

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: STATICIDE® ESD Safety Shield
Product Number: #63001, 63005, 6300S, 64001, 64005, 6400S

Product description: Electrostatic dissipative coating for interior use on hard surfaces
Product type: Acrylic liquid mixture
Application: Industrial applications, professional applications. Interior use

Manufacturer: ACL Incorporated
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Emergency telephone: US/Canada Emergency Telephone:
INFOTRAC: (01) 800.535.5053 (day or night)
International Emergency Telephone:
INFOTRAC: 352.323.3500 (day or night)

Section 2	HAZARD IDENTIFICATION
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Emergency Overview: Caution: Contents under pressure.
US OSHA Hazard Classification: Irritant, Target organ effects
Potential Health Effects: Prolonged overexposure may damage the nervous system, blood and blood forming organs, kidneys and liver.

2.1 Classification of the substance or mixture

Product definition: Mixture

Physical: None

Health: Serious eye damage / eye irritation category 2

Environmental: None

2.2 Label Elements

Hazard Pictograms:



Signal Word: Warning

Hazard Statement:

Causes eye irritation (H315 + H320)

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:

Wash face, hands and any exposed skin thoroughly after handling. Do not touch eyes. (P264+P265)

Wear eye protection/ face protection (P280)

Response:

IF IN EYES, Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305 +P351 + P338)
If eye irritation persists, get medical help (P337 + P317)

Unknown Acute Toxicity: No data available

Section 3	INFORMATION ON INGREDIENTS
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CHEMICAL	C.A.S.	Weight %	GHS Classification
Ethylene Glycol Monobutyl Ether	111-76-2	5 – 10	Flam. Liq. 4; H227 Acute Tox. 4; H302 + H312 + H332 Skin Irrit. 2; H315 Eye Irrit. 2A; H319
Diethylene Glycol Butyl Ether	112-34-5	1 – 5	Eye Irrit. 2A; H319
Diethylene Glycol	111-46-6	1 – 5	Acute Tox. 4; H302 STOT RE 2; H373
Acrylic Resin Blend	Proprietary	3 – 8	Not hazardous
Wetting agent	Proprietary	trace amount	Not hazardous
Water	7732-18-5	75 – 85	Not hazardous

Section 4	FIRST AID MEASURES
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4.1 Description of first aid measures

General Advice: If exposed or concerned: Get medical advice/attention

Inhalation: Remove to fresh air.

Eye Contact: 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: Wash off immediately with plenty of water for at least 15 minutes.

Ingestion: Clean mouth with water and drink afterwards plenty of water.

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

4.2 Most important symptoms and effects, both acute and delayed

May be harmful if swallowed. Causes mild skin irritation. Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Section 5	FIRE FIGHTING MEASURES
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Protective equipment and precautions for firefighters:

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: Not determined

5.2 Special hazards arising from the substance or mixture: Thermal decomposition products may be hazardous.

Hazardous Combustion Products: Oxides of carbon, nitrogen, sulfur and unknown materials.

5.3 Advice for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. This product is not flammable or combustible.

Use any media that is appropriate for the surrounding fire. Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

5.4 Further information: No data available

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

Use personal protective equipment as required. For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Containment: Prevent further leakage or spillage if safe to do so. Halt spill at source and contain or dike spill with inert absorbent material.

Clean up: Transfer liquid to containers for recovery or disposal. Shovel absorbent into drums for disposal in accordance with local, state and federal regulations.

6.4 Reference to other sections

For disposal see section 13.

Section 7	HANDLING AND STORAGE
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7.1 Precautions for safe handling

Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Handle in accordance with good industrial hygiene and safety practice.. Keep containers closed when not in use. For precautions see section 2.2

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place away from direct sunlight. Store in cool, dry, area away from excessive heat and incompatible

Storage Conditions: Ambient (40° - 90° F)

Incompatible Materials: None known based on information supplied.

7.3 Specific end use(s) Apart from the uses mentioned in section 1.2

Designed for static control areas in electronics manufacturing.

Section 8	EXPOSURE CONTROL / PERSONAL PROTECTION
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8.1 Control parameters

Occupational exposure limits

EXPOSURE LIMITS				
Chemical Name	OSHA PEL	ACGIH TLV	DFG	UK WEL
Ethylene Glycol Monobutyl Ether	50 ppm TWA	20 ppm TWA	10 ppm TWA (skin) MAK	25 ppm TWA 50 ppm STEL
Diethylene Glycol Butyl Ether	NE	TWA: 10 ppm inhalable fraction and vapor	100 Mg/m ³ MAK	NE
Diethylene Glycol	NE	NE	10 ppm MAK	NE

*listed under Aliphatic Hydrocarbon Gases ; Alkane C1-C4

8.2 Exposure controls

Appropriate engineering controls

Engineering Controls: Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Hygiene measures: Wash hands before eating, smoking and using the lavatory and at the end of the working period. When using, do not eat or drink. When using, do not smoke.

Eye Protection: Chemical safety goggles recommended.

Skin Protection: Avoid prolonged or repeated skin contact. Impervious gloves such as nitrile, neoprene or rubber are recommended.

Hand protection: Gloves Recommended.

Respiratory protection: None required in well ventilated areas. An approved organic vapor full face respirator is advised for poorly ventilated areas.

Environmental exposure controls: For normal conditions, protection is not necessary.

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Translucent blue liquid
Odor	Reminiscent of ether
Odor threshold	Not determined
pH	2.5
Melting point/freezing point	Not determined
Initial boiling point and boiling range	>212F / 100°C
Flash point and method	> 200°F (93.3° C) estimated
Evaporation rate (butyl acetate = 1)	.1 (2-butoxyethanol)
Flammability (solid, gas, liquid)	Not flammable
Upper/lower flammability or explosive limits	Lower: 1.1% (2-butoxyethanol) Upper: 10.8% (Diethylene glycol)
Vapor pressure	0.6 mmHg@ 20C (2-butoxyethanol)
Vapor density (air=1)	> 7.75
Relative density	Not determined
Solubility(ies).	Soluble
Partition coefficient: n-octanol/water	Not determined
Autoignition temperature	>392F / 200°C
Decomposition temperature	Not determined
Viscosity (kinematic)	Not determined
Volatile by weight	: >60%

9.2 Other safety information

Solids	< 4%
VOC	1.15lb/gal

Section 10 STABILITY AND REACTIVITY

10.1 Reactivity Stable under recommended storage conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions None under normal procession

10.4 Conditions to avoid: Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5 Incompatible materials: Strong acids, strong bases, oxidizing agents, amines.

10.6 Hazardous decomposition products: Hazardous Polymerization will not occur.

Combustion may produce carbon monoxide, carbon dioxide, Oxides of nitrogen, unknown materials.

Other decomposition products: In the event of fire: see section 5

Section 11 TOXICOLOGY INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose
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Ethylene Glycol Monobutyl Ether 111-76-2	LC ₅₀ dermal LD ₅₀ oral LC ₅₀ Inhalation	Rabbit Rat Rat	435 mg/kg 470 mg/kg = 450 ppm 4 h = 486 ppm 4 h
Diethylene Glycol Butyl Ether 112-34-5	LC ₅₀ dermal LD ₅₀ oral	Rabbit Rat	2,764 mg/kg 7,291 mg/kg
Diethylene Glycol 111-46-6	LC ₅₀ dermal LD ₅₀ oral	Rabbit Rat Rat	11,890 mg/kg 12,565 mg/kg >4600 mg/m ³ 4 h
2-Amino-2-methyl-1-propanol 124-68-5	= 2900 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	

Conclusion/Summary : Not available

Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
Ethylene Glycol Monobutyl Ether 111-76-2	Eye irritation skin irritation	Rabbit Rabbit	24 hours 20 hours
Diethylene Glycol Butyl Ether 112-34-5	Eye irritation Mild skin irritation	Rabbit Rabbit	(OECD Test Guideline 405) 1 hours
Diethylene Glycol 111-46-6	No eye irritation No skin irritation	Rabbit Rabbit	--- (OECD Test Guideline 404)

