# SAFETY DATA SHEET

# 1. Identification

**Product number** 1000009075

**TERAND-12914 GLASS & PROTECTIVE COATING Product identifier** 

**Company information** 

1000 INTEGRAM DRIVE

PACIFIC, MO 63069 United States

General Assistance 800-327-1835 Company phone

1-866-836-8855 **Emergency telephone US Emergency telephone outside** 1-952-852-4646

US

01 Version #

Recommended use **COATING Recommended restrictions** None known.

# 2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1

Not classified. **Health hazards OSHA** defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** Extremely flammable aerosol.

**Precautionary statement** 

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open Prevention

flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Wash hands after handling. Response

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Storage **Disposal** Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

# 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	2.5 - 10
Isopropyl Alcohol		67-63-0	2.5 - 10
Propane		74-98-6	1 - 2.5
Other components below reportable levels			90 - 100

<sup>\*</sup>Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

# 4. First-aid measures

Inhalation If symptoms develop move victim to fresh air. Get medical attention if symptoms persist. Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists. Rinse with water. Get medical attention if irritation develops and persists.

Eye contact

Ingestion

Most important

symptoms/effects, acute and

delayed

Indication of immediate

medical attention and special treatment needed

Treat symptomatically.

Not available.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

# 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

Rinse mouth. Get medical attention if symptoms occur.

Direct contact with eyes may cause temporary irritation.

Specific hazards arising from the chemical

nent Firefighters must use standard protective equipment including flame retardant coat, helmet with

Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Specific methods

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Move containers from fire area if you can do so without risk. Containers should be cooled with

water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

General fire hazards Extremely flammable aerosol.

# 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. For waste disposal, see section 13 of the SDS.

**Environmental precautions** 

Avoid discharge into drains, water courses or onto the ground.

# 7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hydiene practices.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Isopropyl Alcohol (CAS 67-63-0)	PEL	980 mg/m3	
•		400 ppm	
Propane (CAS 74-98-6)	PEL	1800 mg/m3	
		1000 ppm	

#### **US. ACGIH Threshold Limit Values**

Components	Туре	Value	
Butane (CAS 106-97-8)	STEL	1000 ppm	
Isopropyl Alcohol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Components	Туре	Value	
Butane (CAS 106-97-8)	TWA	1900 mg/m3	
		800 ppm	
Isopropyl Alcohol (CAS 67-63-0)	STEL	1225 mg/m3	
,		500 ppm	
	TWA	980 mg/m3	
		400 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m3	
		1000 ppm	

#### **Biological limit values**

ACGIH Biological Expos	ACGIH Biological Exposure Indices			
Components	Value	Determinant	Specimen	Sampling Time
Isopropyl Alcohol (CAS	40 mg/l	Acetone	Urine	*

<sup>\* -</sup> For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

## Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear suitable protective clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an

air-supplied respirator.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

# 9. Physical and chemical properties

#### **Appearance**

Physical state Gas.
Form Aerosol.
Color Not available.
Odor Not available.
Odor threshold Not available.
PH Not available.
Melting point/freezing point Not available.

Initial boiling point and boiling

range

212 °F (100 °C) estimated

Flash point -156.0 °F (-104.4 °C) PROPELLANT estimated

Evaporation rate Not available.
Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

2.5 % estimated

(%)

Flammability limit - upper

(%)

12 % estimated

Not available. Explosive limit - lower (%) Not available. Explosive limit - upper (%)

60 psig @70F estimated Vapor pressure

Vapor density Not available. Not available. Relative density

Solubility(ies)

Not available. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

797 °F (425 °C) estimated **Auto-ignition temperature** 

**Decomposition temperature** Not available. Not available. **Viscosity** 

Other information

Not explosive. **Explosive properties** Heat of combustion (NFPA 4.55 kJ/g estimated

30B)

**Oxidizing properties** Not oxidizing. Specific gravity 0.963 estimated

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Isocyanates. Chlorine. **Hazardous decomposition** No hazardous decomposition products are known.

products

## 11. Toxicological information

Information on likely routes of exposure

No adverse effects due to inhalation are expected. Inhalation Skin contact No adverse effects due to skin contact are expected. Direct contact with eyes may cause temporary irritation. Eye contact

Expected to be a low ingestion hazard. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

**Acute toxicity** 

Components **Species Test Results** 

Butane (CAS 106-97-8)

**Acute** Inhalation

LC50 Mouse 1237 mg/l, 120 Minutes

52 %, 120 Minutes

Rat 1355 mg/l

Product name: TERAND-12914 GLASS & PROTECTIVE COATING

Components Species Test Results

Isopropyl Alcohol (CAS 67-63-0)

