

REPAIR GUARD

SAFETY DATA SHEET ACCORDING TO USA FEDERAL HAZCOM 012

1. IDENTIFICATION

1.1. Product Identifier

Code:
Product name

A-REPAIR

REPAIR GUARD

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

Intended use

*Consolidant and water-repellent for decaying absorptive surfaces such as concrete, stone, brick, and mortar.
For professional use only.*

1.3. Details of the supplier of the safety data sheet

Name
Full address
Country

Armus LLC
137 Grand Street 3rd Floor
New York, NY 10013
United States
Tel. (+1) 917-957-5383

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) 917-957-5383 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 is given in sections 11 and 12 of this sheet.

Classification and Hazard Statement

Serious eye damage, category 1
Skin irritation, category 2

Causes serious eye damage
Causes skin irritation

Hazard pictograms:



Signal words: **WARNING**

Hazard statements:

H318	Causes serious eye damage
H315	Causes skin irritation

Precautionary statements:**Prevention:**

P280	Wear protective gloves / eye protection / face protection.
P264	Wash with plenty of water and soap thoroughly after handling.

Response:

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and continue rinsing.
P302+P352	IF ON SKIN: Wash with plenty of water
P310	Contact a POISON CONTROL CENTER / seek medical attention if you feel unwell.
P362+P364	Take of contaminated clothing and wash before reuse.

Storage:

P403+P235	Store in a well-ventilated place. Keep cool
P403+p233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal:

P501	Dispose of contents and / or container according to local / national / international regulations
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2.2 Other hazards

Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Components

<i>Chemical Name</i>	<i>CAS-No</i>	<i>INDEX</i>	<i>Conc. %</i>	<i>Classification</i>
SILIC ACID, POTASSIUM SALT	1312-76-1		2 < x < 7	Eye irritation, category 2 H319, Skin irritation, category 2 H315, Specific target organ toxicity - single exposure, category 3 H335
POTASSIUM METHYLSILANETRIOLATE	31795-24-1		1 < x < 5	Skin corrosion, category 1A H314, Serious eye damage, category 1 H318
METHANOL	67-56-1		0 < x < 0.05	Flammable liquid, category 2 H225, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Acute toxicity, category 3 H331, Specific organ toxicity - single exposure, category 1 H370
OCTAMETHYLCYCLOTETRA-SILOXANE	556-67-2		0 < x < 0.1	Reproductive toxicity, category 2 H361, Hazardous to aquatic environment, chronic toxicity, category 1 H410 M=10

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**GENERAL ADVICE:**

Move out of work / application area.
Consult a physician.
Show this material safety data sheet to the doctor in attendance.

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EYES:	Remove contact lenses. In the case of contact with eyes, rinse immediately with plenty of water and seek medical attention. Keep eyes wide open while rinsing. Continue rinsing eyes during transport to medical facility or for at least 30-60 minutes.
SKIN:	Take off contaminated clothing and shoes immediately. Shower immediately. Seek medical advice / attention.
INHALATION:	Move to fresh air. Seek medical advice / attention immediately. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.
INGESTION:	Drink as much water as possible. Seek medical advice / attention immediately. Do not induce vomiting unless explicitly instructed or authorized by a doctor.

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

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

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

Not applicable based on available information.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing equipment Extinguishing substances are: carbon dioxide, foam, powder, and water.

Unsuitable extinguishing equipment None in particular.

5.2. Special hazards arising from the substance or mixture

Specific hazards during fire fighting 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.

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 clothing.

These indications apply for both product users and those involved in emergency procedures.

6.2. Environmental precautions

The product must not enter the sewer system or come into contact with surface water or groundwater.

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6.3. Methods and material for containment and cleaning up

Collect the leaked product.

Absorb spilled product 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 section 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

Keep away from heat, sparks, and open flames.

Do not eat, drink, or smoke during use.

Do not smoke or use matches or lighters.

Without adequate ventilation, vapors may accumulate and, if ignited, catch fire even at a distance, with danger of backfire.

When performing transfer operations involving large containers, connect to an earthing system and wear anti-static footwear.

Vigorous stirring and flow through tubes and equipment may cause the formation and accumulation of electrostatic charges.

To avoid the risk of fires and explosions, never use compressed air when handling.

Open containers with caution as they may be pressurized.

The product must not enter the sewer system or come into contact with surface water or groundwater.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container.

Store the containers sealed, in a well-ventilated place, away from direct sunlight.

Keep away from heat, sparks, and open flames.

7.3. Specific end use(s)

Refer to section 1.2

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Regulatory References:

USA	NIOSH-REL	NIOSH publication No. 2005-1 49, 3 rd printing, 2007.
USA	OSHA-PEL	Occupational Exposure Limits- Limits for Air Contaminants Table Z-1-1910-1000
USA	CAL/OSHA-PEL	California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits (PELs).
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

METHANOL						
Threshold Limit Value						
Type	Country	TWA / 8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	Ppm	
TLV-ACGIH	-	242	200	328	250	SKIN
OSHA	USA	260	200			
CAL/OSHA	USA	260	200	325 (C)	100 (C)	SKIN
NIOSH	USA	260	200	325	250	SKIN
OEL	EU	260	200			

Legend:

(C) = CEILING
INHAL = Inhalable Fraction
RESP = Respirable 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.

<i>Hand Protection</i>	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.
<i>Skin Protection</i>	Wear category I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.
<i>Eye Protection</i>	Wear airtight protective goggles (OSHA 29 CFR 1910.133).
<i>Respiratory Protection</i>	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 class must be chosen according to the limit of use concentration (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.
<i>Environmental Exposure Controls</i>	This product should not enter the sewer system or come into contact with surface water or groundwater.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid suspension
Color	Transparent
Odor	Very slight rubbing alcohol odor
pH	10.0 ± 0.5
VOC	< 2 g/liter
Melting Point / Freezing Point	< 32°F (0°C)
Boiling Point	> 212°F (100°C)
Flash Point	> 212°F (100°C)
Relative Density	1.10 ± 0.05 kg/ liter
Solubility	Fully miscible with water
Auto-ignition temperature	> 212°F (100°C)
Viscosity	2.8 ± 0.5 cP @ 68°F (20°C)

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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.

10.4. Conditions to avoid

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

10.5. Incompatible materials

None based on available information.

10.6. Hazardous decomposition products

None based on available information.

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 substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Not classified based on available information.

Information on likely routes of exposure

METHANOL

WORKERS: Inhalation; contact with the skin.

POPULATION: Ingestion of contaminated food or water; contact with the skin via products containing the substance.

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

METHANOL

INGESTION: The minimum lethal dose for humans by is in the range of 300 – 1000 mg/kg. Ingestion of 4-10ml of the substance may cause permanent blindness in adult humans (IPCS).

Interactive effects

Not classified based on available information.

Acute toxicity

OCTAMETHYLCYCLOTETRAILOXANE

LD50 (Oral (Rat)) 4800 mg/kg
LD50 (Dermal (Rat)) 2400 mg/kg
LC50 (Inhalation (Rat)) 2975 ppm
Exposure time: 4h

Skin corrosion / irritation

Causes skin irritation.

Serious eye damage / irritation

Causes serious eye damage.

Respiratory or skin sensitization

2-METHYL-2H-ISOTHIAZOL-3-ONE

May produce an allergic reaction.

Germ cell mutagenicity

Not classified based on available information.

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Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT – single exposure

Not classified based on available information.

STOT – repeated exposure

Not classified based on available information.

Aspiration toxicity / hazard

Not classified based on available information.

12. ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the appropriate authorities if the product reaches waterways or contaminates soil or vegetation.

12.1. Toxicity

Not classified based on available information.

12.2. Persistence and degradability

METHANOL

Solubility in Water	1000-10000 mg/ liter
Degradability:	Rapidly degradable

12.3. Bioaccumulative potential

METHANOL

Partition Co-efficient: N-octanol/water	-0.77
BCF	0.2

12.4. Mobility in soil

None based on available information.

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any Persistent, Bioaccumulative and Toxic (PBT) or very Persistent and very Bio-accumulative (vPvB) substances.

13. DISPOSAL CONSIDERATIONS

Disposal methods

<i>Waste from residues</i>	Unused product should be considered special non-hazardous waste. Disposal must be performed through an authorized waste management firm, in compliance with local, national, and international regulations.
<i>Contaminated Packaging</i>	Contaminated packaging must be recovered or disposed of in compliance with all waste management regulations.

14. TRANSPORTATION INFORMATION

This products 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 Associate (IATA) regulations.

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15. REGULATORY INFORMATION

U.S. Federal Regulations

<i>TSCA</i>	All components of this product are listed on US Toxic Substances Control Act (TSCA) Inventory considered as "existing" chemical substances in U.S. commerce.	
<i>Clean Air Act Section 112(b)</i>	CAS 67-56-1	METHANOL
<i>Clean Air Act Sections 112(b), 602 Class I Substances, 602 Class II Substances</i>	This product, in compliance to the Act, does not contain any substances regulated as pollutants.	
<i>Clean Water Act Priority and/or Toxic Pollutants</i>	This product, in compliance to the Act, does not contain any substances regulated as pollutants.	
<i>DEA List I Chemicals (Precursor Chemicals) and List II Chemicals (Essential Chemicals)</i>	No component(s) listed; in compliance with the List.	
<i>EPA List of Lists 313 Category Code:</i>	CAS 67-56-1	METHANOL
<i>EPCRA 302 EHS TPQ</i>	No component(s) listed; in compliance with the List.	
<i>CERCLA RQ</i>	CAS 67-56-1	METHANOL
<i>EPCRA 313 TRI</i>	CAS 67-56-1	METHANOL
<i>RCRA Code</i>	CAS 67-56-1	METHANOL
<i>CAA 112 (r) TMP TQ</i>	No component(s) listed; in compliance with the List.	

State Regulations

Massachusetts / Minnesota/ New Jersey:
CAS 67-56-1 METHANOL
CAS 1305-62-0 CALCIUM HYDROXIDE

Pennsylvania / California:
CAS 67-56-1 METHANOL
CAS 1305-62-0 CALCIUM HYDROXIDE
CAS 64-17-5 ETHANOL

New York:
CAS 67-56-1 METHANOL

CA Proposition 65:

WARNING! This product contains chemicals known to the State of California to cause cancer, reproductive harm, or birth defects.
CAS 67-56-1 METHANOL

16. OTHER INFORMATION

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

H318 Causes serious eye damage
H315 Causes skin irritation

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 (r) RMP TQ	Risk Management Plan Threshold Quantity (Clean Air Act Section 112(R))
CAS NUMBER	Chemical Abstract Service Number

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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
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.

Purchasers must provide product users with adequate training on how to use chemical products.

Safety Data Sheet

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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.