



SAFETY DATA SHEET

Armor Auto LLC
P.O. Box 3974
Missoula, MT59806

Emergency Telephone Number: 800-535-5053
Information Telephone Number: 800-433-6903
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Issue Date 06-Oct-2009

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Version 1

1. IDENTIFICATION

Product Identifier

Product Name ArmorCoat Reducer

Other means of identification

SDS # 911-629

Synonyms 12470-0A 970309

Recommended use of the chemical and restrictions on use

Recommended Use Solvent.

Details of the supplier of the safety data sheet

Supplier Address

Armor Auto LLC
P.O. Box 3974
Missoula, MT 59806

Emergency telephone number

Company Phone Number 1-800-433-6903
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 2B
Flammable liquids	Category 3

Signal word

Warning

Hazard statements

Causes eye irritation
Flammable liquid and vapor

**Appearance** Clear liquid**Physical state** liquid**Odor** Ester Pungent**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

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
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

May be harmful if inhaled
 May be harmful if swallowed
 Causes mild skin irritation

Other Information

- Harmful to aquatic life
- May form explosive peroxides

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms 12470-0A 970309.

Chemical Name	CAS No	Weight-%	Trade Secret
Ethyl 3-ethoxypropionate	763-69-9	100	*

4. FIRST AID MEASURES

First aid measures**Inhalation**

Remove to fresh air. Get medical attention if symptoms persist.

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.

Ingestion	Clean mouth with water and drink afterwards plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops or persists.

Most important symptoms and effects, both acute and delayed

Symptoms	May cause irritation to the mucous membranes and upper respiratory tract. May cause drowsiness or dizziness. Causes eye irritation.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog). Carbon dioxide (CO₂). Foam. Dry chemical. Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing Media Not determined.

Specific hazards arising from the chemical

Material will float and may ignite on surface of water. Forms peroxides of unknown stability if material becomes uninhibited.

Hazardous combustion products Carbon dioxide (CO₂). Carbon monoxide.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

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 Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for containment ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Collect using an inert absorbent material and place in appropriate containers for disposal. For large spills: Flush spill area with water. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

Methods for cleaning up Keep in suitable, closed containers for disposal. Dispose of contents/container to an approved waste disposal plant.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Use only with adequate ventilation. Avoid breathing vapors or mists. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wash face, hands and any exposed skin thoroughly after handling. Wear appropriate personal protective equipment. Ground container and transfer equipment to eliminate static electric sparks. Use spark-proof tools and explosion-proof equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Protect from sunlight. Minimize exposure to air. Do not distill to dryness. Periodically test for peroxide formation on long-term storage. If peroxide formation is suspected, do not open or move container. After opening, purge container with nitrogen before re-closing. Do not allow to evaporate to near dryness. Keep inhibited.

Incompatible materials OXIDIZERS.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines Time weighted average (TWA): 50 ppm
Short term exposure limit (STEL): 100 ppm

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes.

Skin and body protection Wear suitable protective clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air-purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	Ester Pungent
Appearance	Clear liquid	Odor threshold	0.02 ppm
Color	Colorless		
Property	Values	<u>Remarks • Method</u>	
pH	not applicable		
Melting point/freezing point	< -50 °C		
Boiling point/boiling range	165 °C		
Flash point	59 °C	Setaflash CC (closed cup)	

Evaporation rate	0.12	(butyl acetate = 1)
Flammability (solid, gas)	not applicable	
Flammability Limits in Air		
Upper flammability limits	Not determined	
Lower flammability limit	Not determined	
Vapor pressure	2.0	
Vapor density	5.0	
Specific Gravity	0.95	@ 20°C
Water solubility	29 g/l	
Solubility in other solvents	Not determined	
Partition coefficient	P: 22.4; log P: 1.35	
Autoignition temperature	(ASTM E659) 377 °C	
Decomposition temperature	(HPDTA) No exotherm to 400 C	
Kinematic viscosity	1.20 mPa.s	
Dynamic viscosity	Not determined	
Explosive properties	Not determined	
Oxidizing properties	Not determined	

Other Information**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions

Chemical stability

Stable. Forms peroxides of unknown stability if material becomes uninhibited.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

OXIDIZERS.

Hazardous Decomposition Products

Carbon dioxide (CO₂). Carbon monoxide.

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

Inhalation	May be harmful if inhaled.
Eye contact	Causes eye irritation.
Skin Contact	Causes mild skin irritation.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl 3-ethoxypropionate 763-69-9	= 3200 mg/kg (Rat)	= 10 mL/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms May cause respiratory irritation. May cause drowsiness or dizziness.

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

Carcinogenicity Not classifiable as a human carcinogen.

Numerical measures of toxicity- Product

Additional toxicity data may be available on request

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethyl 3-ethoxypropionate 763-69-9		62: 96 h Pimephales promelas mg/L LC50 static		970: 48 h Daphnia magna mg/L EC50

Persistence and degradability

READILY BIODEGRADABLE.

Bioaccumulation

This material is not expected to significantly bioaccumulate.

Mobility

Not determined.

Chemical Name	Partition coefficient
Ethyl 3-ethoxypropionate 763-69-9	1.35

Other adverse effects Not determined

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note For DOT air, vessel and bulk shipments, please refer to international shipping information. DOT info listed below is per 49 CFR 150.173(F)

DOT Not regulated

IATA

UN/ID No	UN3272
Proper shipping name	Esters, n.o.s. (ethyl 3-ethoxypropionate)
Hazard Class	3
Packing Group	III

IMDG

UN/ID No	UN3272
Proper shipping name	Esters, n.o.s. (ethyl 3-ethoxypropionate)
Hazard Class	3
Packing Group	III

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL	Listed
EINECS	Listed EINECS number: 212112-9
IECSC	Listed
PICCS	Listed
AICS	Listed

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

US Federal Regulations**SARA 311/312 Hazard Categories****US State Regulations****U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

16. OTHER INFORMATION

NFPA**Health hazards**

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS**Health hazards**

1

Flammability

2

Physical hazards

1

Personal protection

Not determined

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17-Dec-2012

Revision Note

new format

Disclaimer

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.

End of Safety Data Sheet