



# SAFETY DATA SHEET

## SECTION 1 — PRODUCT IDENTIFICATION

**Product identifier:** VLR LETTER REMOVING SOLVENT

**Product Number:** 1019 & 1020

**Intended Use:** Removal of heat applied materials from textiles.

**Manufacturer's name and address:** Refer to supplier

**Supplier name and address:**

***ALBATROSS USA INC./EXPERT WORLDWIDE***

36-41 36<sup>th</sup> Street  
Long Island City, New York  
United States  
11106  
718-392-6272

5439 San Fernando Road West  
Los Angeles, California  
United States  
90039  
818-543-5850

**Emergency Telephone #:** Chemtrec (Day or Night) 800-424-9300  
(For Chemical Emergency: Spill, Leak, Fire, Exposure or Accident)

This MSDS complies with 29CFR 19190.1200 (Hazard Communication Standard) and WHMIS regulations.

**IMPORTANT:** Read this MSDS before handling and disposing of this product. Pass this information on to employees, customer, and users of this product.

## SECTION 2 — HAZARDS IDENTIFICATION

**Flammable Liquids, Category 2, H225**

**Eye Irritation, Category 2A, H319**

For full text of the H-Statements mentioned in this Section, see Section 16.



**GHS Signal Word:**

**GHS Hazard Phrases:**

**Danger**

H225: Highly flammable liquid and vapour

H319: Causes serious eye irritation

**GHS Precaution Phrases:**

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking

P233: Keep container tightly closed

P240: Ground/bond container and receiving equipment

P241: Use explosion-proof electrical/ventilating/lighting equipment

P242: Use only non-sparking tools

P243: Take precautionary measures against static discharge

P264: Wash hands thoroughly after handling

P280: Wear protective gloves/protective clothing/eye protection/face protection

P261: Avoid breathing gas/mist/vapors/spray

P271: Use only outdoors or in a well-ventilated area

P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337+313: If eye irritation persists, get medical advice/attention.  
 P370+378: In case of fire, use dry chemical to extinguish  
 P403+235: Store in cool/well-ventilated place  
 P501: Dispose of contents/container according to local, state and federal regulations

**Hazards not otherwise classified (HNOC) or not covered by GHS - none**

### SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

**Substances:**

Synonyms: Ethylene glycol methylene ether  
 Formaldehyde ethylene acetal  
 Formula: C<sub>3</sub>H<sub>6</sub>O<sub>2</sub>  
 Molecular weight: 74.08 g/mol  
 CAS-No. 646-06-0  
 EC-No. 211-463-5  
 Index-No. 605-017-00-2

**Hazardous Components**

Component	Classification	Concentration
1,3-dioxolane	Flam.Liq. 2, Eye Irrit. 2A H225, H319	100%

For the full text of the H-Statements mentions in this Section, see Section 16.

### SECTION 4 — FIRST AID MEASURES

**Description of first aid measures:**

**General advice:**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptom and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (section 2) and/or section 11.

**Indication of any immediate medical attention and special treatment needed**

No data available.

### SECTION 5 — FIRE FIGHTING MEASURES

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture.**

Carbon oxides

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**

Use water spray to cool unopened containers.

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see Section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and material for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in Container for disposal according to local regulations (see section 13).

**Reference to other sections**

For disposal see section 13.

## SECTION 7 — HANDLING & STORAGE

**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition – No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Containers with are opened must be carefully resealed and kept upright to prevent leakage.

**Specific end use(s)**

Apart for the uses mentioned in section 1, no other specific uses are stipulated.

## SECTION 8 — EXPOSURE CONTROL/PERSONAL PROTECTION

**Control parameters****Components with workplace control parameters**

Component	CAS-No.	Value	Control parameters	Basis
1,3-Dioxolane	646-06-0	TWA	20.000000 ppm	USA, ACGIH Threshold Limit Values (TLV)
	Remarks	Hematologic effects		

**Exposure controls****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Eye/face protective equipment

#### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate governmental standards such as NIOSH (us) or EN 166 (EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body protection

Impervious clothing. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Appearance:	Clear, colourless, liquid
Odor:	Solvent odor
Odor Threshold:	No data available
pH	No data available
Melting point:	-95°C (-139°F)
Initial boiling point and range:	75 – 75 °C (167 – 169 F) at 1,013 hPA (750 mmHg)
Flashpoint:	-3 °C (27°F) Closed Cup
Evaporation Rate:	No data available
Flammability (solid, gas_	No data available
Upper/lower flammability limits:	No data available
Vapour pressure:	93hPA (70 mmHg) at 20° C (68°F)
Relative density:	2.56 – (Air = 1.0)
Relative density:	1.06 g/cm <sup>3</sup> at 25°C (77° F)
Water Solubility:	soluble
Partition coefficient:	
n-octanol/water	Low Pow: 0.37
Auto-ignition temperature:	250°C (482°F) at 1,019.3 1.027.5 hPA (764.5 – 770.7 mmHg)
Decomposition temperature:	No data available
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

### Other safety information

Surface tension:	71.7 mN/m at 20°C (68°F)
Relative vapor density:	2.56 – (Air = 1.0)

**SECTION 10 — STABILITY AND REACTIVITY****Reactivity**

No data available.