Acute
Dermal
LD50 Rabbit 16.4 ml/kg, 24 Hours
Inhalation

LC50

Rat > 10000 ppm, 6 Hours

Oral

LD50 Rat 5.84 g/kg

Propane (CAS 74-98-6)

Acute Inhalation

LC50 Mouse 1237 mg/l, 120 Minutes

52 %, 120 Minutes

Rat 1355 mg/l 658 mg/l/4h

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation. **Serious eye damage/eye** Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

**Reproductive toxicity**This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

Not classified.

single exposure

Specific target organ toxicity -

repeated exposure

Not classified.

**Aspiration hazard** Not likely, due to the form of the product.

## 12. Ecological information

**Ecotoxicity**The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Isopropyl Alcohol (CA	S 67-63-0)		
Aquatic			
Algae	IC50	Algae	1000.0001 mg/L, 72 Hours
Crustacea	EC50	Daphnia	13299 mg/L, 48 Hours
Fish	LC50	Bluegill (Lepomis macrochirus)	> 1400 mg/l, 96 hours

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** 

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Partition coefficient n-octanol / water (log Kow)

2.89 Butane Isopropyl Alcohol 0.05 Propane 2.36

Mobility in soil No data available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents **Disposal instructions** 

under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance

with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal. Do not re-use empty containers.

# 14. Transport information

DOT

UN1950 **UN number** 

UN proper shipping name

Aerosols, flammable, (each not exceeding 1 L capacity)

Transport hazard class(es)

2.1 Class Subsidiary risk 2.1 Label(s)

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions N82 Packaging exceptions 306 Packaging non bulk None Packaging bulk None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking.

**IATA** 

**UN number** UN1950

**UN proper shipping name** Aerosols, flammable

Transport hazard class(es)

**Class** 2.1 Subsidiary risk Label(s) 2.1

Not applicable. Packing group

**Environmental hazards** No. **ERG Code** 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety

instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

LTD QTY **Packaging Exceptions** 

**IMDG** 

**UN number** UN1950 UN proper shipping name **AEROSOLS**  Transport hazard class(es)

Class 2.1 Subsidiary risk Label(s) None

Packing group Not applicable.

LTD QTY

Not applicable.

**Environmental hazards** 

Marine pollutant No. F-D, S-U **EmS** 

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety

instructions, SDS and emergency procedures before handling.

**Packaging Exceptions** Transport in bulk according to

Annex II of MARPOL 73/78 and the IBC Code

DOT



IATA; IMDG



## 15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US federal regulations** 

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No

> Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

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## SARA 313 (TRI reporting)

Not regulated.

#### Other federal regulations

# Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

## Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8) Propane (CAS 74-98-6)

Safe Drinking Water Act

Not regulated.

(SDWA)

## **US state regulations**

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

# US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

# **US. Massachusetts RTK - Substance List**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

# US. New Jersey Worker and Community Right-to-Know Act

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

## **US. Rhode Island RTK**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

# **US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive

#### US - California Proposition 65 - CRT: Listed date/Developmental toxin

2-Ethoxyethanol (CAS 110-80-5) Listed: January 1, 1989 Ethylene Glycol (CAS 107-21-1) Listed: June 19, 2015 US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

2-Ethoxyethanol (CAS 110-80-5) Listed: January 1, 1989

#### International Inventories

Inventory name	On inventory (yes/no)*
Australian Inventory of Chemical Substances (AICS)	Yes
Domestic Substances List (DSL)	Yes
Non-Domestic Substances List (NDSL)	No
Inventory of Existing Chemical Substances in China (IECSC)	Yes
European Inventory of Existing Commercial Chemical Substances (EINECS)	No
European List of Notified Chemical Substances (ELINCS)	No
Inventory of Existing and New Chemical Substances (ENCS)	No
Existing Chemicals List (ECL)	Yes
New Zealand Inventory	Yes
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
	Australian Inventory of Chemical Substances (AICS) Domestic Substances List (DSL) Non-Domestic Substances List (NDSL) Inventory of Existing Chemical Substances in China (IECSC) European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Existing Chemicals List (ECL) New Zealand Inventory Philippine Inventory of Chemicals and Chemical Substances

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Country(s) or region Inventory name On inventory (yes/no)\*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Vac

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

# 16. Other information, including date of preparation or last revision

**Issue date** 10-02-2018

Version # 01

**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.

Revision information Product and Company Identification: Alternate Trade Names

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