

DEGUSSA

DEGUSSA CORPORATION

M. S. # 1070

EMERGENCY TELEPHONE: 205-443-1634

MATERIAL SAFETY DATA SHEET

DEGUSSA CORPORATION
65 CHALLENGER ROAD, RIDGEFIELD PARK, NJ 07660
TELEPHONE: 201-641-6100

REVISED: 2/03/92 SUPERSEDES: 6/17/91

I. PRODUCT INFORMATION

TRADE NAMES/SYNONYMS: HYDROGEN PEROXIDE >52% TO 72%

CHEMICAL NAME: HYDROGEN PEROXIDE >52% TO 72% BY WT. IN AQUEOUS SOLUTION

CAS NUMBER: 7722-84-1

CHEMICAL FAMILY: INORGANIC PEROXIDE

CHEMICAL FORMULA: H2O2

THIS MATERIAL IS IN COMPLIANCE WITH THE TOXIC SUBSTANCES CONTROL ACT.

II. SUMMARY OF HAZARDS

DANGER! THIS PRODUCT IS A STRONG OXIDIZER WHICH MAY RELEASE OXYGEN AND PROMOTE THE COMBUSTION OF FLAMMABLE MATERIAL. MAY CAUSE EYE AND SKIN IRRITATION AND/OR BURNS. MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT. SEE SECTION V FOR ADDITIONAL INFORMATION ON HEALTH HAZARDS.

III. HAZARDOUS COMPONENTS

NAME	CAS NO.	%	EXPOSURE LIMITS		
			PEL	TLV	OTHER
.. HYDROGEN PEROXIDE	7722-84-1	53-70	1 PPM	1 PPM	NONE

NO CARCINOGENICITY DESIGNATED BY NTP, IARC, OSHA OR OTHERS.

IV. CHEMICAL AND PHYSICAL PROPERTIES

BOILING POINT: 237-257F (113-124 C)

APOR PRESSURE: 11-18 MMHG @ 85 F

MPING POINT: NOT APPLICABLE

APOR DENSITY: 1.0 (AIR=1)

SOL. IN WATER: COMPLETE

SPECIFIC GRAVITY: 1.2-1.3 (H2O=1)

Flash: 0-1

EVAPORATION RATE: >1 (BUTYL ACETATE=1)

APPEARANCE/ODOR: CLEAR, COLORLESS LIQUID WITH A SLIGHTLY PUNGENT ODOR.

IV. HEALTH HAZARD DATA & FIRST AID PROCEDURES

THE LD50 BELOW CORRESPONDS TO 90% HYDROGEN PEROXIDE.

TOXICITY DATA

CHEMICAL NAME	LD50	LC50
HYDROGEN PEROXIDE	4060 MG/KG SKIN, RAT	2000MG/M3 4H IHL RAT

CONTACT: EXPECTED TO CAUSE EYE IRRITATION AND/OR BURNS. AS A LIQUID, VAPOR OR AEROSOL, THIS PRODUCT COULD CAUSE CORNEAL DAMAGE WHICH MAY OCCUR SEVERAL DAYS LATER. IN CASE OF CONTACT, FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN/OPHTHALMOLOGIST IF IRRITATION PERSISTS OR BURNS OCCUR.

SKIN CONTACT: EXPECTED TO CAUSE SKIN IRRITATION AND/OR BURNS. AS THE CONCENTRATION AND/OR TIME OF EXPOSURE INCREASES, THE EXTENT OF SKIN DAMAGE INCREASES. IN CASE OF CONTACT, FLUSH SKIN WITH PLENTY OF WATER WHILE REMOVING CONTAMINATED CLOTHING. CALL A PHYSICIAN IF IRRITATION PERSISTS OR IF BURNS OCCUR.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. IN THE CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN IF IRRITATION PERSISTS OR IF BURNS OCCUR.

INHALATION: EXPECTED TO BE IRRITATING TO RESPIRATORY TRACT. IF INHALED, REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN IF IRRITATION PERSISTS.

INGESTION: EXPECTED TO CAUSE BURNS TO THE GASTROINTESTINAL TRACT. IF SWALLOWED. DO NOT INDUCE VOMITING. GIVE VICTIM

PLENTY OF WATER TO DILUTE STOMACH CONTENTS. CALL A PHYSICIAN IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

CHRONIC EFFECTS OF OVEREXPOSURE: NO CHRONIC (LONG TERM) EFFECTS ARE KNOWN FOR HUMANS.

OTHER HEALTH EFFECTS: MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT INCLUDE: CONJUNCTIVITIS OF THE EYE, DERMATITIS OF THE SKIN, ASTHMA AND RESPIRATORY DISEASES.

VI. EXPOSURE CONTROL MEASURES

EYE PROTECTION: CHEMICAL GOGGLES OR FACE SHIELD IS REQUIRED.

PROTECTIVE GLOVES: WEAR CHEMICAL RESISTANT NEOPRENE, BUTYL RUBBER OR VINYL GLOVES.

RESPIRATORY PROTECTION: ATMOSPHERIC LEVELS SHOULD BE MAINTAINED BELOW THE EXPOSURE LIMITS LISTED IN SECTION III BY USING ENGINEERING CONTROLS.
IF NOT FEASIBLE, USE AN APPROVED AIR-PURIFYING RESPIRATOR WITH APPROVED FILTERS AND/OR SORBENTS

OTHER PROTECTION: IF SKIN CONTACT OR CONTAMINATION OF CLOTHING IS POSSIBLE, CHEMICAL RESISTANT CLOTHING MUST BE WORN.

