

SECTION 1  
MANUFACTURER/REP  
DISTRIBUTOR

MATERIAL SAFETY DATA SHEET

PAGE 1  
DATE PREPARED  
11/07/97

EMERGENCY PHONE # (800) 424-9300

1250 REACTIVATOR

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TRADE NAME: REACTIVATOR/ RS RENU PRODUCT CODE: 14-  
2202

DOT PROPER SHIPPING NAME: PAINT RELATED MATERIAL

DOT HAZARD CLASSIFICATION: 3

IDENTIFICATION NUMBER: UN1263 PACKING GROUP: PGH

EMERGENCY TELEPHONE NUMBER (CHEMTREC): 1-800-424-9300 ERG#: 26  
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SECTION I: HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV/PEL	AGENCY	TYPE
ETHANOL	42.83-41.16	1000 PPM	OSHA	TWA
CAS#: 64-17-5				
METHANOL	5.88 - 6.88	200 PPM (SKIN)	OSHA	TWA
CAS#: 67-56-1		250 PPM (SKIN)	OSHA	STEL
METHYL ISOBUTYL KETONE	0.29 - 0.98	50 PPM	OSHA	TWA
CAS#: 108-10-1		75 PPM	OSHA	STEL
PROPYLENE GLYCOL METHYL ETHER	51	100 PPM	OSHA	TWA
CAS#: 107-98-2		150 PPM	OSHA	STEL

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SECTION II - EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT:

MOVE VICTIM AWAY FROM EXPOSURE AND INTO FRESH AIR. IF IRRITATION OR  
REDNESS

DEVELOPES, FLUSH EYE WITH CLEAN WATER AND SEEK MEDICAL ATTENTION. FOR  
DIRECT CONTACT, HOLD EYELIDS APART AND FLUSH THE AFFECTED EYE(S) WITH  
CLEAN WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION.

SKIN CONTACT:

REMOVE CONTAMINATED SHOES AND CLOTHING AND CLEANSE AFFECTED AREA(S)  
THOROUGHLY BY WASHING WITH MILD SOAP AND WATER. IF IRRITATION OR  
REDNESS

DEVELOPS AND PERSISTS, SEEK MEDICAL ATTENTION.

INHALATION (BREATHING):

IF RESPIRATORY SYMPTOMS DEVELOP, MOVE VICTIM AWAY FROM SOURCE OF  
EXPOSURE

AND INTO FRESH AIR. IF SYMPTOMS PERSIST SEEK MEDICAL ATTENTION. IF  
VICTIM

BREATHING IS NOT BREATHING, IMMEDIATELY BEGIN ARTIFICIAL RESPIRATION. IF  
PERSONNEL. DIFFICULTIES DEVELOP, OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED  
INGESTION (SWALLOWING): SEEK IMMEDIATE MEDICAL ATTENTION.  
PLACE ON THIS MATERIAL IS A POTENTIAL ASPIRATION HAZARD. IF SWALLOWED, SEEK  
VOMITING EMERGENCY MEDICAL ATTENTION. IF VICTIM IS DROWSY OR UNCONSCIOUS,  
FOR THE LEFT SIDE WITH THE HEAD DOWN AND DO NOT GIVE ANYTHING BY MOUTH.  
PHYSICIAN BECAUSE OF POTENTIAL TOXICITY, IF VICTIM IS CONSCIOUS AND ALERT,  
COMMENTS: SHOULD BE INDUCED BY INGESTION OF MORE THAN 1 SWALLOW (1-2 TABLESPOONS  
AN ADULT) PREFERABLE WITH SYRUP OF IPECAC UNDER DIRECTION FROM A  
OR POISON CENTER. IF POSSIBLE DO NOT LEAVE VICTIM UNATTENDED.  
METABOLISM NOTE TO PHYSICIANS: THIS PRODUCT CONTAINS METHANOL. METHANOL IS  
BE METABOLIZED TO FORMALDEHYDE AND FORMIC ACID. THIS IN TURN MAY CAUSE  
THE METABOLIC ACIDOSIS, VISUAL DISTURBANCES AND BLINDNESS. BECAUSE  
MUST OCCUR BEFORE THE TOXIC EFFECTS, THE ONSET OF TOXIC SYMPTOMS MAY  
DELAYED FROM 6 TO 30 HOURS FOLLOWING INGESTION. ETHANOL COMPETES FOR  
THE SAME METABOLIC PATHWAY AND HAS BEEN USED AS AN ANTIDOTE. METHANOL IS  
EFFECTIVELY REMOVED BY HEMODIALYSIS.

