

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Section 1	CHEMICAL PRODUCT SECTION
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Identification: Product Name: ACL Reflow Oven Cleaner
Product Number: 8697

Product description: Cleaner for reflow ovens, wave soldering and heat exchanger systems

Product type: Liquid

Application: Industrial applications

Manufacturer: ACL Incorporated
840 W 49th Place
Chicago, IL 60609
PH: (01) 847.981.9212 [U.S.A.]
FAX: (01) 847.981.9278 [U.S.A.]

Email of responsible party for SDS: marykay@aclstaticide.com

US/Canada Emergency TEL: INFOTRAC: (01) 800.535.5053 (day or night)
International Emergency TEL: INFOTRAC: 352.323.3500 (day or night)

Section 2	HAZARDOUS IDENTIFICATION
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Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] & (US) OSHA HCS/ HazCom 2012:

2.1 Classification of the substance or mixture

Product definition: Combustible liquid Flash point $\geq 60^{\circ}\text{C}$ (140 $^{\circ}\text{F}$) and $\leq 93^{\circ}\text{C}$ (200 $^{\circ}\text{F}$)

Percentage of mixture consisting of ingredients of unknown toxicity: < 1%

Physical/chemical hazards: Combustible liquid- Category 4

Human health hazards: NA

Environmental hazards: NA

2.2 Label Elements

Hazard Pictograms:



Signal Word: Warning

Hazard Statement:

Combustible liquid (H227)

Precautionary Statements:

General:

If medical advice is needed, have container or label at hand (P101)

Keep out of reach of children (P102)

Read label before use (P103)

Prevention:

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking (P210)

Keep cool (P235)

Wear protective gloves, protective clothing and eye protection (P280)

Response:

In case of fire: Use dry chemicals, CO2, water spray or alcohol-resistant foam to extinguish (P370 + P378)

Storage:

Store in a well-ventilated place. Keep cool. (P403 + P235)

Store locked up (P405)

Disposal: Dispose of contents in accordance with state and local laws as they vary (P501)

Section 3	COMPOSITION / INFORMATION ON INGREDIENTS
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3.1 Substances

CHEMICAL	C.A.S. Number	Weight %	EU Classification
Dipropylene Glycol	34590-94-8	1.00% - 5.00%	Flam. Liq. 4; H227
Monomethyl Ether			

Section 4	FIRST AID MEASURES
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4.1 Description of first aid measures

Inhalation: Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eye Contact: Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Skin Contact: Wash skin with soap and copious amounts of water. Seek medical attention..

Ingestion: DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. Treat symptomatically.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data

Section 5	FIRE FIGHTING MEASURES
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5.1 Extinguishing media

Suitable extinguishing media: SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam. LARGE FIRE: Use water spray, water fog or alcohol-resistant foam. Cool all affected containers with flooding quantities of water.

Unsuitable extinguishing media: No data available.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture: Carbon oxides expected to be the primary hazardous combustion product.

Hazardous thermal decomposition products: Unknown

5.3 Advice for firefighters

Special protective actions for fire-fighters: Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses.

Use fire fighting procedures suitable for surrounding area.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes . Keep unopened containers cool by spraying with water..
Unusual Fire & Explosion Hazards: Unknown

Section 6	ACCIDENTAL RELEASE MEASURES
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6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

For emergency responders: Wear breathing apparatus plus protective gloves. Wear breathing apparatus plus protective gloves.

6.2 Environmental precautions. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or vermiculite.

6.3 Methods and materials for containment and cleaning up

Small spill: Contain spill, then collect with an electrically protected vacuum cleaner or by wet-brushing and put the material into a convenient waste disposal container. Keep container closed.

Large spill: Moderate hazard.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

Section 7	HANDLING AND STORAGE
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The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures:

Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

Suitable Container: Check all containers are clearly labeled and free from leaks.

Advice on general occupational hygiene: Always wash hands with soap and water after handling.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a cool, dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Recommendations: Cleaner for reflow ovens, wave soldering and heat exchanger systems

Industrial sector specific solutions: Electronics manufacturing

Section 8	EXPOSURE CONTROL / PERSONAL PROTECTION
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8.1 Control parameters

Occupational exposure limits

CHEMICAL	C.A.S.	OSHA TWA (ppm)	OSHA STEL (ppm)	ACGIH TWA (ppm)	ACGIH STEL (ppm)
Dipropylene Glycol Monomethyl Ether	34590-94-8	100ppm		100 PPM	STEL 150 PPM

8.2 Exposure controls

Appropriate engineering controls: Local exhaust in addition to general room ventilation may be required to meet exposure limit

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Take off contaminated clothing and wash before reuse. Use care in walking on spilled material.

Individual protection measures

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Eye/face protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

Skin protection

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection: Wear impervious, flame retardant, antistatic protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection: The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult your Occupational Health and Safety Advisor.

Environmental exposure controls: Not determined.

In Case of Large Spill: Keep out of drains. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 9	PHYSICAL AND CHEMICAL PROPERTIES
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9.1 Information on basic physical and chemical properties

Appearance	Clear liquid, water white
Odor	Ethereal odor
pH	9.5
Melting point/freezing point	No data available
Initial boiling point and boiling range	209 °C (408F)
Flash point and method	>60C (140F) and <93C (200F) tag closed cup
Evaporation rate (H ₂ O=1)	No data available
Flammability (solid, gas, liquid)	Not flammable
Upper/lower flammability or explosive limits	No data available
Vapor pressure	< 0.02 mm Hg at 20 C
Vapor density (air=1)	90% at 100 C
Water solubility.	Fully miscible in water
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Kinematic Viscosity	No data available
Dynamic viscosity	No data available
Explosive properties	No data available

9.2 Other safety information

Density	1.00 at 25C
Specific Gravity	1.02

VOC %	< 5% Dipropylene Glycol Monomethyl Ether
VOC Actual(g/l)	50 g/l 50ml/liter

Section 10	STABILITY AND REACTIVITY
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10.1 Reactivity: Hazardous polymerization will not occur.

