

Deck Guard

Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

1. Identification

1.1. Product identifier

Code:

Armus_GA_080721-01

Product name

Deck Guard

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use **Water-based transparent wood varnish with protection from water and staining.**

1.3. Details of the supplier of the safety data sheet

Name

Armus LLC

Full address

137 Grand Street 3rd floor NY

District and Country

NY 10013

United States

Tel. (+1) 9179575383

e-mail address of the competent person
responsible for the Safety Data Sheet

bill@armussolutions.com

1.4. Emergency telephone number

For urgent inquiries refer to

Tel. (+1) 9179575383 United States

2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard pictograms:

Skin sensitization, category 1A

May cause an allergic skin reaction.

Signal words:

WARNING



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Hazard statements:

H317 May cause an allergic skin reaction.

Precautionary statements:

Prevention:

P261 Avoid breathing fume, mist or spray.
P280 Wear protective gloves.
P272 Contaminated work clothing should not be allowed out of the workplace.

Response:

P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P302+P352 IF ON SKIN: Wash with plenty of water
P363 Wash contaminated clothing before reuse.

Storage:

Disposal:

P501 Dispose of contents or container according to local/national/international regulations.

2.2 Other hazards

Environmental classification as for Reg. (EU) 1272/2008 (CLP):

The product is classified as hazardous for environment pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP).

Classification and Hazard Statement

Hazardous to the aquatic environment, chronic toxicity, category 3 Harmful to aquatic life with long lasting effects.

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

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Prevention:

P273 Avoid release to the environment.

Response:

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Storage:

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Disposal:

P501 Dispose of contents or container according to local/national/international regulations

Additional hazards

Information not available.

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3. Composition / information on ingredients

3.1. Mixtures

Contains:

Identification	Conc. %	Classification:
2-(2-BUTOXYETHOXY)ETHANOL CAS 112-34-5 EC 203-961-6 INDEX 603-096-00-8	4.5	Eye irritation, category 2 H319
Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one CAS 55965-84-9 EC -- INDEX 613-167-00-5	0.003	Acute toxicity, category 2 H310, Acute toxicity, category 2 H330, Acute toxicity, category 3 H301, Skin corrosion, category 1C H314, Serious eye damage, category 1 H318, Skin sensitization, category 1A H317, Hazardous to the aquatic environment, acute toxicity, category 1 H400 M=100, Hazardous to the aquatic environment, chronic toxicity, category 1 H410 M=100

The full wording of hazard (H) phrases is given in section 16 of the sheet.

4. First-aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorized by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

5. Fire-fighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder, and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

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None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal firefighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink, or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

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7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well-ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

8. Exposure controls / personal protection

8.1. Control parameters

Regulatory References:

EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2020

2-(2-BUTOXYETHOXY)ETHANOL

Threshold Limit Value

Type	Country	TWA / 8h		STEL/15min		Remarks / Observations
		mg/m ³	ppm	mg/m ³	Ppm	
OEL	EU	67.5	10	101.2	15	
TLV-ACGIH	-	66	10			

Legend:

(C) = CLEANING ; INHAL = Inhalation Fraction ; RESP = Respiratory Fraction ; THORA = Thoracic Fraction

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must comply with current regulations.

HAND PROTECTION

Protect hands with category III work gloves (OSHA 29 CFR 1910.138).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.

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EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose limit of use will be defined by the manufacturer (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134). In the presence of gases or vapors of various kinds and/or gases or vapors containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odorless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84, OSHA 29 CFR 1910.134.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with wastewater or by dumping in waterways.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Color	Not available
Odor	Not available
Odor threshold	Not available
pH	Concentration: 7.5-8.5
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	>93 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapor pressure	Not available
Vapor density	Not available
Relative density	Not available
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available

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Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidizing properties	Not available

9.2. Other information

Information not available.

10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

2-(2-BUTOXYETHOXY)ETHANOL

May react with: oxidizing substances.

May form peroxides with: oxygen.

Develops hydrogen on contact with: aluminum.

May form explosive mixtures with: air.

10.4. Conditions to avoid

None in particular. However, the usual precautions used for chemical products should be respected.

2-(2-BUTOXYETHOXY)ETHANOL

Avoid exposure to: air.

10.5. Incompatible materials

2-(2-BUTOXYETHOXY)ETHANOL

Incompatible with: oxidizing substances, strong acids, alkaline metals.

10.6. Hazardous decomposition products

2-(2-BUTOXYETHOXY)ETHANOL

May develop: hydrogen.