Conclusion/Summary : Not available

Sensitization

Product/ingredient name	Result	Species	Test
Ethylene Glycol Monobutyl Ether 111-76-2	Does not cause skin sensitization	Guinea Pig	OECD Test Guideline 406
Diethylene Glycol Butyl Ether 112-34-5	Does not cause skin sensitization	Guinea Pig	OECD Test Guideline 406
Diethylene Glycol 111-46-6	Does not cause sensitization on laboratory animals	Guinea Pig	Maximisation Test (GPMT)

Conclusion/Summary: Not available.

Mutagenicity

Product/ingredient name	Result	Species	Test
Ethylene Glycol Monobutyl Ether 111-76-2	Result: negative	Mouse, male	Method: OECD Test Guideline 474
Diethylene Glycol Butyl Ether 112-34-5	Negative	Drosophila melanogaster - male and female	OECD Test Guideline 477
	Negative	S. typhimurium	Ames Test
Diethylene Glycol 111-46-6	No data available	---	---

Conclusion/Summary: Not available.

Carcinogenicity Conclusion/Summary:

IARC: Ethylene Glycol Monobutyl Ether Group 3: Not classifiable as to its carcinogenicity to humans
Diethylene Glycol Butyl Ether is not present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: Ethylene Glycol Monobutyl Ether (A3) is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Ethylene Glycol Monobutyl Ether : Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Diethylene Glycol Butyl: No adverse effect has been observed in chronic toxicity tests.

Diethylene Glycol: No data available

Conclusion/Summary: Not available.

Teratogenicity Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure):

Specific target organ toxicity (repeated exposure): Not available.

Aspiration hazard: Not available.

Information on the likely routes of exposure: Not available.

Numerical measures of toxicity

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

Oral LD50 4,456.00 mg/kg

Dermal LD50 11,956.60 mg/kg

ATEmix (inhalation-dust/mist) 6.47 mg/l

ATEmix (inhalation-vapor) 29.40 mg/l

Section 12	ECOLOGICAL INFORMATION
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12.1 Toxicity

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ethylene Glycol Monobutyl Ether 111-76-2		LC50: =1490mg/L (96h, Lepomis macrochirus) LC50: =2950mg/L (96h, Lepomis macrochirus)	EC50: >1000mg/L (48h, Daphnia magna)
Diethylene Glycol Monobutyl Ether 112-34-5	EC50: >100mg/L (96h, Desmodesmus subspicatus)	LC50: =1300mg/L (96h, Lepomis macrochirus)	EC50: >100mg/L (48h, Daphnia magna)
Diethylene glycol 111-46-6		LC50: =75200mg/L (96h, Pimephales promelas)	EC50: =84000mg/L (48h, Daphnia magna)
2-Amino-2-methyl-1-propanol 124-68-5	EC50: =520mg/L (72h, Desmodesmus subspicatus)	LC50: =190mg/L (96h, Lepomis macrochirus)	EC50: =193mg/L (48h, Daphnia magna)

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Ethylene Glycol Monobutyl Ether 111-76-2	OECD Test Guideline 301B	90.4 %	-	-
Diethylene Glycol Butyl Ether 112-34-5	OECD Test Guideline 301B	91.7%	-	-
Diethylene Glycol 111-46-6	OECD Test Guideline 301B	90 – 100%	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Ethylene Glycol Monobutyl Ether 111-76-2	-	-	Readily biodegradable
Diethylene Glycol Butyl Ether 112-34-5	-	-	Readily biodegradable
Diethylene Glycol 111-46-6	-	-	Readily biodegradable

Conclusion/Summary : Not available

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Ethylene Glycol Monobutyl Ether 111-76-2	No data	-	Not likely
Diethylene Glycol Butyl Ether 112-34-5	No data	-	Does not bioaccumulate.
Diethylene Glycol 111-46-6		100	Leuciscus idus melanotus - 3 d - 0.05 mg/l

12.4 Mobility in soil

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

Mobility:

Chemical name	Partition coefficient
Ethylene Glycol Monobutyl Ether 111-76-2	0.81
Diethylene Glycol Monobutyl Ether 112-34-5	1
Diethylene glycol 111-46-6	-1.98

12.5 Results of PBT and vPvB assessment

PBT: Not available.

vPvB: Not available.

