

SAFETY DATA SHEET**1. Identification**

Product Name: 710 Solution
Product Code: A-3004
SDS Date: 4/12/2018
Use: Industrial

Solvent Direct Inc.
19129 S Hamilton Ave
Gardena, CA 90248

General Information: 310-344-4011
CHEMTREC: 800-424-9300

2. Hazard(s) identification**GHSClassification**

Flammable liquids (Category 2)
Serious eye damage/eye irritation (Category 2A)

Pictogram

Signalword Danger

HazardStatement

Highly flammable liquid and vapor.
Causes serious eye irritation.

Precautionary

Highly flammable liquid and vapor. Causes serious eye irritation. Prevention Keep away from heat, sparks, open flames, hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof electrical/ ventilating/ lighting/ equipment. Use only non sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Wear protective gloves/ eye protection/ face protection. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use dry sand, dry chemical, or alcohol resistant foam for extinction. Store in a well-ventilated place. Keep cool. Dispose of contents/ container in accordance with local/ regional/ national/ international regulations.
Dispose of contents/container in accordance with local/ state/ and federal regulations.

Hazards not otherwise classified: Not available

3. Composition/information on ingredients

| Name | CAS | Concentration |
|-----------|----------|---------------|
| n-Heptane | 142-82-5 | 1-5 |
| Ethanol | 64-17-5 | 80-100 |

4. 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 symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indications of any immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures

| | |
|--------------------------------|--|
| Extinguishing Media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Special Hazards | Carbon oxides |
| Advice for firefighters | Wear self-contained breathing apparatus for firefighting if necessary. |
| Further Information | Use water spray to cool unopened containers. |

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 vapors accumulating to form explosive concentrations. Vapors 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 materials 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.

7. Handling and storage

Safe Handling Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of

electrostatic charge.

Safe Storage

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

8. Exposure controls/personal protection

| Name | CAS | | |
|--------------------|--------------------|-----------|---------------|
| n-Heptane | 142-82-5 | | |
| OSHA TWA | OSHA STEL | ACGIH TWA | ACGIH STEL |
| 500 ppm, 2,000 mg/ | 500 ppm, 2,000 mg/ | 400 ppm | 500 ppm |
| Ethanol | 64-17-5 | | |
| OSHA TWA | OSHA STEL | ACGIH TWA | ACGIH STEL |
| 1000 ppm | Not Available | 1000 ppm | Not Available |

Engineering Control

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

Eye/Face Protection

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

Skin Protection

Handle with butyl rubber 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 multipurpose 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.

9. Physical and chemical properties

| | | |
|-------------------------------|---------|-------------------------|
| Appearance | Ethanol | Colorless, clear liquid |
| Odor | Ethanol | No data available |
| Odor Threshold | Ethanol | No data available |
| pH | Ethanol | No data available |
| Melting/Freezing Point | Ethanol | -143.99C (-227.18F) |

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| | | |
|------------------------------------|---------|---|
| Initial Boiling Point/Range | Ethanol | 78.0 - 80.0 °C (172.4 - 176.0 °F) |
| Flash Point | Ethanol | 14.0 °C (57.2 °F) - closed cup |
| Evaporation Rate | Ethanol | No data available |
| Flammability | Ethanol | No data available |
| Upper Explosion Limit | Ethanol | 19% |
| Lower Explosion Limit | Ethanol | 3.3% |
| Vapor Pressure | Ethanol | 59.5 hPa (44.6 mmHg) at 20.0 °C (68.0 °F) |
| Vapor Density | Ethanol | No data available |
| Relative Density | Ethanol | 0.7974 g/cm ³ |
| Water Solubility | Ethanol | completely soluble |
| Partition Coefficient | Ethanol | No data available |
| Auto Ignition Temperature | Ethanol | 363.0 °C (685.4 °F) |
| Decomposition Temperature | Ethanol | No data available |
| Viscosity | Ethanol | No data available |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | No data available |
| Chemical Stability | Stable under recommended storage conditions. |
| Possibility of Hazardous Reactions | Vapors may form explosive mixture with air. |
| Conditions to Avoid | Heat, flames and sparks. Extremes of temperature and direct sunlight. |
| Incompatible materials | Alkali metals, Oxidizing agents, Peroxides |
| Hazardous Decomposition Products | No data available |

11. Toxicological information

| Name | CAS |
|--|---|
| n-Heptane | 142-82-5 |
| LD50: > 5,000 mg/kg | |
| Inhalation: No data available | |
| Dermal: No data available | |
| Skin corrosion/irritation | Irritating to skin. May cause skin irritation in susceptible persons. |
| Serious eye damage/eye irritation | Vapors may cause irritation to the eyes, respiratory system and the skin. |

Respiratory or skin sensitization Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.

Germ cell mutagenicity Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity Not identified as probable, possible or confirmed human carcinogen by IARC, NTP, or ACGIH

Reproductive Species: Rat
 Application Route: Inhalation
 Dose: 0, 900, 3000, 9000 ppm
 Number of exposures: 6 hr/d, 5 d/wk
 Test period: 13 wk
 Method: OECD Test Guideline 416
 NOAEL Parent: 9000 ppm
 NOAEL F1: 3000 ppm
 NOAEL F2: 3000 ppm

Additional information Concentrations substantially above the TLV value may cause narcotic effects. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Solvents may degrease the skin.

| Name | CAS |
|---|---------|
| Ethanol | 64-17-5 |
| LD50 Oral - Rat - 2,743 mg/kg | |
| Inhalation: No data available | |
| LD50 Dermal - Rabbit - > 2,000 mg/kg | |
| Skin corrosion/irritation Result: Mild skin irritation - 24 h | |
| Serious eye damage/eye irritation Result: Irritating to eyes. - 24 h | |
| Respiratory or skin sensitization No data available | |
| Germ cell mutagenicity No data available | |
| Carcinogenicity Not identified as probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA | |
| Reproductive No data available | |
| Additional information drying, cracking of the skin, Skin irritation Liver - Irregularities | |

12. Ecological information

| Name | CAS | Toxicity |
|-----------|----------|--|
| n-Heptane | 142-82-5 | LL50: 1.284 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR LC50: 375 mg/l Exposure time: 96 h Species: Tilapia mosambica (Fish) EC50: 1.5 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Toxic to aquatic organisms. LC50: 0.1 mg/l Exposure time: 96 h Species: Mysidopsis bahia (mysid shrimp) semi-static test Very toxic to aquatic organisms. EL50: 4.338 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (microalgae) Method: QSAR |
| Ethanol | 64-17-5 | Not Available |

13. Disposal considerations

Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information

| | |
|------------------------------|------------------|
| Proper Shipping Name | Alcohols, n.o.s. |
| Hazard Class | 3 |
| Identification Number | UN1987 |
| Packing Group | II |
| Label | Flammable |

15. Regulatory information

| Name | CAS |
|---------------------|------------------------------------|
| n-Heptane | 142-82-5 |
| SARA 302/304 | No components were identified |
| SARA 313 | No components were identified |
| CERCLA | No components were identified |
| SARA 311/312 | Fire Hazard Acute Health Hazard |
| PROP 65 | No components were identified |

This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

| Name | CAS |
|---------------------|------------------------------------|
| Ethanol | 64-17-5 |
| SARA 302/304 | No components were identified |
| SARA 313 | No components were identified |
| CERCLA | No components were identified |
| SARA 311/312 | Fire Hazard, Chronic Health Hazard |
| PROP 65 | No components were identified |

This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

16. Other information, including date of preparation or last revision**SDS Date:** 4/12/2018**Disclaimer:**

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