

RDO

For the In Vitro Preparation of Histological Materials

APEX ENGINEERING PRODUCTS CORPORATION

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MATERIAL SAFETY DATA SHEET REVISED AUGUST 2009

PRODUCT INFORMATION

TRADE NAMES:	RDO
FORMULA:	PROPRIETARY, CONFIDENTIALITY REQUIRED
CHEMICAL FAMILY:	DECALCIFIER FOR HISTOLOGICAL MATERIALS

HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	TLV (p.p.m.)	PEL (p.p.m.)	APPROXIMATE %
HYDROGEN CHLORIDE, AQUEOUS	5	5	LESS THAN 10

NOTE: Material as a whole should be considered non-hazardous under normal use conditions. Laboratory tests indicate material to be **BIODEGRADABLE**. Non-reportable under Sara Title 3: Section 311/312/313 Categorization. Not reportable under CERCLA.

PHYSICAL DATA

BOILING POINT:	101°C. / +214°F.
FREEZING POINT:	-8°C. / +18°F.
SOLUBILITY IN WATER:	MISCIBLE
SPECIFIC GRAVITY, (WATER=1):	1.042
VAPOR PRESSURE:	30 TORR.
VAPOR DENSITY, (AIR=1):	GREATER THAN 1
PERCENT VOLATILE BY VOLUME:	>99.0
APPEARANCE:	DARK LIQUID
ODOR:	CHARACTERISTIC
pH:	UNREADABLE, GENERALLY <3
EVAPORATION RATE, (WATER=1):	SLOW

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	NO FLASH POINT, EXTINGUISHES FLAME
EXTINGUISHING MEDIA:	DOES NOT SUPPORT COMBUSTION
SPECIAL FIRE FIGHTING PROCEDURES:	NONE-WATER WILL CONTROL, OR CO2/DRY CHEMICALS
UNUSUAL FIRE & EXPLOSION HAZARDS:	NON-COMBUSTIBLE AND NON-EXPLOSIVE. BREATHING APPARATUS RECOMMENDED IN FIRE SITUATION.

HMIS

HEALTH:	0
FLAMMABILITY:	0
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	A

(continued)

HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:	SHOULD BE CONSIDERED NON-HAZARDOUS WHEN USED AS DIRECTED.
EMERGENCY & FIRST AID:	IF EYE/SKIN CONTACT, COPIOUS WATER RINSE. CONSULT PHYSICIAN. NOT TO BE TAKEN INTERNALLY. IF INGESTED-DO NOT INDUCE VOMITING - DRINK MILK, EGG WHITES, ETC. AS DIRECTED BY PHYSICIAN.
NOTE:	ADVERSE EFFECTS ON HUMAN HEALTH ARE NOT EXPECTED FROM THE RDO SOLUTION, BASED UPON YEARS OF USE WITHOUT REPORTED ADVERSE HEALTH INCIDENCE IN DIVERSE POPULATION GROUPS.

REACTIVITY DATA

STABILITY:	STABLE
HAZARDOUS DECOMPOSITION PRODUCTS:	NONE
HAZARDOUS POLYMERIZATION:	WILL NOT OCCUR
INCOMPATIBILITIES:	HYDROGEN CHLORIDE AND FORMALDEHYDE GASES ARE REPORTED TO FORM A CARCINOGENIC COMPOUND, BIS(CHLOROMETHY)ETHER.

SPILL AND DISPOSAL PROCEDURES

ACTION TO TAKE FOR SPILLS:	RINSE WITH COPIOUS AMOUNTS OF WATER TO DILUTE: SODIUM BICARBONATE MAY ALSO BE USED TO SOAK UP AND NEUTRALIZE LIQUID, IF NECESSARY.
DISPOSAL METHOD:	EXPENDED OR USED MATERIAL MAY BE DISPOSED OF DOWN SANITARY DRAIN WITH WATER FLUSH. MATERIAL IS BIODEGRADABLE - IN AS RECEIVED FORM.

SPECIAL HANDLING INFORMATION

VENTILATION:	USE EXHAUST HOOD WHEN WORKING WITH HIGH VAPOR CONCENTRATIONS OF FORMALDEHYDE.
RESPIRATORY PROTECTION:	NONE
PROTECTIVE GLOVES:	ONLY FOR THOSE WITH SENSITIVE OR DRY SKIN.
EYE PROTECTION:	RECOMMENDED, SUCH AS SAFETY GOGGLES.
OTHER PROTECTIVE EQUIPMENT:	AS RECOMMENDED BY SAFETY DEPARTMENT. TO PREVENT STAINING OF CLOTHES, WEAR AN APRON.

SPECIAL PRECAUTIONS

HANDLING AND STORING:	PRESERVE INTEGRITY OF CONTAINER.
OTHER PRECAUTIONS:	PLEASE USE MATERIAL ONLY AS DIRECTED. SOME ADVERSE REACTIONS MAY OCCUR WITH SOME ALLOYS OF ALUMINUM, MAGNESIUM, CHROME, AND/OR ZINC.

FOR ADDITIONAL INFORMATION, PLEASE CONTACT OUR OFFICES AT 800-451-6291.

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