



SAFETY DATA SHEET

1. Identification

Product number	0375
Product identifier	CAMIE 375 SCREEN PRINT FLASH ADHESIVE
Revision date	04-14-2014
Company information	Camie-Campbell, Inc. 1005 S. Westgate Drive Addison, IL 60101 United States
Company phone	General Assistance 1-630-543-7600
Emergency telephone US	1-866-836-8855
Emergency telephone outside US	1-952-852-4646
Version #	02
Supersedes date	04-09-2014
Recommended use	SCREEN PRINT FLASH ADHESIVE
Recommended restrictions	None known.

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 1
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Reproductive toxicity (fertility)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
OSHA defined hazards	Not classified.	
Label elements		

Signal word	Danger	
Hazard statement	Extremely flammable aerosol. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure.	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.	
Response	If swallowed: Immediately call a poison center/doctor. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). Do NOT induce vomiting. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.	
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazard(s) not otherwise classified (HNOC)	Not classified.	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2

Supplemental information

Hazard statement Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Prevention Avoid release to the environment.
Response Collect spillage.

51.78% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Hazardous components			
Chemical name	Common name and synonyms	CAS number	%
n-Hexane		110-54-3	20 - 40
Acetone		67-64-1	10 - 20
Propane		74-98-6	10 - 20
2-Methylpentane		107-83-5	2.5 - 10
3-Methylpentane		96-14-0	2.5 - 10
Butane		106-97-8	2.5 - 10
Dimethyl Ether		115-10-6	2.5 - 10
2,2-Dimethylbutane		75-83-2	1 - 2.5
2,3-Dimethylbutane		79-29-8	1 - 2.5
Other components below reportable levels			20 - 40

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Aspiration may cause pulmonary edema and pneumonitis.

Most important symptoms/effects, acute and delayed Irritation of eyes and mucous membranes. Prolonged exposure may cause chronic effects. May cause drowsiness or dizziness.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Powder. Alcohol resistant foam. Water. Carbon dioxide (CO2).

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Special protective equipment and precautions for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire-fighting equipment/instructions Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. In the event of fire and/or explosion do not breathe fumes.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Collect spillage. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the MSDS.

Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe gas. Avoid contact with skin. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Use only in well-ventilated areas. Use personal protective equipment as required. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the MSDS). Level 3 Aerosol.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Acetone (CAS 67-64-1)	PEL	2400 mg/m ³ 1000 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m ³ 500 ppm
Propane (CAS 74-98-6)	PEL	1800 mg/m ³ 1000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
2,2-Dimethylbutane (CAS 75-83-2)	STEL	1000 ppm
	TWA	500 ppm
2,3-Dimethylbutane (CAS 79-29-8)	STEL	1000 ppm
	TWA	500 ppm
2-Methylpentane (CAS 107-83-5)	STEL	1000 ppm
	TWA	500 ppm
3-Methylpentane (CAS 96-14-0)	STEL	1000 ppm
	TWA	500 ppm
Acetone (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm
n-Hexane (CAS 110-54-3)	TWA	50 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	590 mg/m ³
		250 ppm
Butane (CAS 106-97-8)	TWA	1900 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
n-Hexane (CAS 110-54-3)	TWA	800 ppm 180 mg/m3 50 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Dimethyl Ether (CAS 115-10-6)	TWA	1880 mg/m3 1000 ppm

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
n-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines**US - California OELs: Skin designation**

n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

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

Hand protection Wear protective gloves.

Other Wear appropriate chemical resistant clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Color Not available.

Form Aerosol.

Physical state Gas.

Flash point 114.45 °F (45.80 °C) estimated

Melting point/freezing point Not available.

Odor Not available.

pH Not available.

Solubility(ies) Not available.

Vapor density Not available.

Vapor pressure 131.3 psig @70F estimated

Viscosity Not available.

Other information

Specific gravity 0.641 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May be fatal if swallowed and enters airways.
Inhalation	May be fatal if swallowed and enters airways. Prolonged inhalation may be harmful. Narcotic effects. May cause damage to organs by inhalation.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Irritant effects.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. Narcotic effects.

