



SAFETY DATA SHEET

Revision Date 12-Mar-2015

Version 1

1. IDENTIFICATION

Product identifier

Product Name DUCO CEMENT

Other means of identification

Product Code 62435

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Adhesives/Glues

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

ITW Permatex
10 Columbus Blvd.
Hartford, CT 06106 USA

Distributor

ITW Permatex Canada
35 Brownridge Road, Unit 1
Halton Hills, ON Canada L7G 0C6
Telephone: (800) 924-6994

Company Phone Number 1-87-Permatex
(877) 376-2839

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

Label elements

Emergency Overview

Danger

Causes serious eye irritation
May cause drowsiness or dizziness
Highly flammable liquid and vapor

**Appearance** Clear**Physical state** Liquid**Odor** Solvent**Precautionary Statements - Prevention**

Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Wear eye/face protection
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ventilating/lighting/equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool
 Do not expose to temperatures exceeding 122 °F (50 °C)

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Carcinogenic effects: Not applicable

Unknown acute toxicity

4% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%	Trade Secret
ACETONE	67-64-1	60 - 100	*
CELLULOSE NITRATE	9004-70-0	10 - 30	*
2-PROPANOL	67-63-0	3 - 7	*
CAMPHOR	76-22-2	1 - 5	*
1-METHOXY-2-PROPANOL ACETATE	108-65-6	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	Get medical advice/attention if you feel unwell.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash skin with soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
Ingestion	IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms See section 2 for more information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO₂), Dry chemical, Foam

Unsuitable extinguishing media

None.

Specific hazards arising from the chemical

Highly flammable. Vapors may travel to source of ignition and flash back.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Incompatible materials Strong acids, Bases, Acids, Amines

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
ACETONE 67-64-1	STEL: 750 ppm TWA: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³
2-PROPANOL 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³
CAMPHOR 76-22-2	STEL: 3 ppm synthetic TWA: 2 ppm synthetic	TWA: 2 mg/m ³ (vacated) TWA: 2 mg/m ³	IDLH: 200 mg/m ³ TWA: 2 mg/m ³ synthetic

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Clear
Odor Solvent
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	55 °C / 131 °F	
Flash point	-20 °C / -4 °F	
Evaporation rate	< 1	Ether = 1
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	13.1%	
Lower flammability limit:	0.6%	
Vapor pressure	185 @ 68°F	
Vapor density	>1	Air = 1
Relative density	0.87	
Water solubility	Negligible	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point No information available
Molecular weight No information available
VOC Content (%) 8.5%
Density No information available
Bulk density No information available

10. STABILITY AND REACTIVITY

Reactivity
 No data available

Chemical stability
 Stable under recommended storage conditions.

Possibility of Hazardous Reactions
 None under normal processing.

Conditions to avoid
 Heat, flames and sparks.

Incompatible materials

Strong acids, Bases, Acids, Amines

Hazardous Decomposition Products

Carbon oxides, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation	May cause irritation of respiratory tract. May cause drowsiness or dizziness.
Eye contact	Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
Skin contact	May cause skin irritation and/or dermatitis.
Ingestion	Ingestion may cause irritation to mucous membranes.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
ACETONE 67-64-1	= 5800 mg/kg (Rat)	-	= 50100 mg/m ³ (Rat) 8 h
CELLULOSE NITRATE 9004-70-0	> 5 g/kg (Rat)	-	-
2-PROPANOL 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
1-METHOXY-2-PROPANOL ACETATE 108-65-6	= 8532 mg/kg (Rat)	> 5 g/kg (Rabbit)	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
CELLULOSE NITRATE 9004-70-0	-	Group 2A	-	X
2-PROPANOL 67-63-0	-	Group 1	-	X

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Target Organ Effects Central nervous system, Eyes, Respiratory system, Skin.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	5358 mg/kg
ATEmix (dermal)	61296 mg/kg
ATEmix (inhalation-dust/mist)	123.9 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

19% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea

ACETONE 67-64-1	-	4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
2-PROPANOL 67-63-0	1000: 96 h Desmodemus subspicatus mg/L EC50 1000: 72 h Desmodemus subspicatus mg/L EC50	11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50	13299: 48 h Daphnia magna mg/L EC50
1-METHOXY-2-PROPANOL ACETATE 108-65-6	-	161: 96 h Pimephales promelas mg/L LC50 static	500: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Chemical Name	Partition coefficient
ACETONE 67-64-1	-0.24
2-PROPANOL 67-63-0	0.05
1-METHOXY-2-PROPANOL ACETATE 108-65-6	0.43

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
Contaminated packaging	Do not reuse container.
US EPA Waste Number	D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
ACETONE 67-64-1	-	Included in waste stream: F039	-	U002

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
ACETONE 67-64-1	Ignitable
CELLULOSE NITRATE 9004-70-0	Ignitable Reactive
2-PROPANOL 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no UN 1133
Proper shipping name: Adhesives, Limited Quantity (LQ)
Hazard Class 3
Packing Group II
Emergency Response Guide Number 128

IATA

UN/ID no ID 8000
Proper shipping name: Consumer commodity
Hazard Class 9
ERG Code 9L

IMDG

UN/ID no UN 1133
Proper shipping name: Adhesives, Limited Quantity (LQ)
Hazard Class 3
Packing Group II
EmS-No F-E, S-D

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-PROPANOL - 67-63-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
ACETONE 67-64-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ACETONE 67-64-1	X	X	X
CELLULOSE NITRATE 9004-70-0	X	X	X
2-PROPANOL 67-63-0	X	X	X
CAMPHOR 76-22-2	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

NFPA	Health hazards 2	Flammability 3	Instability 0	-
HMIS	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection B

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

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Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet