

# SAFETY DATA SHEET.

Issuing date 01-May-2017

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Version 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product name ARMOR-KOTE

### Recommended use of the chemical and restrictions on use

Product code 7603, 9903, 8022

Product Type Extremely Flammable Aerosol

Synonyms None

### Supplier's details

Recommended Use Cleaner / Polish.

Uses advised against No information available

### Manufactured For:

Tifco Industries  
21400 Northwest Freeway  
Cypress, TX 77429  
800-868-4326

### Emergency telephone number

Chemical Emergency Phone Number Chem-Tel 800-255-3924

## 2. HAZARDS IDENTIFICATION

### Classification

Flammable aerosols	Category 1
Gases under pressure	Compressed Gas

### GHS Label elements, including precautionary statements

#### Emergency Overview

#### **DANGER**

Extremely Flammable Aerosol  
Contains gas under pressure; may explode if heated



**Appearance** Opaque

**Physical state** Aerosol

**Odor** Mild

#### **Precautionary Statements - Prevention**

Keep away from heat/sparks/open flames/hot surfaces.-No smoking.  
Do not spray on an open flame or other ignition source.  
Pressurized container: Do not pierce or burn, even after use

#### **Precautionary Statements - Storage**

Store locked up  
Protect from sunlight. Store in a well-ventilated place  
Do not expose to temperatures exceeding 122°F (50°C)

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

None

#### Other information

Less than 1% of the mixture consists of ingredient(s) of unknown toxicity.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	1-10
TRIETHANOLAMINE	102-71-6	1-10

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. FIRST AID MEASURES

### First aid measures for different exposure routes

<b>General advice</b>	Under normal conditions of intended use, this product does not pose a risk to Health.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.
<b>Skin contact</b>	Wash off with plenty of water and soap. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately. If not breathing, give artificial respiration. Artificial respiration and/or oxygen may be necessary. If breathing has stopped, contact emergency medical services immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

### Most important symptoms/effects, acute and delayed

<b>Main Symptoms</b>	May cause eye, skin, respiratory irritation. May cause drowsiness or dizziness.
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### Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	Treat symptomatically.
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## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Water fog. Dry chemical. Carbon dioxide (CO2). Cool containers/tanks with water spray.

**Unsuitable Extinguishing Media** Keep away from heat and sources of ignition. Cool containers / tanks with water spray.

### Specific hazards arising from the chemical

Extremely Flammable/Flammable. Keep product and empty container away from heat and sources of ignition. No smoking. Cool containers/tanks with water spray. In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.

### Explosion Data

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** Yes.

### Protective Equipment and Precautions for Firefighters

In the event of fire and/or explosion do not breathe fumes.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Use with adequate ventilation to keep the exposure levels below the occupational exposure limits.
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### Environmental precautions

<b>Environmental precautions</b>	Vapors can accumulate in low areas. Report spills as required by local and federal regulations.
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### Methods and materials for containment and cleaning up

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
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**Methods for cleaning up**

Contain liquid and collect with an inter,non-combustible material.

**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling**

Irritating to eyes. Avoid inhaling vapors or spray mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces. Avoid inhaling vapors or mists. May cause respiratory irritation if inhaled.

**Conditions for safe storage, including any incompatibilities****Technical measures/Storage conditions**

Keep containers tightly closed in a cool, well-ventilated place.

**Incompatible products**

Strong acids or oxidizing agents.

**Aerosol Level**

1

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm	74-98-6:TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> 106-97-8: (vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	74-98-6:IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup> 106-97-8:TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup> 75-28-5:TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>
TRIETHANOLAMINE 102-71-6	TWA: 5 mg/m <sup>3</sup>	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety &amp; Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

**Other Exposure Guidelines**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Exposure controls****Engineering Measures**

Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits.

**Individual protection measures, such as personal protective equipment****Eye/Face Protection**

Safety glasses with side-shields.

**Skin and body protection**

Chemical resistant apron. Protective gloves.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

Physical state	Aerosol	Odor	Mild
Appearance	Opaque		
Color	White	Odor Threshold	
<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>	
pH	9.5		
Melting/freezing point	No information available		
Boiling point/boiling range			
Flash Point	-91 °C / -132 °F	Based on propellant	
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limits in Air			
upper flammability limit			
lower flammability limit			
Vapor pressure			
Vapor density			
Specific Gravity	0.962		
Water solubility	Dilutable		
Partition coefficient: n-octanol/water			
Autoignition temperature	No information available		
Decomposition temperature			
Viscosity	No information available		
Explosive properties			

### Other information

VOC Content(%)	7.94
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## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under recommended storage conditions

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Extremes of temperature and direct sunlight.