Product	Species	Test Results
CAMIE 375 SCREEN PRINT FLASH ADHESIVE (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	128.3195 ml/kg, estimated
	Rat	11801.0342 mg/kg, estimated
<i>Inhalation</i>		
LC50	Mouse	6876.6294 mg/l, 2 Hours, estimated 5547.812 mg/l, 15 Minutes, estimated 4331.1001 mg/l, 30 Minutes, estimated
	Rat	12939.2461 mg/l, 15 Minutes, estimated 3461.3525 mg/l, 4 Hours, estimated 1641.7533 mg/l/4h, estimated 321.4402 mg/l, 8 Hours, estimated
<i>Oral</i>		
LD50	Cat	7137.7588 g/kg, estimated
	Dog	35688.793 g/kg, estimated
	Mouse	19227.0762 mg/kg, estimated
	Rabbit	34261.2969 mg/kg, estimated
	Rat	113.9994 mg/kg, estimated
<i>Other</i>		
LD50	Mouse	8312.8428 mg/kg, estimated
	Rat	35248.0313 mg/kg, estimated
Components	Species	Test Results
Acetone (CAS 67-64-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	20000 mg/kg 20 ml/kg
<i>Inhalation</i>		
LC50	Rat	76 mg/l, 4 Hours 50.1 mg/l, 8 Hours

Components	Species	Test Results
<i>Oral</i> LD50	Mouse	3000 mg/kg
	Rabbit	5340 mg/kg
	Rat	5800 mg/kg
<i>Other</i> LD50	Mouse	1297 mg/kg
	Rat	5500 mg/kg
Butane (CAS 106-97-8)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
Dimethyl Ether (CAS 115-10-6)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	494.36 mg/l, 15 Minutes
		385.94 mg/l, 30 Minutes
	Rat	308.5 mg/l, 4 Hours
n-Hexane (CAS 110-54-3)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	48000 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	24 mg/kg
	Wistar rat	49 mg/kg
Propane (CAS 74-98-6)		
Acute		
<i>Inhalation</i>		
LC50	Rat	> 1442.847 mg/l, 15 Minutes
		658 mg/l/4h

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	Suspected of damaging fertility.
Specific target organ toxicity - single exposure	Narcotic effects.
Specific target organ toxicity - repeated exposure	Respiratory system. Skin. Kidneys. Central nervous system. Eyes. Liver. May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Product	Species	Test Results
CAMIE 375 SCREEN PRINT FLASH ADHESIVE (CAS Mixture)		
Crustacea	EC50 Daphnia	507.5419 mg/L, 48 Hours, estimated

Product	Species	Test Results
Fish	LC50	Fish
		10.5277 mg/L, 96 Hours, estimated
Components	Species	Test Results
Acetone (CAS 67-64-1)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna)
		21.6 - 23.9 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)
		4740 - 6330 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.
Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Dimethyl Ether	0.1
Acetone	-0.24
Propane	2.36
Butane	2.89
2,3-Dimethylbutane	3.42
3-Methylpentane	3.6
2-Methylpentane	3.74
2,2-Dimethylbutane	3.82
n-Hexane	3.9

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste U List: Reference

Acetone (CAS 67-64-1) U002

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	2.1
Subsidiary class(es)	Not available.
Packing group	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Labels required	None
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	2.1

Subsidiary class(es)	-
Packaging group	Not available.
Environmental hazards	Yes
Labels required	2.1
ERG Code	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Packaging Exceptions	LTD QTY

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS, MARINE POLLUTANT
Transport hazard class(es)	2.1
Subsidiary class(es)	-
Packaging group	Not available.
Environmental hazards	
Marine pollutant	Yes
Labels required	None
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Packaging Exceptions	LTD QTY

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

DOT



IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1)	LISTED
n-Hexane (CAS 110-54-3)	LISTED

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
 Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - Yes
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

n-Hexane (CAS 110-54-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8)

Dimethyl Ether (CAS 115-10-6)

Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Acetone (CAS 67-64-1) 6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1) 35 % weight/volumn

DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1) 6532

Food and Drug Administration (FDA) Not regulated.

US state regulations**US. New Jersey Worker and Community Right-to-Know Act**

Butane (CAS 106-97-8) 500 lbs

Dimethyl Ether (CAS 115-10-6) 500 lbs

n-Hexane (CAS 110-54-3) 500 lbs

Propane (CAS 74-98-6) 500 lbs

US. Pennsylvania RTK - Hazardous Substances

2,2-Dimethylbutane (CAS 75-83-2)

2,3-Dimethylbutane (CAS 79-29-8)

2-Methylpentane (CAS 107-83-5)

3-Methylpentane (CAS 96-14-0)

Acetone (CAS 67-64-1)

Butane (CAS 106-97-8)

Dimethyl Ether (CAS 115-10-6)

n-Hexane (CAS 110-54-3)

Propane (CAS 74-98-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 04-09-2014

Revision date 04-14-2014

Version # 02

Further information Not available.

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this 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.