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SECTION III: HEALTH HAZARDS

EYE CONTACT: ONE OR MORE COMPONENTS OF THIS MATERIAL IS AN EYE IRRITANT. DIRECT  
CONTACT WITH THE LIQUID OR EXPOSURE TO VAPORS OR MISTS MAY CAUSE STINGING,  
TEARING, REDNESS, AND SWELLING.  
SKIN CONTACT: ONE OR MORE COMPONENTS OF THIS MATERIAL MAY CAUSE MILD SKIN  
IRRITATION. PROLONGED OR REPEATED CONTACT MAY CAUSE REDNESS, BURNING, AND DRYING  
AND CRACKING OF THE SKIN.  
SKIN ABSORPTION: CONTACT MAY RESULT IN SKIN ABSORPTION BUT SYMPTOMS OF TOXICITY ARE NOT  
PERSONS ANTICIPATED BY THIS ROUTE ALONE UNDER NORMAL CONDITIONS OF USE.  
EFFECTS OF WITH PRE-EXISTING SKIN DISORDERS MAY BE MORE SUSCEPTIBLE TO THE  
THIS MATERIAL.  
INHALATION (BREATHING): WHILE THIS MATERIAL HAS A LOW DEGREE OF TOXICITY, BREATHING HIGH  
CONCENTRATIONS OF VAPORS OR  
MISTS MAY CAUSE:  
IRRITATION OF THE NOSE AND THROAT  
SIGNS OF NERVOUS SYSTEM DEPRESSION (E.G. HEADACHE, DROWSINESS,  
DIZZINESS, LOSS OF COORDINATION, AND FATIGUE)

NAUSEA, COUGHING, SHORTNESS OF BREATH.  
RESPIRATORY SYMPTOMS ASSOCIATED WITH PRE-EXISTING LUNG DISORDERS  
(E.G.,  
ASTHMA-LIKE CONDITIONS) MAY BE AGGRAVATED BY EXPOSURE TO THIS  
MATERIAL.  
INGESTION (SWALLOWING):  
ONE OR MORE COMPONENTS OF THIS MATERIAL IS TOXIC AND MAY BE HARMFUL IF  
SWALLOWED. EFFECTS OF OVEREXPOSURE MAY INCLUDE:  
IRRITATION OF THE DIGESTIVE TRACT  
SIGNS OF NERVOUS SYSTEM DEPRESSION (E.G., HEADACHE,  
DROWSINESS,  
DIZZINESS, LOSS OF COORDINATION, AND FATIGUE).  
VOMITING, DRUNKENNESS, STUPOR, VISUAL DISTURBANCES (INCLUDING  
BLINDNESS), CONVULSIONS, COMA, DEATH, NAUSEA  
ASPIRATION HAZARD - ONE OR MORE COMPONENTS OF THIS MATERIAL CAN ENTER LUNGS DURING  
SWALLOWING OR VOMITING AND CAUSE LUNG INFLAMMATION AND DAMAGE.  
COMMENTS:  
METHANOL, A COMPONENT OF THIS PRODUCT, CAUSES HARM TO THE FETUS IN  
LABORATORY ANIMAL STUDIES. THE RELEVANCE OF THESE FINDINGS TO HUMANS  
IS  
UNCERTAIN. CONSUMPTION OF ALCOHOLIC BEVERAGES HAS BEEN IDENTIFIED AS  
A  
HUMAN CANCER HAZARD BY IRAC. ETHANOL, A COMPONENT OF THIS PRODUCT, IS  
THE  
SAME ALCOHOL FOUND IN ALCOHOLIC BEVERAGES. HOWEVER, THE ALCOHOL IN  
THIS  
PRODUCT HAS BEEN DENATURED MAKING IT UNFIT TO DRINK. LONG TERM  
INGESTION  
OF LARGE QUANTITIES OF ETHANOL HAS ALSO BEEN ASSOCIATED WITH LIVER  
DAMAGE,  
IRREVERSIBLE CHANGES IN THE GENETIC MATERIAL (DNA) OF A CELL AND  
ADVERSE  
EFFECTS ON THE REPRODUCTIVE SYSTEM AND DEVELOPING FETUS. SUCH EFFECTS  
EXPOSURES  
HAVE NOT BEEN REPORTED NOR ARE EXPECTED FORM NORMAL OCCUPATIONAL  
TO ETHANOL  
REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL  
OVEREXPOSURE TO  
SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE (SOMETIMES  
REFERRED  
TO AS SOLVENT OR PAINTERS' SYNDROME). INTENTIONAL MISUSE BY  
DELIBERATELY  
CONCENTRATING AND INHALING THE CONTENTS AMY BE HARMFUL OR FATAL

