MATERIAL SAFETY DATA SHEET

SECTION I PRODUCT AND COMPANY IDENTIFICATION

COMMON NAME
190 Red Fluid
PRODUCT FILE NUMBER
920:405-923FL-9
MANUFACTURER'S NAME
Meriam Instrument
ADDRESS
10920 Madison Ave.

CITY, STATE, ZIP
Cleveland, Ohio 44102

PRODUCT MODEL NUMBER
923FL
PRODUCT USE
Indicating Fluid
EMERGENCY PHONE NUMBERS
1-800-255-3924 (US), + 01 813 248 0585 (International)
ENGINEERING CONTROL DATA
MSDS - A35801-1, Rev. M, EO 7393
Drawing – A35322
DATE PREPARED
05-Nov-2014

SECTION II HAZARDS IDENTIFICATION

ACUTE

EYES
May cause mild irritation.
SKIN CONTACT
No skin effects expected.
INGESTION
Practically non-toxic.
INHALATION
No effects expected.

CHRONIC

CHRONIC EFFECTS OF EXPOSURE
None known, but unnecessary exposure to any chemical should be avoided.

SECTION III COMPOSITION/INFORMATION ON INGREDIENTS

1.Chemical Name:	Chlorotrifluoroethylene polymer	**2.Chemical Name:**	Red Dye
CAS No:	9002-83-9	**CAS No:**	82-38-2
OSHA/PEL:	NE*	**OSHA/PEL:**	NE*
ACGIH/TLV:	NE*	**ACGIH/TLV:**	NE*
% :	100	**% :**	Trace

*Not Established

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SECTION IV FIRST AID MEASURES

EYES
Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. If irritation persists, contact a physician.

SKIN CONTACT
Remove contaminated clothing and wash off skin with soap and water. Wash contaminated clothes. If irritation develops, contact a physician.

INHALATION
Remove person from contaminated area to fresh air.

INGESTION
No effect expected. If large amounts are ingested, get medical attention.

SECTION V FIRE FIGHTING MEASURES

FLASH POINT	METHOD USED	FLAMMABLE LIMITS (in Air % by Vol.)	LEL	UEL
190°F/87°C	Closed cup		NA	NA

AUTO-IGNITION TEMPERATURE
Not Determined

EXTINGUISHER MEDIA
Water fog, CO_2, 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
NA

SECTION VI ACCIDENTAL RELEASE MEASURES

RESPONSE TO SMALL SPILLS
Absorb with non-combustible absorbent material. Dispose of properly, prevent from entering sewers. The product is a non-hazardous waste when spilled material is disposed of defined in Resource Conservation Recovery Act (RCRA) regulations (40CFR261).

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.

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

SECTION 7 NOTES: Containers should not be opened until ready for use. Use clean non-sparking equipment and tools when handling.

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.

PROTECTIVE GLOVES
Wear chemical resistant gloves such as rubber, neoprene or vinyl.

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

ADDITIONAL PROTECTIVE CLOTHING OR EQUIPMENT
Eye wash fountains and safety showers should be available for emergency use.

SECTION IX PHYSICAL & CHEMICAL PROPERTIES

BOILING POINT
Decomposes above 500°F

SPECIFIC GRAVITY (H_2O=1)
1.868 @ 100°F

VAPOR PRESSURE (200°F)
.07 to 2.2 mmHg

VAPOR DENSITY (AIR=1)
NA

SOLUBILITY IN WATER
Insoluble

REACTIVITY IN WATER
NA

EVAPORATION RATE (BuAc=1)
NA

FREEZING POINT
-90 °F to -65°F

pH
6.0 – 7.5

APPEARANCE & ODOR
Red color, very little odor.

SECTION X STABILITY AND REACTIVITY

STABILITY
Stable

CONDITION TO AVOID
Avoid friction of galling in contact with aluminum or magnesium parts. This can cause localized areas of instantaneously high pressure and temperature which may result in detonation.

INCOMPATIBILITY (Materials to Avoid)
Reacts violently with sodium, potassium, amines, liquid fluorine, liquid chlorine trifluoride. Keep separate from aluminum and magnesium.

HAZARDOUS DECOMPOSITION PRODUCTS
Decomposes above 500°F releasing hydrogen fluoride, hydrogen chlorides, chlorotrifluoroethylene and other toxic organic fluorine compounds.

HAZARDOUS POLYMERIZATION
Will not occur

CONDITIONS TO AVOID
NA

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SECTION XI TOXICOLOGICAL INFORMATION

Chemical Listed as Carcinogen or Potential Carcinogen

National Toxicology Program	I.A.R.C. Monographs	OSHA
No	No	No

SECTION XII ECOLOGICAL INFORMATION

Environmental Fate:
When released into the soil this material is not expected to biodegrade. When released into the soil this material is not expected to leach into groundwater. When released into water, this material may evaporate to a moderate extent. When released into the air this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of 1 and 10 days.

Environmental Toxicity:
This material may be toxic to aquatic life. The LC 50/96 hour values for fish are less than 1 mg/l.

SECTION XIII DISPOSAL CONSIDERATIONS

Disposal: Dispose of all cleanup materials in accordance with all Local, State, and Federal regulations.

SECTION XIV TRANSPORT INFORMATION

Proper Shipping Name:	N/A
Hazard Class or Division:	N/A
Identification Number:	N/A
Packing Group:	N/A
Packing Authorization:	N/A
IATA Packing Instructions:	N/A

SECTION XV REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCE CONTROL ACT): Not Provided

SARA Section 302 Extremely Hazardous Substances (EHS): This product does not contain any components regulated under Section 302 (40 CFR 355) as Extremely Hazardous Substances.

SARA Section 304 CERCLA Hazardous Substances: This product does not contain any components regulated under section 304 (40 CFR 370) as hazardous chemicals for emergency release.

SARA Section 311/312 Hazard Communication Standard (HCS): This product is regulated under Section 311/312 HCS (40 CFR 370) as:

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Acute Health Hazard
Fire Hazard

SARA Section 313 Toxic Chemical List (TCL): This product does not contain any components listed on the Section 313 Toxic Chemical List.

Clean Water Act CWA – Priority Pollutants: Not Provided

STATE REGULATIONS: California Proposition 65: Not Provided

INTERNATIONAL REGULATIONS: 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 - 1 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.

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