUM DISTILLATE	N.E.	N.E.	N.E.	N.E.
ISOBUTYL ISOBUTYRATE	N.E.	N.E.	N.E.	N.E.
SOLVENT NAPHTHA, LIGHT	300 ppm	N.E.	300 ppm	400 ppm

ALIPHATIC				
METHYL n-AMYL KETONE	50 ppm	N.E.	100 ppm	N.E.
2-BUTOXYETHANOL	25 ppm	N.E.	25 ppm	N.E.
NITROCELLULOSE	HAZARD - N.E.	HAZARD - N.E.	HAZARD - N.E.	HAZARD - N.E.
1-BUTANOL	20 ppm	N.E.	50 ppm	N.E.
XYLENE	100 ppm	150 ppm	100 ppm	N.E.
ISOPROPANOL ANHYDROUS	400 ppm	500 ppm	400 ppm	500 ppm
2-BUTOXY ETHYL ACETATE	N.E.	N.E.	N.E.	N.E.
ETHYL BENZENE	100 ppm	125 ppm	100 ppm	125 ppm

Notes

ODORLESS MINERAL SPIRITS CAS# 8052-41-3 - NIOSH recommends a limit of 350 mg/m³ - 8 hour TWA, 1800 mg/m³ as determined by a 15-minute sample.

ISOBUTYL ISOBUTYRATE CAS# 97-85-8 - Eastman Kodak recommends an exposure limit of: 100 ppm 8 hour TWA.

2-BUTYOXYETHANOL CAS# 111-76-2 - This component has been shown to cause harm to the fetus in laboratory animals. It only caused harm at levels of overexposure that would also harm the pregnant animal. It has been shown to cause cancer in laboratory animals. The relevance to humans is unknown. It also has been shown to cause reversible kidney effects, reversible liver effects, and blood abnormalities in laboratory animals. Congestion in the spleen, liver, kidneys, and lungs resulted from acute lethal exposure in animal studies.

NITROCELLULOSE CAS# 9004-70-0 - It is on the OSHA Process Safety Management (PSM) list.

n-BUTYL ALCOHOL CAS# 71-36-3, there is evidence that some hearing loss may occur from long-term repeated exposure to vapor concentrations that are greater than 50 ppm. Animal studies have shown exposure causes effects on the liver, kidney, lungs, eyes, ears (vertigo), and central nervous system. Exposure caused birth defects and is toxic to the fetus of animals at levels that are nontoxic to the pregnant animal. The animals were exposed to doses many times higher than are expected to occur during use of the component.

XYLENE CAS# 1330-20-7 - In animal studies, exposure has caused birth defects. The relevance to humans is unknown. It also has been shown to cause reversible effects to the liver, kidney damage, testis damage, harmful to fetuses, liver damage, hearing effects, central nervous effects, and cardiac sensitization in laboratory animals.

ISOPROPANOL ANHYDROUS CAS# 67-63-0 in animal studies, exposure has caused fetal developmental effects and low fetal weights in non-toxic exposure levels to the mothers. It has been shown to cause fetotoxic effects at the level of exposure that was harmful to the mother. The relevance of these findings to humans is unknown. Exposure has been shown to cause kidney damage in male rats. The mechanism of toxicity that caused the kidney damage is not found in humans; therefore kidney damage from exposure is not expected to occur in humans.

BUTYL CELLOSOVE ACETATE CAS# 112-07-2 - US. NIOSH: Pocket Guide to chemical Hazards Recommended exposure limit (REL): 5 ppm, 33 mg/m³. Eastman Chemical Company occupational exposure limit: TWA Skin Notation: 25 ppm.

ETHYL BENZENE CAS# 100-41-4 - IARC Group 2B possibly carcinogenic to humans.

Engineering Controls: Local ventilation of emission sources may be necessary to maintain ambient concentrations below permissible OSHA exposure limits. Remove all ignition sources (heat, sparks, flame, and hot surfaces).

Respiratory Protection: A respirator that is recommended or approved for use in an organic vapor environment (air purifying, fresh air supplied, or NIOSH certified respirator for organic vapors, mists, and fumes) is necessary if OSHA/ACGIH permissible exposure limits are exceeded. Observe OSHA regulations for respirator use. Ventilation should be provided to keep exposure levels below OSHA/ACGIH permissible exposure levels.

Skin Protection: Solvent-resistant gloves.

Eye Protection: Wear safety eyewear (safety glasses, safety glasses with side-shields, chemical goggles, or face shields) to prevent eye contact.

Other protective equipment: Long sleeve and long leg clothing is recommended. Remove and wash contaminated clothing before reuse or discard. Safety shower and eyewash station should be located in immediate work area.

Wear an apron and boots that are chemical-resistant.

