



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 201-003
Product name **Plastic Spray Clear Fixative**
Effective date 17-Jan-2012
Company information Sprayway, Inc.
1005 Westgate
Addison, IL 60101 United States
Company phone General information telephone 1-630-543-7600
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 07
Supersedes date 21-Mar-2011
Product use Solvent cleaner

2. Hazards Identification

Emergency overview Aerosol. EXTREMELY FLAMMABLE
CONTENTS UNDER PRESSURE.
Will be easily ignited by heat, spark or flames. Cancer hazard. Irritating to skin. Irritating to eyes. Irritating to respiratory system.

Potential health effects

Routes of exposure Inhalation. Skin contact.

Eyes Causes eye irritation.

Skin Irritating to skin.

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Irritating to respiratory system. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage.

Target organs Kidneys. Central nervous system. Liver. Lungs.

Chronic effects Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. May cause delayed lung injury.

Signs and symptoms Discomfort in the chest. Narcosis. Coughing. Liver enlargement. Jaundice.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Trichloroethylene	79-01-6	20 - 30
Propane	74-98-6	10 - 15
n-Butane	106-97-8	10 - 15
Methylal	109-87-5	10 - 15
Synthetic Isoparaffinic Hydrocarbon	64741-66-8	10 - 15
Light Aliphatic Solvent Naphtha	64742-89-8	8 - 10
Diacetone Alcohol	123-42-2	3 - 5
Odorless Mineral Spirits	64742-48-9	3 - 5
Xylene	1330-20-7	1 - 3
Ethyl Alcohol	64-17-5	0.1 - 0.5
Ethyl Benzene	100-41-4	0.1 - 0.5
Non-hazardous and other components below reportable levels		10 - 20

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.
Skin contact	Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. Get medical attention if irritation develops and persists.
Inhalation	Oxygen or artificial respiration if needed. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If inhalation of gas/fume/vapor/dust/mist from the material is excessive (air concentration is greater than the TLV or health effects are noticed), immediately remove the affected person(s) to fresh air. Get medical attention if symptoms persist.
Ingestion	Do not induce vomiting without advice from poison control center. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

5. Fire Fighting Measures

Flammable properties	Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.
Extinguishing media	
Suitable extinguishing media	Foam. Dry chemical. Carbon dioxide (CO ₂). Do not use water jet.
Protection of firefighters	
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Protective equipment and precautions for firefighters	In case of fire and/or explosion do not breathe fumes. Containers should be cooled with water to prevent vapor pressure build up.

6. Accidental Release Measures

Methods for containment	Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk.
Methods for cleaning up	Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

7. Handling and Storage

Handling	Pressurized container: Do not pierce or burn, even after use. Do not smoke while using or until sprayed surface is thoroughly dry. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not re-use empty containers. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.
Storage	Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat, sparks, and flame. Avoid exposure to long periods of sunlight. Store in cool place. Keep in an area equipped with sprinklers. Keep out of the reach of children. Level 3 Aerosol.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Trichloroethylene	79-01-6	10 ppm	25 ppm	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established
Methylal	109-87-5	1000 ppm	Not established	Not established
Diacetone Alcohol	123-42-2	50 ppm	Not established	Not established
Xylene	1330-20-7	100 ppm	150 ppm	Not established
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	Not established
Ethyl Benzene	100-41-4	20 ppm	125 ppm	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Trichloroethylene	79-01-6	100 ppm	Not established	200 ppm
Propane	74-98-6	1000 ppm	Not established	Not established
Methylal	109-87-5	1000 ppm	Not established	Not established
Diacetone Alcohol	123-42-2	50 ppm	Not established	Not established
Xylene	1330-20-7	100 ppm	Not established	Not established
Ethyl Alcohol	64-17-5	1000 ppm	Not established	Not established
Ethyl Benzene	100-41-4	100 ppm	Not established	Not established

Personal protective equipment

Eye / face protection

Not normally needed.

Skin protection

No special protective equipment required.

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA). If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Boiling point	140 °F (60 °C) estimated
Color	Clear.
Density	0.679 g/cm ³ estimated
Flammability (HOC)	31.0603 kJ/g estimated
Flash back	Yes
Flash point	-156 °F (-104.4 °C) Propellant
Form	Aerosol.
Freezing point	Not available
Odor	Solvent.
pH	Not applicable
Physical state	Liquid.
Pressure	40 - 50 psig @ 70F
Solubility	Partially
Specific gravity	0.6791 estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	Irritants. Toxic gas.