### Incompatible Materials

Strong acids or oxidizing agents.

### Hazardous Decomposition Products

Carbon oxides. Fumes. Hydrocarbons.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	May cause respiratory irritation. May cause drowsiness or dizziness.
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<b>Eye contact</b>	May cause eye irritation.
<b>Skin contact</b>	May cause skin irritation.
<b>Ingestion</b>	May be harmful if swallowed and enters airways.

**Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
TRIETHANOLAMINE 102-71-6	= 4190 mg/kg ( Rat )	> 20 mL/kg ( Rabbit )	-

**Information on toxicological effects**

<b>Symptoms</b>	May cause eye, skin, and respiratory irritation. May be harmful if swallowed and enters airways.
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**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	May cause skin irritation.
<b>Eye damage/irritation</b>	May cause eye irritation.
<b>Irritation</b>	May cause skin, eye and respiratory irritation.
<b>Sensitization</b>	Not a known sensitizer.
<b>Germ Cell Mutagenicity</b>	Not a germ cell mutagen.
<b>Carcinogenicity</b>	The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
TRIETHANOLAMINE 102-71-6	-	3	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Group 2B - Possibly Carcinogenic to Humans

<b>Reproductive toxicity</b>	This product does not contain any known or suspected reproductive hazards.
<b>Specific target organ systemic toxicity (single exposure)</b>	None under normal use conditions.
<b>Specific target organ systemic toxicity (repeated exposure)</b>	None under normal use conditions.
<b>Chronic toxicity</b>	Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.
<b>Neurological effects</b>	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
<b>Aspiration hazard</b>	May be harmful if swallowed and enters airways.

**Numerical measures of toxicity - Product Information****Unknown Acute Toxicity** Less than 1% of the mixture consists of ingredient(s) of unknown toxicity.**The following values are calculated based on chapter 3.1 of the GHS document .**

ATEmix (oral)	17255 mg/kg
ATEmix (dermal)	2315 mg/kg
ATEmix (inhalation-gas)	996173 mg/l
ATEmix (inhalation-dust/mist)	6.3 mg/l
ATEmix (inhalation-vapor)	55096 mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates

TRIETHANOLAMINE 102-71-6	216 mg/L EC50 Desmodesmus subspicatus 72h 169 mg/L EC50 Desmodesmus subspicatus 96h	10600 - 13000 mg/L LC50 Pimephales promelas 96h flow-through 1000 mg/L LC50 Pimephales promelas 96h static 450 - 1000 mg/L LC50 Lepomis macrochirus 96h static	-	-
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**Persistence and degradability****Bioaccumulation**

Chemical Name	log Pow
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	<=2.8
TRIETHANOLAMINE 102-71-6	-2.53

**Other adverse effects** No information available**13. DISPOSAL CONSIDERATIONS****Waste treatment****Waste Disposal Methods** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations.**Contaminated packaging** Do not re-use empty containers.**14. TRANSPORT INFORMATION****DOT Ground** CONSUMER COMMODITY ORM-D  
or  
LIMITED QUANTITY**IATA** UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD.QTY.**IMDG** UN1950, AEROSOLS, 2.1, LTD. QTY.**15. REGULATORY INFORMATION****International Inventories**

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	Not listed	X	X	X	X
TRIETHANOLAMINE	X	X	X	X	X	X	X	X

**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 Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

## U.S. Federal Regulations

### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Star Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	no

### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

## U.S. State Regulations

### California Proposition 65

This product does not contain any known Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
TRIETHANOLAMINE 102-71-6	X	X	X

EPA Pesticide Registration Number Not applicable

### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

### **WHMIS Hazard Class**

A Compressed gases

D2B Toxic materials

B5 Flammable aerosol



**16. OTHER INFORMATION**

<u>NFPA</u>	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 2	Flammability 4	Physical Hazard 1	Personal protection B

**Issuing date** 01-May-2017  
**Revision Date** 01-May-2017  
**Revision Note**

**Disclaimer**

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of Safety Data Sheet**