



SAFETY DATA SHEET

SECTION I PRODUCT & COMPANY IDENTIFICATION

COMMON NAME

295 Red Fluid

PRODUCT FILE NUMBER

920:405-924BA-10

MANUFACTURER'S NAME

Alta Robbins, Inc.

ADDRESS

110 South 1200 West

CITY, STATE, ZIP

Lindon, Utah 84042

PRODUCT MODEL NUMBER

R295

PRODUCT USE

Indicating Fluid

EMERGENCY PHONE NUMBER

801-785-1114 or 936-697-3688

DATE PREPARED

01-01-2019

SECTION II HAZARDS IDENTIFICATION

Classification: Material is considered hazardous UN2504, Hazard Class 6.1, PG 3

Signal Word:

DANGER!

Hazard Statements:

Fatal if inhaled

Causes serious eye irritation



PRECAUTIONARY STATEMENTS

APPEARANCE: RED FLUID

Warning! May be fatal if inhaled. Possible risks of irreversible effects. May cause severe eye irritation and possible injury. May be absorbed through intact skin. Causes digestive and respiratory tract irritation. May be harmful if swallowed. May cause severe skin irritation and possible burns. May cause central nervous system depression. May cause liver and kidney damage.

Target Organs: Kidneys, central nervous system, liver, respiratory system, eyes.

POTENTIAL HEALTH EFFECTS:

ACUTE

EYES: Contact with eyes may cause severe irritation, and possible eye burns.

SKIN CONTACT: May be absorbed through damaged or abraded skin in harmful amounts. Exposure may cause irritation and possible burns. Causes symptoms similar to those of inhalation.

INGESTION: Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver and kidney damage.

INHALATION: May be fatal if inhaled. Causes respiratory tract irritation. May cause liver and kidney damage. Exposure produces central nervous system depression. May cause lung damage. May cause headaches, loss of appetite, nausea, fatigue, abdominal pain, darkened urine and jaundice.

CHRONIC

CHRONIC EFFECTS OF EXPOSURE

May cause liver, lung, testes, and kidney damage. Exposure above TLV may increase the body's burden of bromine. To the best of our knowledge all toxicological properties have not been thoroughly investigated. Prolonged or repeated exposure may cause nausea, dizziness, and headache.

SECTION III COMPOSITION/INFORMATION ON INGREDIENTS

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|---------------------------------|------------------|----------------------------|------------------------|
| 1. <u>CHEMICAL NAME:</u> | Tetrabromoethane | <u>Common Name:</u> | Acetylene Tetrabromide |
| CAS No: | 79-27-6 | | |
| OSHA/PEL: | 14MG/M3 | | |
| ACGIH/TLV: | Air: 1 ppm | | |
| %: | 97 | | |
| 2. <u>CHEMICAL NAME:</u> | Stoddard Solvent | | |
| CAS No: | 8052-41-3 | | |
| OSHA/PEL: | NE | | |
| ACGIH/TLV: | NE | | |
| %: | 3 | | |
| 3. <u>CHEMICAL NAME:</u> | Red Dye | | |
| CAS No: | 4477-79-6 | | |
| OSHA/PEL: | NE | | |
| ACGIH/TLV: | NE | | |
| %: | Trace | | |

* Not Established

SECTION IV FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

SKIN: Get medical aid immediately. Remove contaminated clothing and shoes immediately. Immediately wash skin with plenty of soap & water for at least 15 minutes.

INGESTION: Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

INHALATION: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes To Physician: Monitor liver function closely.

SECTION V

FIRE FIGHTING MEASURES

FLASH POINT

Non – Flashing

METHOD USED

FLAMMABLE LIMITS (in Air % by Vol.)

LEL UEL

Non - Flammable

AUTO-IGNITION TEMPERATURE

635°F, (335° C)

EXTINGUISHER MEDIA

CO2, Dry Chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES

Evacuate area of all unnecessary personnel. Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Emits highly toxic fumes of bromine, hydrogen bromide, and carbonyl bromide.

GENERAL INFORMATION: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated. Runoff from fire control or dilution water may cause pollution.

EXTINGUISHING MEDIA: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

SECTION VI

ACCIDENTAL RELEASE MEASURES

GENERAL INFORMATION: Use proper personal protective equipment as indicated in section 8.

RESPONSE TO SMALL SPILLS:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which leads to waterways. The product is a non-hazardous waste when spilled, material is disposed of defined in Resource Conservation Recovery Act (RCRA) regulations (40CFR261). Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

WASTE DISPOSAL:

Place in an appropriate disposal facility in compliance with Federal, State, and Local regulations.

SECTION VII

HANDLING AND STORAGE

HANDLING AND STORAGE: Skin and eye contact should be avoided as good industrial practice. Wearing of protective gloves and eye protection is recommended. Wash hands and contaminated skin area after handling. Follow all warnings and precautions even after container is emptied. Wash thoroughly after handling or at the end of the shift. Avoid ingestion and inhalation. Use only in a chemical fume hood.

OTHER PRECAUTIONS: Store in cool, dry, and well-ventilated area away from strong oxidizers and acids. Keep container tightly closed when not in use. Keep away from metals. Poison room locked. Store away from alkalis. All handling equipment should be properly grounded to prevent the build-up of electrostatic charges. Storage area should be equipped with CO2 system. Handle in accordance with good industrial hygiene and safety practices.