12.6 Other adverse effects: No known significant effects or critical hazards. The ecological effects of this product have not been determined. The solvents in this product are not classified as toxic to aquatic organisms.

Section 13 DISPOSAL CONSIDERATIONS

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: Offer surplus and non-recyclable solutions to a licensed disposal company

Hazardous waste: The classification of the product does not meet the criteria for a hazardous waste.

Contaminated Packaging

Methods of disposal: Dispose of as unused product. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions: Empty containers may contain product residue and may be dangerous.

RCRA 40 CFR 261 Classifications: As packaged and after use, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it has neither the characteristics of Subpart C nor is listed in Subpart D.

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	
US DOT air	Non Hazardous Material	NA	NA	
IATA	Non Hazardous Material	NA	NA	
IMDG	Non Hazardous Material	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.

CERCLA/Superfund, 40 CFR 117. 302: **None of the chemicals have a reportable quantity**

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

Section 311/312 – Material Safety Data Sheet Requirements (40 CFR 370):

Hazard Categories: Immediate (acute) health, Delayed (chronic) health, Fire,

Section 313 – List of Toxic Chemicals (40CFR 372): This product contains 2-Butoxyethanol (CAS# 111-76-2) at a weight of 5 – 10% and Diethylene glycol butyl ether (CAS# 112-34-5) at a weight of 1 - 5% which are found 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

STATE REGULATIONS:

The following chemicals are specifically listed by individual state; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethylene Glycol Monobutyl Ether 111-76-2	X	X	X
Diethylene Glycol Monobutyl Ether 112-34-5	X		X
Diethylene glycol 111-46-6			X
2-Amino-2-methyl-1-propanol 124-68-5	X	X	X

California Proposition 65: This product does not contain chemicals which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

INTERNATIONAL REGULATIONS: Canada WHMIS: This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR. All of the components of this product are listed on the Canadian Domestic substances List (DSL).

5.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization
Substances of very high concern: None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable.

Sections 16 OTHER INFORMATION

NFPA Health: Can cause significant irritation
NFPA Fire: Will not burn
NFPA Instability: Stable
NFPA Reactivity: None



HMIS Health: Slight Hazard. Irritation or minor reversible injury possible.
HMIS Flammability: Materials that must be preheated before ignition will occur.
Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
HMIS Reactivity: Minimal Hazard. Stable
HMIS Personal Protection: B. Safety glasses and protective gloves should be worn when handling this material.

1	HEALTH
1	FLAMMABILITY
0	REACTIVITY
B	PROTECTIVE EQUIPMENT

LABEL INFORMATION: For Shipping Label information refer to section 14

- Keep out of the reach of children (S2)
- Caution: Contents under pressure

REVISION DATES, SECTIONS, REVISED BY:

27-Oct-08 Original release date, MKB
04-DEC-08 revision, mkb
14-Sept-09 EU format, new address, section 15, mkb
20-July-12 Updated flammability rating, section 2, mkb
11-Dec-14 Section 2, mkb
07-Jan-16 Updated GHS elements, mkb
29-June-18 Reviewed, mkb
07-July-21 Reviewed, mkb
13-Oct-22 Revised sections 2, mkb

ABBREVIATIONS USED IN THIS DOCUMENT:

NE – Not Established
NA – Not Applicable
NIF – No Information Found
F+ - Extremely Flammable
Xi - Irritant
Xn - Harmful
R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed
R22 - Harmful if swallowed
R36 - Irritating to eyes
R36/38 - Irritating to eyes and skin

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)
American National Standards Institute

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