**Chemical Stability:**

Stable under recommended storage condition Contains the following stabiliser(s): BHT (0.0075%)

**Possibility of hazardous reactions:**

Vapours may form explosive mixture with air.

**Conditions to avoid:**

Heat, flames and sparks

**Incompatible materials:**

Strong oxidizing agents.

**Hazardous decomposition products**

Other decomposition products – No data available. In the event of fire: section 5

**SECTION 11 — TOXICOLOGICAL INFORMATION****Information on toxicological effects****Acute toxicity**

LD50 Oral – Rate – male and female – 5,1200 mg/kg  
(OECD Test Guideline 401)

LC50 Inhalation – Rat – male and female – 4 h – 68.4 mg/l  
(OECD Test Guideline 403)

LD50 Dermal – Rat = 15,000 mg/kg

No data available

**Skin corrosion/irritation**

Skin – Rabbit

Result: No skin irritation

**Serious eye damage/eye irritation**

Eyes – Rabbit

Result: Irritating to eyes.

**Respiratory or skin sensitisation**

- Mouse

Result: Did not cause sensitisation on laboratory animals.

(OECD Test Guideline 429)

**Germ cell mutagenicity**

In vitro mammalian cell gene mutation test

Mouse lymphoma cells

Result: negative

**Carcinogenicity**

**IARC:** No component of this product present a levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a cardinogen or potential carcinogen by OSHA.

**Reproductive toxicity:**

No data available

**Specific target organ toxicity – single exposure:**

No data available.

**Specific target organ toxicity – repeated exposure:**

No data available

**Aspiration hazard**

No data available

**Additional Information:**

Repeated dose toxicity

Rat – male – Oral – NOAEL: 75 mg/kg – OECD Test Guideline 407

RTECS: JH6760000

## SECTION 12 — ECOLOGICAL INFORMATION

**Toxicity**

Toxicity to fish      semi-static test LC50 – Lepomis macrochirus - > 95.4 mg/l – 96 h  
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates:  
Immobilization EC50 – Daphnia magna (Water flea) - > 772 mg/l – 48 h  
(OECD Test Guideline 202)

Toxicity to algae      Growth inhibition EC50 – Pseudokirchneriella subcapitata - > 877 mg/l – 72 h

**Persistence and degradability**

Biodegradability      aerobic – Exposure time 35 d  
Result: 3.7% - According to the results of tests of biodegradability this product is not readily biodegradable.  
(OECD Test Guideline 301D)

**Bioaccumulative potential:**

No data available.

**Mobility in soil:**      No data available.

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

**Other adverse effects:** No data available.

## SECTION 13 — DISPOSAL CONSIDERATIONS

**Waste Disposal Method:**      Dispose of in accordance with all applicable local, state, and federal regulations

## SECTION 14 — TRANSPORT INFORMATION

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:**      Dioxolane  
Limited Quantity\*.

**DOT Hazard Class:** 3 FLAMMABLE LIQUID  
**UN/NA Number:** UN1166 **Packing Group:** II

**\*Limited Quantity Exemption:** This product, as packaged in 20 & 32 oz. containers, meets the exemption requirements of section 173.150 (49 CFR 173) as a limited quantity for ground shipments within the United States. Limited quantities require the limited quantity diamond mark on all outer cartons.

**AIR TRANSPORT:** We do NOT recommend this product to be shipped via air. It would need to be repacked by an authorized packing company and the DG would have to be completed by a licensed hazardous material shipping company.

## SECTION 15 — REGULATORY INFORMATION

<b>This material meets the EPA</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Acute (immediate) Health Hazard
<b>'Hazard Categories' defined</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Chronic (delayed) Health Hazard
<b>For SARA Title III Sections</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Fire Hazard
<b>311/312 as indicated:</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Sudden Release of Pressure Hazard
	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Reactive Hazard

<b>CAS #</b>	<b>Hazardous Components (Chemical Name)</b>	<b>Other US EPA or State Lists</b>
646-06-0	1,3-Dioxolane	Massachusetts, Pennsylvania, New Jersey

### California Prop. 65 Components:

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

## SECTION 16 — OTHER INFORMATION

### Full text of H-Statements referred to under section 2 and 3.

Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation

### HMIS Rating:

Health hazard:	2
Chronic health hazard:	*
Flammability:	3
Physical hazard:	0

### NFPA Rating:

Health hazard:	2
Fire hazard:	3
Reactivity hazard:	0

<b>Revision Date:</b>	03/04/2016
<b>Prepared by:</b>	Albatross USA Inc.
<b>Additional Information About This Product:</b>	No data available
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