11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

2-(2-BUTOXYETHOXY) ETHANOL

WORKERS: inhalation; contact with the skin.

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

2-(2-BUTOXYETHOXY) ETHANOL

May be absorbed by inhalation, ingestion and skin contact; is irritating for the skin and especially for the eyes. May cause damage to the spleen. At room temperature the danger of inhalation is unlikely, due to the low vapour pressure of the substance.

Interactive effects

Information not available

ACUTE TOXICITY

MIXTURE OF 5-CHLORO-2-METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE

LC50 (Inhalation) 0.51 mg/l/4h Rat

ISOBUTYRIC ACID, MONOESTER WITH 2,2,4-TRIMETHYLPENTANE-1,3-DIOL

LD50 (Dermal) > 15200 mg/kg Rabbit - New Zealand white

2-(2-BUTOXYETHOXY) ETHANOL

LD50 (Oral) 3384 mg/kg Rat

LD50 (Dermal) 2700 mg/kg Rabbit

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Sensitizing for the skin.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

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CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

MIXTURE OF 5-CHLORO-2METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE

LCD50 – for Fish 0.58 mg/l/96h

EC50 – for Crustacea 1.02 mg/l/48h

ISOBUTYRIC ACID, MONOESTER WITH 2,2,4-TRIMETHYLPENTANE-1,3-DIOL

LC50 - for Fish 33 mg/l/96h *Pimephales promelas*

EC50 - for Crustacea 147.8 mg/l/48h *Daphnia magna*

EC50 - for Algae / Aquatic Plants > 57 mg/l/72h *Pseudokirchnerella subcapitata*

12.2. Persistence and degradability

ISOBUTYRIC ACID, MONOESTER WITH 2,2,4-TRIMETHYLPENTANE-1,3-DIOL

Solubility in water 1360 mg/l

Rapidly degradable

2-(2-BUTOXYETHOXY)ETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

ISOBUTYRIC ACID, MONOESTER WITH 2,2,4-TRIMETHYLPENTANE-1,3-DIOL

Partition coefficient: n-octanol/water 3.2

BCF 44.1

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12.4. Mobility in soil

ISOBUTYRIC ACID, MONOESTER WITH 2,2,4-TRIMETHYLPENTANE-1,3-DIOL

Partition coefficient: soil/water 2.2181

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%.

12.6. Other adverse effects

Information not available

13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

15. Regulatory information

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

U.S. Federal Regulations

TSCA:

All components are listed on TSCA Inventory.

Clean Air Act Section 112(b):

No component(s) listed.

Clean Air Act Section 602 Class I Substances:

No component(s) listed.

Clean Air Act Section 602 Class II Substances:

No component(s) listed.

Clean Water Act

Priority Pollutants:

No component(s) listed.

Clean Water Act

Toxic Pollutants:

No component(s) listed.

DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

DEA List II Chemicals (Essential Chemicals):

No component(s) listed.

EPA List of Lists:

313 Category Code:

No component(s) listed.

EPCRA 302 EHS TPQ:

No component(s) listed.

EPCRA 304 EHS RQ:

No component(s) listed.

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CERCLA RQ:

121-44-8 TRIETHYLAMINE

EPCRA 313 TRI:

34590-94-8 DIPROPYLENE GLYCOL MONOMETHYL ETHER (GLYCOL ETHERS)
121-44-8 TRIETHYLAMINE

RCRA Code:

121-44-8 TRIETHYLAMINE

CAA 112 (r) RMP TQ:

No component(s) listed.

State Regulations

Massachusetts:

No component(s) listed.

Minnesota:

No component(s) listed.

New Jersey:

No component(s) listed.

New York:

No component(s) listed.

Pennsylvania:

No component(s) listed.

California:

No component(s) listed.

Proposition 65:

This product does not contain any substances known to the State of California to cause cancer, reproductive harm or birth defects.

International Regulations

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

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16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

- H310 Fatal in contact with skin.
- H330 Fatal if inhaled.
- H301 Toxic if swallowed.
- H314 Causes severe skin burns and eye damage.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

LEGEND:

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAA 112@ RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112@)
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: EC Regulation 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REL: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act
- TWA STEL: Short-term exposure limit

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- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Communication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachusetts 105 CMR Department of public health 670.000: "Right to Know"
- Minnesota Chapter 5206 Department of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Product classification derives from criteria established by the OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200), unless determined otherwise in Section 11 and 12. The data for evaluation of chemical-physical properties are reported in section 9.