11. Toxicological Information

Acute effects

Acute LD50: 8149 mg/kg estimated, Rat, Dermal

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

Diacetone Alcohol	123-42-2	Oral LD50 Rat 4 g/kg; Dermal LD50 Rabbit 13500 mg/kg
Ethyl Alcohol	64-17-5	Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h
Ethyl Benzene	100-41-4	Inhalation LC50 Rat 17.2 mg/L 4 h; Oral LD50 Rat 3500 mg/kg; Dermal LD50 Rabbit 15354 mg/kg
Light Aliphatic Solvent Naphtha	64742-89-8	Oral LD50 Mouse 5000 mg/kg; Dermal LD50 Rabbit 3000 mg/kg
Methylal	109-87-5	Inhalation LC50 Mouse 57 g/m ³ 7 h; Oral LD50 Rat 6653 mg/kg
n-Butane	106-97-8	Inhalation LC50 Rat 658 mg/L 4 h
Odorless Mineral Spirits	64742-48-9	Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >3160 mg/kg
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h
Synthetic Isoparaffinic Hydrocarbon	64741-66-8	Inhalation LC50 Rat >5.04 mg/L 4 h; Oral LD50 Rat >7000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg
Trichloroethylene	79-01-6	Inhalation LC50 Rat 8000 ppm 4 h; Inhalation LC50 Rat 26300 ppm 1 h; Oral LD50 Rat 4290 mg/kg; Dermal LD50 Rabbit >20 g/kg
Xylene	1330-20-7	Inhalation LC50 Rat 5000 ppm 4 h; Inhalation LC50 Rat 47635 mg/L 4 h; Oral LD50 Rat 4300 mg/kg; Dermal LD50 Rabbit >1700 mg/kg

Sensitization

Not expected to be hazardous by OSHA criteria.

Carcinogenicity

Hazardous by OSHA criteria. Risk of cancer cannot be excluded with prolonged exposure.

IARC - Group 1 (Carcinogenic to Humans)

Ethyl Alcohol 64-17-5 Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages)

IARC - Group 2A (Probably Carcinogenic to Humans)

Trichloroethylene 79-01-6 Monograph 63 [1995]; Supplement 7 [1987]

IARC - Group 2B (Possibly Carcinogenic to Humans)

Ethyl Benzene 100-41-4 Monograph 77 [2000]

Teratogenicity

Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity

LC50 150 mg/L estimated, Fish, 96.00 Hours,
EC50 9.69 mg/L estimated, Daphnia, 48.00 Hours,
IC50 2501 mg/L estimated, Algae, 72.00 Hours,
Components of this product are hazardous to aquatic life.

13. Disposal Considerations

Waste codes

D001: Waste Flammable material with a flash point <140 F
D040: Waste Trichloroethylene

Disposal instructions

Contents under pressure. Dispose of this material and its container to hazardous or special waste collection point. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Aerosols
Hazard class	2.1
UN number	UN1950
Additional information:	
Special provisions	153, N82
Packaging exceptions	LTD QTY
Packaging non bulk	None
Packaging bulk	None



Further information

Until 12/31/2013, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packagings of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/13 and may be used now in place of the "Consumer Commodity ORM-D" marking but not concurrently.

IMDG**Basic shipping requirements:**

Proper shipping name AEROSOLS
Hazard class 2.1
Subsidiary hazard class 6.1
UN number 1950
Additional information:
Packaging exceptions NOT a LTD QTY
Labels required 2.1, 6.1
Transport Category If <1L: Consumer Commodity

**IATA****Basic shipping requirements:**

Proper shipping name Aerosols, flammable, containing substances in Division 6.1, Packing Group III
Hazard class 2.1
Subsidiary hazard class 6.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Labels required 2.1, 6.1

**15. Regulatory Information****US federal regulations**

OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Ethyl Benzene	100-41-4	0.1 % de minimis concentration
Trichloroethylene	79-01-6	0.1 % de minimis concentration
Xylene	1330-20-7	1.0 % de minimis concentration

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Trichloroethylene: 100.0000
 Xylene: 100.0000
 Ethyl Benzene: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No
Section 311 hazardous chemical Yes
Hazard categories (311/312) Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - Yes
 Reactivity Hazard - No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

U.S. - Pennsylvania - RTK (Right to Know) List

Diacetone Alcohol	123-42-2	Present
Ethyl Alcohol	64-17-5	Present
Ethyl Benzene	100-41-4	Environmental hazard
Light Aliphatic Solvent Naphtha	64742-89-8	Present
Methylal	109-87-5	Present
n-Butane	106-97-8	Present
Odorless Mineral Spirits	64742-48-9	Present
Propane	74-98-6	Present
Trichloroethylene	79-01-6	Environmental hazard
Xylene	1330-20-7	Environmental hazard

16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 2*
Flammability: 4
Physical hazard: 0

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. The information in the sheet was written based on the best knowledge and experience currently available. 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.

MSDS sections updated

Product and Company Identification: Product Review
Toxicological Information: Teratogenicity
Transport Information: Product Shipping Name/Packing Group
Transport Information: Further information

Prepared by

Regulatory Compliance