



# SAFETY DATA SHEET

## SECTION 1 — PRODUCT IDENTIFICATION

**Product identifier:** VLR LETTER REMOVING SOLVENT

**Product Number:** 1012, 1020

**Intended Use:** Removal of heat applied letters 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**

**Eye Irritation, Category 2A**

**Specific Target Organ Toxicity, Category 3**



**GHS Signal Word:**

**GHS Hazard Phrases:**

**Danger**

H225: Highly flammable liquid and vapour

H319: Causes serious eye irritation

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

**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

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P370+378: In case of fire, use dry chemical to extinguish

P403+233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up

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:

| Chemical name: | Concentration | CAS Number |
|----------------|---------------|------------|
| 1,3 Dioxolane  | >80%          | 646-06-0   |
| Methyl Acetate | <20%          | 79-20-9    |
| Methanol       | <2.5%         | 67-56-1    |
| Water          | <1.5%         | 7732-18-5  |

All concentrations are by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 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**

Move to fresh air. Get medical attention. Treat symptomatically.

**Skin contact**

Wash with soap and water. Get medical attention if symptoms persist. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

**Eye contact**

Immediately flush with plenty of water for at least 15 minutes. If easy to do so, remove contact lenses. Get medical attention.

**Ingestion:**

Call a physician or poison control center immediately. Only induce vomiting at the instructions of medical personnel. Never give anything by mouth to an unconscious person.

**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                                 |
|----------------|----------|---------------------|--------------------|---------------------------------------|
| Methyl acetate | 79-20-9  | TWA                 | 200 ppm            | US ACGIH Threshold Limit Values (TLV) |
| Methanol       | 67-56-1  | TWA                 | 200 ppm            | US ACGIH Threshold Limit Values (TWA) |
| 1,3-Dioxolane  | 646-06-0 | TWA                 | 20.000000 ppm      | US 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   |
| Boiling point range:             | 55.8 - 75 °   |
| Flashpoint:                      | -13 °C Tag Closed Cup (Lowest component)                  |
| Evaporation Rate:                | No data available   |
| Flammability (solid, gas_        | No data available   |
| Upper/lower flammability limits: | No data available   |
| Vapour pressure:                 | 228.3 mbar (20 C) Methyl Acetate                          |
| Relative density:                | N/A   |
| Relative density:                | N/A   |
| Water Solubility:                | soluble   |
| Partition coefficient:           |   |
| n-octanol/water                  | N/A   |
| 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   |

**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 likely routes of exposure:**

- Inhalation:** May cause respiratory irritation. May cause drowsiness or dizziness.  
**Ingestion:** None known.  
**Skin contact:** None known.  
**Eye contact:** Causes serious eye damage.

**Information on toxicological effects****Oral:**

**Methyl Acetate:**  
LD50 Oral – Rat): 6,482 mg/kg (highest dose tested)

**Methanol:**  
LD-50 Oral – Rat: 5,600 mg/kg

**1,3 Dioxolane:**  
LD50 Oral – Rat – male and female – 5,1200 mg/kg  
(OECD Test Guideline 401)

**Inhalation:**

**Methyl Acetate:**  
LC50 Inhalation – Rat – 4 h > 49 mg/l

**Methanol:**  
LC50 Inhalation – Rat – 4 h: 64000 ppm

**1,3 Dioxolane**  
LC50 Inhalation – Rat – male and female – 4 h – 68.4 mg/l  
(OECD Test Guideline 403)

**Dermal:**

**Methyl Acetate:**  
LD50 Dermal – Rabbit > 2,000 mg/kg (highest does tested)

**Methanol:**  
LD50 Dermal – Rabbit: 17,100 mg/kg

**1,3 Dioxolane:**

LD50 Dermal – Rat = 15,000 mg/kg

**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 at 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 carcinogen 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 (1,3 dioxolane)

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

RTECS: JH6760000

**SECTION 12 — ECOLOGICAL INFORMATION****Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish:**

**Methyl Acetate:**

LC-50 (Fathead Minnow, 96h): 320 – 399 mg/l

**Methanol:**

LC-50 (Bluegill Sunfish, 96 h): 15,400 mg/l

**1,3 Dioxolane:**

Semi-static test LC50 – Lepomis macrochirus - > 95.4 mg/l – 96 h

(OECD Test Guideline 203)

**Aquatic Invertebrates:****1,3 Dioxolane:**

Toxicity to daphnia and other aquatic invertebrates:

Immobilization EC50 – Daphnia magna (Water flea) - > 772 mg/l – 48 h  
(OECD Test Guideline 202)

**Toxicity to Aquatic Plants:****Methyl Acetate:**

EC-50 (Selenastrum capricornutum, 72 h): > 120 mg/l

**Methanol:**

EC-50 Algae (Pseudokirchneriella subcapitata), 96h >22,000 mg/l

**1,3 Dioxolane:**

EC50 Algae (Pseudokirchneriella subcapitata), 72h > 877 mg/l

**Persistence and degradability:**

Biodegradation:

**Methyl Acetate:** 70% (28 d)

**Methanol:** 95% (20 d)

**1,3 Dioxolane:** 3.7% Aerobic (35 d) -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:** Flammable liquid, n.o.s.  
Limited Quantity\*.

**DOT Hazard Class:** 3 FLAMMABLE LIQUID

**UN/NA Number:** UN1993 **Packing Group:** II

**\*Limited Quantity Exemption:** This product, as packaged in 4 oz. & 20 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 ‘Hazard Categories’ defined For SARA Title III Sections 311/312 as indicated:</b> | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | Acute (immediate) Health Hazard   |
|  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | Chronic (delayed) Health Hazard   |
|  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | Fire Hazard                       |
|  | <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                   |

**US EPCRA (SARA Title II) Section 313 – Toxic Chemical List:** Methanol

|              |   |   |
|--------------|---|---|
| <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:** Methanol

This product can expose you to chemicals including methanol which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**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 |

**Revision Date:** 08/10/2018  
**Prepared by:** Albatross USA Inc.  
**Additional Information About This Product:** No data available

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