Hygienic Practices: Wash hands before breaks, eating, smoking, using washroom, and at the end of the workday.

Section 9 - Physical and Chemical Properties

Boiling Range (°F):	181 - 343	Vapor Density:	Heavier than air
Odor:	ODORLESS MINERAL SPIRITS, ISOBUTYL ISOBUTYRATE, & VM&P NAPHTHA SOLVENTS	Odor Threshold:	N.D.
Appearance:	Amber liquid	Evaporation Rate:	ND
Solubility in H ₂ O:	ND	Specific Gravity:	0.903
Freeze Point:	N.D.	PH:	N.A.
Vapor Pressure, mm Hg:	12.	Viscosity:	18-20 #3 ZAHN CUP SECONDS (> 165 cps)
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability and Reactivity

Conditions To Avoid: Avoid high temperatures, sparks, or open flames. Do not breathe vapors or spray mist.

Incompatibility: Material is incompatible with strong oxidizers, strong acids, strong alkalis, heat, aluminum, and salts of strong bases. A component is incompatible with oxidizing agents, strong acids, strong alkalies, amines, pigments that give an alkaline reaction, or alcohol denatured with pyridine. Reacts with air to form peroxides.

Hazardous Decomposition: Thermal decomposition can lead to the generation and release of gases and vapors including carbon monoxide, carbon dioxide, oxides of nitrogen, and hydrocarbons.

Hazardous Polymerization: Will not occur.

Stability: Stable under recommended storage conditions.

Section 11 - Toxicological Information

Product LD50: N.E.

Product LC50: N.E.

Section 12 - Ecological Information

Ecological Information: No Information.

Section 13 - Disposal Information

Disposal Information: Dispose of waste in accordance with federal, state, and local environmental regulations. Empty containers will contain product residue and flammable vapors. Handle as hazardous material. Do not incinerate closed containers. EPA Hazardous Waste Number/Code: D001, F003, F005. Hazardous Waste Characteristics: Ignitability and Reactivity. Do not weld or use a cutting torch on empty containers.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Consumer Commodity	Packing Group:	NA
DOT Technical Name:	N.A.	Hazard Subclass:	N.A.
DOT Hazard Class:	ORM-D	Resp. Guide Page:	N.A.
DOT UN/NA Number:	N.A.	IATA:	REGULATED

Section 15 - Regulatory Information

CERCLA – SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Component</u>	<u>CAS Number</u>	<u>Percent By Weight</u>
2-BUTOXYETHANOL	111-76-2	8.9932
1-BUTANOL	71-36-3	4.8643
XYLENE	1330-20-7	3.9549
ISOPROPANOL ANHYDROUS	67-63-0	3.5234
2-BUTOXY ETHYL ACETATE	112-07-2	3.0468
ETHYL BENZENE	100-41-4	1.0914

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

<u>Component</u>	<u>CAS Number</u>
p-XYLENE OR PARA-XYLENE	106-42-3

U.S. State Regulations: As follows –

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Component</u>	<u>CAS Number</u>
ALKYD RESIN	UNKNOWN

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Component</u>	<u>CAS Number</u>
ALKYD RESIN	UNKNOWN

California Proposition 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

<u>Component</u>	<u>CAS Number</u>	<u>Percent By Weight</u>
ETHYL BENZENE	100-41-4	1.0914
BENZENE	71-43-2	0.0016

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

<u>Component</u>	<u>CAS Number</u>	<u>Percent By Weight</u>
BENZENE	71-43-2	0.0016
TOLUENE	108-88-3	0.0011

International Regulations: As follows –

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: B2, D1A, D2A, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2

Flammability: 3

Reactivity: 0

Personal Protection: G

NFPA Fire Rating: 3

NFPA Health Rating: 1

NFPA Specific Hazard Rating: NA

NFPA Stability Rating: 1

VOLATILE ORGANIC COMPOUNDS, GR/LTR: 664

VOLATILE ORGANIC COMPOUNDS, LB/GAL: 5.54

VOLATILE ORGANIC COMPOUNDS MIXED, GR/LTR: <= 680

VOLATILE ORGANIC COMPOUNDS MIXED, LB/GAL: <= 5.67

VOLATILE ORGANIC COMPOUNDS, LB/LB-SOLID: <= 2.77

VOLATILE ORGANIC COMPOUNDS OF MATERIAL (SCAQMD RULE 443.1), GR/LTR: 664

VOLATILE ORGANIC COMPOUNDS OF MATERIAL (SCAQMD RULE 443.1), LB/GAL: 5.54

VOLATILE HAPs PER WEIGHT SOLIDS, LB./LB. 0.30505

REASON FOR REVISION: PERIODIC REVIEW

REGULATORY CODE: 010

LAYOUT CODE: A2004R

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.