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SECTION IV: SPECIAL PROTECTION INFORMATION

VENTILATION:

IF CURRENT VENTILATION PRACTICES ARE NOT ADEQUATE TO MAINTAIN AIRBORNE  
CONCENTRATIONS BELOW ESTABLISHED EXPOSURE LIMITS (SEE SECTION I),  
ADDITIONAL VENTILATION OR EXHAUST SYSTEMS MAY BE REQUIRED. WHERE

EXPLOSIVE

MIXTURES MAY BE PRESENT, ELECTRICAL SYSTEMS SAFE FOR SUCH LOCATIONS  
MUST BE  
USED.

RESPIRATORY PROTECTION:

THE USE OF RESPIRATORY PROTECTION IS ADVISED WHEN CONCENTRATIONS EXCEED THE ESTABLISHED EXPOSURE LIMITS, (SEE SECTION I). DEPENDING ON THE AIRBORNE CONCENTRATION, USE A RESPIRATOR OR GAS MASK WITH APPROPRIATE CARTRIDGES AND CANISTERS (NIOSH APPROVED, IF AVAILABLE) OR SUPPLIED AIR EQUIPMENT.

PROTECTIVE GLOVES: THE USE OF GLOVES IMPERMEABLE TO THE SPECIFIC MATERIAL HANDLED IS ADVISED TO PREVENT SKIN CONTACT AND POSSIBLE IRRITATION.

EYE PROTECTION: APPROVED EYE PROTECTION TO SAFEGUARD AGAINST POTENTIAL EYE CONTACT IRRITATION OR INJURY IS RECOMMENDED.

OTHER PROTECTIVE EQUIPMENT: A SOURCE OF CLEAN WATER SHOULD BE AVAILABLE IN THE WORK AREA FOR FLUSHING EYES AND SKIN. IMPERVIOUS CLOTHING SHOULD BE WORN AS NEEDED.

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#### SECTION V: REACTIVITY DATA

STABLE, Y=YES, N=NO : Y

CONDITIONS TO AVOID: THIS PRODUCT FORMS COMBUSTIBLE AND/OR EXPLOSIVE MIXTURES WITH AIR AND/OR OXYGEN.

INCOMPATIBILITY: STRONG ACIDS OR BASES, OXIDIZING AGENTS, ALKALI METALS, ANHYDRIDES, ISOCYANATES, HALOGENS, ORGANOMETALLIC CONTAMINANTS, EXTENDED CONTACT WITH AIR OR OXYGEN.

HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION IN THE PRESENCE OF AIR MAY YIELD CARBON MONOXIDE AND/OR CARBON DIOXIDE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

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#### SECTION VI: SPILL/LEAK PROCEDURES

PRECAUTIONS IN CASE OF RELEASE OR SPILL: KEEP ALL SOURCES OF IGNITION AWAY FROM SPILL/RELEASE. STAY UPWIND AND AWAY FROM SPILL/RELEASE. ISOLATE HAZARD AREA AND LIMIT ENTRY TO AUTHORIZED PERSONNEL. STOP SPILL/RELEASE IF IT CAN BE DONE WITHOUT RISK. WEAR APPROPRIATE PROTECTIVE EQUIPMENT INCLUDING RESPIRATORY PROTECTION AS CONDITIONS WARRANT (SEE SECTION IV). PREVENT SPILLED MATERIAL FROM ENTERING SEWERS, STORM DRAINS, OTHER UNAUTHORIZED TREATMENT DRAINAGE SYSTEMS, AND NATURAL WATERWAYS. DIKE FAR AHEAD OF SPILL FOR LATER RECOVERY OR DISPOSAL. SPILLED MATERIAL MAY BE ABSORBED INTO AN APPROPRIATE ABSORBENT MATERIAL. NOTIFY FIRE AUTHORITIES AND APPROPRIATE FEDERAL, STATE AND LOCAL AGENCIES. IMMEDIATE CLEAN UP OF ANY SPILL IS RECOMMENDED.

IF SPILL OF ANY AMOUNT IS MADE INTO OR UPON U.S. NAVIGABLE WATERS, THE CONTIGUOUS ZONE, OR ADJOINING SHORELINES, NOTIFY THE NATIONAL RESPONSE CENTER (PHONE NUMBER 800-424-8802)

WASTE DISPOSAL METHOD:

FEDERAL DISPOSE OF PRODUCT IN ACCORDANCE WITH LOCAL, COUNTY, STATE, AND  
REGULATIONS.

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SECTION VII - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS:

KEEP CONTAINERS TIGHTLY CLOSED, COOL, DRY AND AWAY FROM ALL SOURCES OF  
IGNITION. USE AND STORE THIS PRODUCT WITH ADEQUATE VENTILATION.

AVOID

INHALATION OF VAPORS AND PERSONAL CONTACT WITH THE PRODUCT. BOND AND  
GROUND EQUIPMENT WHEN TRANSFERRING TO ANOTHER CONTAINER. "EMPTY"  
CONTAINERS RETAIN RESIDUE (LIQUID AND/OR VAPOR) AND CAN BE  
DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND

OR

EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF

IGNITION;

THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. "EMPTY" DRUMS SHOULD BE  
COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY SHIPPED TO THE

SUPPLIER OR

DRUM RECONDITIONER. ALL OTHER CONTAINERS SHOULD BE DISPOSED OF IN A  
ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH GOVERNMENTAL  
REGULATIONS. BEFORE WORKING ON OR IN TANKS WHICH CONTAINED THIS

PRODUCT,

REFER TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS,

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Z49.1 AND OTHER GOVERNMENTAL AND INDUSTRIAL REFERENCES PERTAINING TO  
CLEANING, REPAIRING, WELDING OR OTHER CONTEMPLATED OPERATIONS.

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SECTION VIII: FIRE & EXPLOSION DATA

FPA	HEALTH:	1	CODE:	0=LEAST
HAZARD	FLAMMABILITY:	3		1=SLIGHT
CLASS	REACTIVITY:	0		2=MODERATE
	OTHER:	-		3=HIGH
				4=EXTREME
HMIS	HEALTH:	2*		*=LONG TERM HEALTH EFFECT
HAZARD	FLAMMABILITY:	3		
CLASS	REACTIVITY:	0		
	OTHER:	-		

LOWER - UPPER EXPLOSIVE LIMIT (% VOL.): 1.4 - 36.0

FLASH POINT: 55 TCC

EXTINGUISHING MEDIA:

EXTINGUISH WITH DRY CHEMICAL, CO2 OR A UNIVERSAL TYPE FOAM

FIRE AND EXPLOSION HAZARDS:

THIS MATERIAL IS FLAMMABLE AND MAY BE IGNITED BY HEAT, SPARKS, FLAMES,

OR

OTHER SOURCES OF IGNITION (E.G. STATIC ELECTRICITY, PILOT LIGHTS, OR  
MECHANICAL/ELECTRICAL EQUIPMENT). VAPORS MAY TRAVEL CONSIDERABLE

DISTANCES

TO A SOURCE OF IGNITION WHERE THEY MAY IGNITE, FLASHBACK, OR EXPLODE.