10.2 Chemical stability: Stable under normal storage conditions.

10.3 Possibility of hazardous reactions: Isocyanates, Perchloric acid, Sulfuric acid, Oxidizing agents, Acic anhydrides Extended contact with air or oxygen. The potential for peroxide formation is enhanced when this solvent is used in processes such as distillation. Heat, sparks, open flame, other ignition sources, and oxidizing conditions. Ignition may occur at temperatures below those published in the literature as autoignition or ignition temperatures. Carbon Monoxide and other toxic vapors

10.5 Incompatible Materials: Air or oxygen. Moisture and humidity. Strong oxidizing agents. May react with oxygen to form peroxides.

10.6 Hazardous decomposition products: No data available

Section 11	TOXICOLOGY INFORMATION
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Acute toxicity: Not determined

Irritation/Corrosion: Not determined

Sensitization: No Data Available

Mutagenicity: No Data Available

Carcinogenicity: No Data Available

Reproductive toxicity: No Data Available

Teratogenicity: No Data Available

Specific target organ toxicity (single exposure): Not determined

Specific target organ toxicity (repeated exposure): Not determined

Aspiration hazard: Not available

Information on the likely routes of exposure:

SWALLOWED: No Data Available.

EYE: No Data Available

SKIN: No Data Available

INHALED: No Data Available

Section 12	ECOLOGICAL INFORMATION
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12.1 Toxicity: No Data Available

12.2 Persistence and degradability: Conclusion/Summary : Not available

12.3 Bioaccumulative potential: Conclusion/Summary : Not available

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}): Not available.

Mobility: Not available.

12.5 Results of PBT and vPvB assessment:Not available.

12.6 Other adverse effects: No known significant effects or critical hazards.

Section 13	DISPOSAL CONSIDERATIONS
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The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Hazardous waste: This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

Contaminated Packaging

Not determined

Special precautions:

Federal, State, and Local laws governing disposal of material can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14	TRANSPORTATION INFORMATION
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	Proper Shipping Name	Hazard Class	UN number	NOTE
US DOT ground	Non Hazardous Material	NA	NA	NA
US DOT air	Non Hazardous Material	NA	NA	NA
IATA	Non Hazardous Material	NA	NA	NA
IMDG	Non Hazardous Material	NA	NA	NA

Section 15	REGULATORY INFORMATION
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United States Federal Regulations: SDS complies with the OSHA Hazard Communication Rule, 29 CFR 1910.1200.

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

SDS complies with the OSHA Hazard Communication Rule, 29 CFR 1910.1200.

CERCLA/Superfund, 40 CFR 117, 302: None of the chemicals are CERCLA hazards ---

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:

Section 302 – Extremely hazardous substances (40 CFR 355): None of the chemicals are Section 302 hazards

Section 311/312 – SDS Requirements (40 CFR 370): By our hazard evaluation, this product is non-hazardous.

Section 313 – List of Toxic Chemicals (40CFR 372):

This product does not contain chemicals on the 313 list of Toxic Chemicals.

Toxic Substance Control Act (TSCA): **All substances are TSCA listed.**

Resource Conservation and Recovery Act (RCRA 40 CFR 261) Subpart C & D: Refer to Section 13

Federal Water Pollution Control Act, Clean Water Act, 40 CFR 401.15 (formerly section 307) 40 CFR 116 (formerly section 311): **No products listed**

California Proposition 65: --- None of the chemicals are on the Proposition 65 list---

15.1.1 EU regulations Authorisations and/or Restrictions On Use

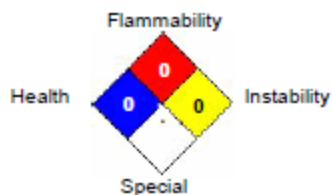
REACH Directive EC1907/2006 Annex II and GHS requirements: To the best of our ability, this SDS is written in accordance to the requirements. This product is not subject to REACH restrictions. It does not contain substances that are candidates on the SvHC or on Annex XVII.

Sections 16	OTHER INFORMATION
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Hazardous Material Information System (HMIS)

HEALTH	1	HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH
FLAMMABILITY	0	
PHYSICAL HAZARD	0	
PERSONAL PROTECTION	B	

National Fire Protection Association (NFPA)



REVISION DATES, SECTIONS, REVISED BY:

10-May-19 Original Preparer: mkb
25-Mar-20 Revised all sections, mkb

ABBREVIATIONS USED IN THIS DOCUMENT:

NE – Not Established, NA – Not Applicable, NIF – No Information Found, ND – Not Determined

ABRIDGED LIST OF REFERENCES:

- Code of Federal Regulations (CFR)
- The Sigma-Aldrich Library of Regulatory and Safety Data
- Chemical Guide and OSHA Hazardous Communication Standard
- The Environmental Protection Agency (www.epa.gov)
- http://oehha.ca.gov/prop65/prop65_list
- EPA list of lists: <http://orise.orau.gov/emi/hazards-assessment/files/resources/epa-title3.pdf>

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