


SAFETY DATA SHEET

Key Surgical® Adhesive Remover

SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND OF THE COMPANY	
Manufacturer Name: Key Surgical Inc.	Emergency Phone No: Customer Service: 800.541.7995
Address: 8101 Wallace Rd. Eden Prairie, MN 55344	
Synonyms, Trade Names: Orange oil based cleaning agent, Adhesive Remover	Product Type: Cleaning agent
Key Surgical Part: MJ-7004, MJ-7032	Formula Code: FLCIDDOX
Identified Uses: Removes sticky residues	
SECTION 2: HAZARDOUS IDENTIFICATION according to Regulation 1272/2008	
2.1 Classification of the substance or mixture:	
According to regulation 1272/2008:	Flammable liquid cat. 3 – H226 Skin irritation cat. 2 – H315 Skin sensitisation cat. 1 – H317 Aspiration toxicity cat. 1 – H304 Short-term aquatic hazardous cat. 1 – H400 Long-term aquatic hazardous cat. 1 – H410
According to EC directive 1999/45:	N, Xi R10 – Flammable R38 – Irritating to skin R 43 May cause sensitization by skin contact. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2.2 Label elements:	
According to regulation 1272/2008:	Pictograms: GHS02, GHS07, GHS08, GHS09 <div style="text-align: center; margin: 10px 0;">  </div> Signal Word: Danger Hazard statements according to regulation 1272/2008: H226 - Flammable liquid and vapor H315 - Causes skin irritation H317 - May cause an allergic skin reaction H304 - May be fatal if swallowed and enters airways H410 - Very toxic to aquatic life with long lasting effects Precautionary statements according to 1272/2008: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children P210 - Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P280 - Wear protective gloves / eye protection P261 - Avoid breathing vapors/spray. P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P363 - Wash contaminated clothing before reuse. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician P331 - Do NOT induce vomiting. P405 - Store locked up. P273 - Avoid release to the environment. P391 - Collect spillage. P501 - Dispose of contents/container to local facility for disposal of hazardous waste S-Phrases according to EC directive 1999/45: S2 - Keep out of reach of children. S23 - Do not breathe vapor. S24/25 - Avoid contact with skin and eyes. S37/39 - Wear suitable gloves and eye/face protection. S 60 - This material must be disposed as hazardous waste. S 61 - Avoid release to the environment.
2.3 Other hazards:	
Most important hazards: Specific hazards: Other information:	Vapor may form an explosive mixture in the atmosphere. Potential for formation of explosive vapor, may cause allergic effects on skin.

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SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS				
Chemical Description:		Chemical blend		
Mixture:				
Ingredient	CAS No.	EC No.	% w/w	Classification
d-Limonene	5989-27-5	227-813-5	< 20	H226 H315 H317 H400 H410
Hydrocarbons, C11-C13, isoalkanes, < 2%aromatics	64742-47-8	920-901-1	15-20	H304
Hydrocarbons, C12-C16, isoalkanes,cyclics < 2%aromatics	64742-47-8	927-676-8	50-60	-
Isopropylamine Dodecylbenzene Sulfonate	68649-00-3	272-018-9	5-6	H315
SECTION 4: FIRST AID MEASURES				
4.1 Description of First-Aid-Measures				
Inhalation:	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.			
Eye Contact:	Remove contacts. Flush with water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.			
Skin Contact:	Thoroughly wash exposed skin with soap and water. Remove any contaminated clothing and wash before reuse.			
Ingestion:	Wash out mouth with water. Drink plenty of water. Do not induce vomiting unless directed by medical personnel. Never give anything to an unconscious person. Get medical aid.			
4.2 Symptoms and Effects, both acute and delayed				
Inhalation:	May cause respiratory tract irritation. Lung and respiratory tract may be hurt if substance is inhaled in high amounts.			
Eye Contact:	Irritating to eyes.			
Skin Contact:	Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material (d-limonene). Prolonged and/or repeated contact may cause defatting of the skin and dermatitis.			
Ingestion:	May cause digestive tract disturbances. In case of ingestion negative effects also to respiratory tract may be expected due to aspiration toxicity.			
4.3 Indication of any immediate medical attention and special treatment needed				
Treatment:	Treat symptomatically			
SECTION 5: FIRE AND EXPLOSION HAZARD DATA				
Suitable Extinguishing Media:	Any standard extinguishing media (alcohol foam, water spray or fog, CO2 dry chemical, etc.).			
Unsuitable Extinguishing Media:	None known.			
Special hazards arising from the substance or mixture:	Possibly oxides of carbon and unidentified organic compounds. Vapors are heavier than air and may travel to a source of ignition and travel back. Vapors can spread along the ground and collect in low or confined areas. This liquid might float on water and may travel to a source of ignition and spread fire.			
Special Fire Fighting Procedures:	Substance does not mix with water and has density less than water.			
Special Protective Equipment for Fire Fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces. Self-contained positive pressure breathing apparatus is needed.			
SECTION 6: ACCIDENTAL RELEASE MEASURES				
Personal Precautions, protective equipment and emergency procedures:	Do not take internally. Prevent eye and skin contact. Refer to section 8 of the SDS for Personal Protective Equipment.			
Environmental Precautions:	Avoid release to the environment. Dispose of according to local regulations.			
Methods and material for containment and cleaning up:	Use absorbent material to soak up spills. Then place in suitable container. Forms smooth, slippery surfaces on floors, posing an accident risk. Remove all sources of ignition. Sweep up and dispose of in according to local regulations. Collect and dispose of spillage as indicated in section 13 of the SDS.			
SECTION 7: HANDLING AND STORAGE				
Precautions for safe handling:	Keep away from sources of ignition. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Avoid breathing vapor or mist.			
Conditions for safe storage, including any incompatibilities:	Store in cool, dry place, Keep container closed to avoid contamination.			