MAY

AIR CREATE VAPOR/AIR EXPLOSION HAZARD IF HEATED. VAPORS ARE HEAVIER THAN  
AND MAY ACCUMULATE IN LOW AREAS. IF CONTAINER IS NOT PROPERLY COOLED,  
IT MAY EXPLODE IN THE HEAT OF A FIRE.  
FIRE FIGHTING PROCEDURES:  
WEAR APPROPRIATE PROTECTIVE EQUIPMENT INCLUDING RESPIRATORY PROTECTION  
AS  
CONDITIONS WARRANT (SEE SECTION IV). STOP SPILL/RELEASE IF IT CAN BE  
DONE  
WITHOUT RISK. MOVE UNDAMAGED CONTAINERS FROM FIRE AREA. WATER SPRAY  
MAY  
BE USEFUL IN MINIMIZING OR DISPERSING VAPORS AND COOLING EQUIPMENT  
EXPOSED  
TO HEAT AND FLAME. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR  
COOLING PURPOSES.

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SECTION IX: PHYSICAL & CHEMICAL CHARACTERISTICS

BOILING RANGE: 148 - 243 F	EVAPORATION RATE (n-BuOAc=1) 1.3
VAPOR PRESSURE: 37.4 (mmHG)	% VOLATILE: 100
% SOLUBILITY IN WATER: 99.5	VAPOR DENSITY: 2.34
SPECIFIC GRAVITY (60F/60F): .858	
APPEARANCE : CLEAR, LITTLE IF ANY COLOR	ODOR: CHARACTERISTIC

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SPECIAL MESSAGE SECTION

THE HAZARDOUS LISTED ON THIS MSDS ARE TAKEN FROM THE MSDS FOR EACH OF THE  
INGREDIENTS IN THIS MIXTURE. IN MOST CASES, THE MAXIMUM FORM OF HAZARD IS  
REPRESENTED HERE. THE TLV'S REPRESENT THE CONDITIONS UNDER WHICH IT IS BELIEVED  
THAT NEARLY ALL WORKERS MAY BE REPEATEDLY EXPOSED DAY AFTER DAY WITHOUT ADVERSE  
EFFECT. IT MUST BE REMEMBERED THAT EACH INDIVIDUAL REACTS DIFFERENTLY AND SOME MAY  
EXPERIENCE DISCOMFORT WHILE OTHERS DO NOT. THIS MSDS IS PRESENTED SO THAT EACH  
INDIVIDUAL WILL HAVE THE INFORMATION TO DEAL SAFELY WITH THE USE OF THIS PRODUCT.  
ALL MATERIALS TSCA LISTED.

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DISCLAIMER OF LIABILITY:

AS THE CONDITIONS OR METHODS OF USE ARE BEYOND OUR CONTROL, WE DO NOT ASSUME ANY  
RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR ANY USE OF THIS MATERIAL.  
INFORMATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH AND BELIEVED TO BE TRUE AND  
ACCURATE. BUT ALL STATEMENTS OR SUGGESTIONS ARE MADE WITHOUT ANY WARRANTY,  
EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THE INFORMATION, THE HAZARDS  
CONNECTED WITH THE USE OF THE MATERIAL OR RESULTS TO BE OBTAINED FROM THE USE  
THEREOF. INFORMATION ON MSDS SUPPLIED BY INK MANUFACTURER.

PREPARED BY: ALLEN WERWA, SAFETY DIRECTOR