SECTION VIII

EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION

Not typically required. If exposure exceeds permissible exposure limits wear a self-contained breathing apparatus in compliance with NIOSH/MSHA specifications. Comply with 29CFR 1910.134.

VENTILATION

General (mechanical) room ventilation is generally satisfactory. Special, local ventilation may be needed at points where vapors can be expected to exceed exposure limits.

PROTECTIVE GLOVES

For the best protection wear compatible chemical resistant gloves. Wear additional protective garments where necessary.

EYE PROTECTION

Wear chemical goggles if there is likelihood of contact with eyes.

ADDITIONAL PROTECTIVE CLOTHING OR EQUIPMENT

Boots, aprons, or chemical suits should be used when necessary to prevent skin contact. Eye wash fountains and safety showers should be available for emergency use.

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

CHEMICAL NAME	ACGIH	NIOSH	OSHA – Final PELs
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CAS# 79-27-6 is listed on the TSCA inventory.

Health and Safety Reporting List

None of the chemicals are on the health & Safety Reporting list.

Chemical Test rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this material have a TPQ.

SARA Codes

CAS #79-27-6: Immediate, delayed.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

SECTION IX

PHYSICAL & CHEMICAL PROPERTIES

BOILING POINT

401°F

VAPOR DENSITY (AIR=1)

11.9

PH

Not Available

APPEARANCE & ODOR

Red color, sweet, pungent odor

EVAPORATION RATE

Not Available

SPECIFIC GRAVITY (H₂O=1)

2.95 @ 25.8°C

SOLUBILITY IN WATER

Insoluble

MELTING POINT/FREEZING

32°F

MOLECULAR FORMULA

C₂H₂Br₄

VISCOSITY

Not Available

VAPOR PRESSURE(20°C)

.1mm Hg @68°F

REACTIVITY IN WATER

None

PHYSICAL STATE:

Liquid

MOLECULAR WEIGHT

345.63

DECOMPOSITION TEMPERATURE

Not Available

SECTION X

STABILITY AND REACTIVITY

Chemical Stability: Stable.

Conditions to Avoid: High temperatures.

Incompatibilities with other materials: Strong oxidizers, strong bases, and metals such as aluminum, magnesium, and zinc in the presence of steam. Will attack some forms of plastics, rubber, and coatings.

Hazardous Decomposition Products: Hydrogen bromide, bromine fumes, carbonyl bromide.

Hazardous Polymerization: Has not been reported.

SECTION XI

TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 79-27-6:

KI8225000

LD50/LC50:

CAS# 79-27-6:

Draize test, rabbit, eye: 100 mg Mild;

Draize test, rabbit, skin: 500 mg/24H Moderate;

Inhalation, rat: LC50 = 549 mg/m³/4H;

Inhalation, rat: LC50 = 550 mg/m³;

Oral, mouse: LD50 = 269 mg/kg;

Carcinogenicity:

CAS# 79-27-6:

Not listed by ACGIH, IARC, NTP, or CA Prop 65.

SECTION XII

ECOLOGICAL INFORMATION

Ecotoxicity: No data available. No information available.

Environmental: In water, substance will evaporate. In soil, it will slowly evaporate.

Physical: No Information available.

Other: No information available.

SECTION XIII

DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

SECTION XIV

TRANSPORT INFORMATION

Proper Shipping Name:	Tetrabromoethane
Hazard Class or Division:	6.1
Identification Number:	UN2504
Packing Group:	III
Packing Authorization:	D.O.T 49 CFR 173.153 & 173.203
IATA Packing Instructions:	611
Marking:	Marine Pollutant

SECTION XV

REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCE CONTROL ACT): Reported in the EPA TSCA Inventory.

SARA Section 302 Extremely Hazardous Substances (EHS): Not Provided

SARA Section 304 CERCLA Hazardous Substances: Not Provided

SARA Section 311/312 Hazard Communication Standard (HCS): Not Provided

SARA Section 313 Toxic Chemical List (TCL): Not Provided

Clean Water Act CWA – Priority Pollutants: Not Provided

STATE REGULATIONS: California Proposition 65: Not Provided

INTERNATIONAL REGULATIONS: Canada: Listed in DSL
Not Provided

SECTION XVI

OTHER INFORMATION

-THIS PRODUCT IS FOR INDUSTRIAL AND LABORATORY USE ONLY.

-Do not store in open, unlabeled or mislabeled containers.

-Store in cool, dry place with adequate ventilation.

-Keep away from flames and high temperatures.

-For personal hygiene protection, we recommend that employees wash thoroughly after handling product.

Always wash up before eating, smoking, and using toilet facilities.

-Keep out of reach of children.

-HMIS rating HEALTH -2 FLAMMABILITY - 0 REACTIVITY – 1

DISCLAIMER OF LIABILITY

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of the results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. User of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO THE INFORMATION CONTAINED HEREIN OR THE CHEMICAL TO WHICH THE INFORMATION REFERS. It is the responsibility of the user to comply with all applicable federal, state, local laws and regulations.