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Specific end use(s):	Application as cleaning agent		
Incompatible Storage:	None known		
Other:	None known		
SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION			
Control parameters:	None		
Occupational exposure limits:	None		
8.1 Exposure Controls:			
Appropriate engineering controls:	Use local exhaust or dilution ventilation.		
Personal protective equipment:			
Eye:	Safety glasses or safety goggles.		
Hand:	Chemical resistant gloves.		
Respiratory:	In case of regular applications and amounts used no respiratory equipment is necessary.		
Skin:	Cover body with clothing.		
Working Hygiene:	Take usual precautions when handling. Workers should wash hands before eating, drinking or smoking.		
Environmental exposure controls:	Avoid release to the environment.		
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
Physical State:	Orange liquid	Odor:	Typical-citrus
Boiling Point/Boiling Range:	Not measured	pH:	Not applicable
Color:	Orange	Solubility in Water:	Non-Soluble
Flash point:	48 °C (Flash Point, °C PM Closed Cup ASTM D93) estimate for lowest in composition	Relative density:	0.814 g/cc
Inflammation:	Flash point not established. Hydrocarbon > 63 °C (142 °F) ASTM D-56 Hydrocarbon > 94 °C (200 °F) ASTM D-93 d-limonene 48 °C (118.4 °F)	% VOC:	<20%
Vapor Pressure:	Not measured	Decomposition Temperature:	Not measured
Vapor density (aire=1):	Not measured		
Form:	Liquid	Melting Temperature:	Not measured
SECTION 10: STABILITY AND REACTIVITY			
Reactivity:	The mixture does not contain any reactive substance.		
Conditions to Avoid:	Heat and sources of ignition, prolonged exposure to air		
Chemical Stability:	The mixture contains no stabilizers. If stored under regular conditions no extraordinary reactions are expected. Static discharge, open fire (smoking) etc. should be avoided in respect to flammability.		
Possibility of hazardous reactions:	Hazardous reactions may occur in presence of oxidising substances or strong acids or bases.		
Incompatible materials:	Strong oxidizing agents, strong acids and bases.		
Hazardous Decomposition of Materials:	See Section 5, Special Exposure Hazards		
SECTION 11: TOXICOLOGICAL INFORMATION			
Acute Toxicity:			
Hydrocarbons C11-C16 (CAS: 64742-47-8)	LD50 oral rat	> 15 000 mg/kg	
	LD50 dermal rabbit	> 3160 mg/kg	
d-limonene (CAS: 5989-27-5)	LD50 oral rat	4400 mg/kg	
	LD50 dermal rabbit	> 5 mg/kg	
Isopropylamine Dodecylbenzene Sulfonate (CAS 68649-00-3)	No toxicological results available.		
Local effects:	Skin effects for exposed and non-exposed areas are possible.		
Chronic Toxicity:	d-limonene: in 2-year gavage studies, there was clear evidence of carcinogenic activity of d-limonene for male rats, as shown by increased incidences of tubular cell hyperplasia, adenomas, and adenocarcinomas of the kidney. There was NO evidence of carcinogenic activity of d-limonene for female rats, for male mice, or for female mice.		
Sensitization:	Allergic skin reaction in respect to d-limonene contact are possible.		
Specific effects:	No significant effects or critical hazards		

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SECTION 12: ECOLOGICAL INFORMATION	
Toxicity:	Long-term toxic to aquatic life
Bioaccumulative potential:	General notes: The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. In accordance with the requirements of the Renewable Volume Obligation (RVO) in the Act on Detergents and Cleansing Agents, tensides are biodegradable up to at least 90%.
Persistence/Degradability:	Data not available, surfactant is biodegradable under OECD 301 D. Based on data of ingredients full formulation would be expected to be biodegradable. Naptha based on raw material manufacturer's information is biodegradable.
Mobility in soil:	Not determined for the mixture
Results of PBT and vPvB assessment:	Preparation does meet the criteria for PBT or vPvB in accordance with REACH Annex XII
SECTION 13: DISPOSAL INFORMATION	
Waste treatment methods:	
Product:	Dispose of waste in an appropriate authorised treatment facility in accordance with regulations in force and product characteristics at time of disposal. (for example, energy recovery).
Packaging material:	Single use packaging. Collect for salvage or disposal.
SECTION 14: TRANSPORTATION INFORMATION	
DOT regulated	
Class 3 Flammable liquid NOS (d-limonene) UN 1993, PG III	
UN number	UN 1993
UN Shipping name	flammable Liquid (d-Limonene)
Transport hazard class(es)	Class 3
Packaging group	III
Environmental hazards	The mixture is environmentally hazardous
Special precautions for user:	Avoid smoking and any other ignition source
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.	
SECTION 15: REGULATORY INFORMATION	
Safety, health and environmental regulations/legislation specific for the substance or mixture	
This safety data sheet conforms to regulation (EU) n°453/2010 amending annex II of regulation (EC) No 1907/2006 (REACH)	
Product name:	Adhesive Remover
SECTION 16: OTHER INFORMATION	
The manufacturer warrants that this product conforms to its standard specification when used according to direction. To the best of our knowledge the information contained herein is accurate. However we do not assume accuracy or completeness of the information contained herein.	
Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.	