VENTILATION: PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO MAINTAIN AIRBORNE LEVELS BELOW THE EXPOSURE LIMITS IN SECTION III. REFER TO "INDUSTRIAL VENTILATION" BY ACGIH FOR A MANUAL OF RECOMMENDED PRACTICES.

PERSONAL HYGIENE/WORK PRACTICES: ESTABLISH GOOD PERSONAL HYGIENE AND WORK PRACTICES. ALWAYS WASH HANDS AND FACE BEFORE EATING, DRINKING OR SMOKING. PROVIDE SAFETY SHOWER AND EYE WASH STATION IN WORK AREA.

VII. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): NON-FLAMMABLE

FLAMMABLE LIMITS LOWER: NONE UPPER: NONE

EXTINGUISHING MEDIA: USE WATER ONLY TO FIGHT FIRES IN WHICH THIS MATERIAL IS INVOLVED. APPLY VAST AMOUNTS OF WATER FOR COOLING AND DILUTION.

FIRE FIGHTING

INSTRUCTIONS:

EVACUATE ENCLOSED AND SURROUNDING AREAS. IF SMOKE AND FUMES CANNOT BE AVOIDED, USE PROXIMITY SUIT AND SELF-CONTAINED BREATHING APPARATUS. IN CASE OF EXTERNAL FIRE, COOL HYDROGEN PEROXIDE CONTAINMENTS WITH PLENTY OF WATER.

UNUSUAL FIRE AND

EXPLOSION HAZARDS:

SPONTANEOUS COMBUSTION CAN OCCUR IF ALLOWED TO REMAIN IN CONTACT WITH OXIDIZABLE MATERIALS. DRYING OF PRODUCT ON CLOTHING OR COMBUSTIBLE MATERIAL MAY CAUSE FIRE. DO NOT ALLOW TEMPERATURE OF STORAGE TANKS TO RISE ABOVE 100 F. DO NOT HEAT SOLUTION TO CONCENTRATE OF 74% OR GREATER. MIXTURES WITH COMBUSTIBLE MATERIAL MAY BE EXPLOSIVE.

VIII. REACTIVITY DATA

STABILITY:

THIS PRODUCT IS STABLE ONLY WHEN COOL AND PURE.

INCOMPATIBILITY:

HEAVY METALS, HEAVY METAL IONS/SALTS, RUST, ALKALI, ORGANIC MATERIALS, REDUCING AGENTS DUST AND DIRT.

HAZARDOUS PRODUCTS

DECOMPOSITION:

WILL INCLUDE OXYGEN, AND WILL PROMOTE THE COMBUSTION OF FLAMMABLE MATERIAL. HIGH TEMPERATURE AND STEAM ARE PROBABLE.

HAZARDOUS

POLYMERIZATION:

WILL NOT UNDERGO HAZARDOUS POLYMERIZATION.

IX. ENVIRONMENTAL & DISPOSAL INFORMATION

GENERAL:

CERCLA/SARA REQUIRES NOTIFICATION TO THE APPROPRIATE FEDERAL STATE AND LOCAL AUTHORITIES OF RELEASES OF HAZARDOUS OR EXTREMELY HAZARDOUS QUANTITIES EQUAL TO OR GREATER THAN THE REPORTABLE QUANTITIES (RQS) IN 40 CFR 302.4 AND 40 CFR 355. THE REPORTABLE QUANTITIES ARE LISTED IN SECTION XII.

SARA TITLE 313 REQUIRES SUBMISSIONS OF ANNUAL REPORTS OF RELEASES OF TOXIC CHEMICALS THAT APPEAR IN 40 CFR 372. COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL WHICH COULD REQUIRE REPORTING UNDER THE STATUTE ARE:
NONE

ACTION TO TAKE

SPILLS/LEAKS:

SEE SECTION V AND VI FOR HAZARDS AND EXPOSURE CONTROLS. ELIMINATE SOURCE OF SPILL AND WASH AWAY WITH VAST AMOUNTS OF WATER. FOR AN EMERGENCY, CONTACT DEGUSSA AT (205) 443-1634.

DISPOSAL METHOD: THIS MATERIAL IS A HAZARDOUS WASTE (AS PER RCRA) BECAUSE OF ITS REACTIVITY. IT IS ALSO AN OXIDIZER DEFINED BY DOT AND THEREFORE A HAZARDOUS WASTE (PER RCRA) DUE TO IGNITABILITY. DISPOSAL SHOULD BE CONDUCTED BY AN EPA (RCRA) PERMITTED DISPOSAL FACILITY. CONTACT DEGUSSA CORPORATION FOR ASSISTANCE AT (205) 443-4000 EXT. 2287.

X. PRECAUTIONS FOR SAFE HANDLING, STORAGE AND USE

STORE IN ORIGINAL VENTED CONTAINERS, IN DRY LOCATION AND AWAY FROM SUN AND HEAT OR IN DEDICATED BULK STORAGE FACILITIES. PROTECT FROM PHYSICAL DAMAGE. KEEP OPEN FLAMES, FIRE AND SPARKS AWAY FROM CONTAINERS. DO NOT CONFINE IN UNVENTED VESSELS OR BETWEEN CLOSED VALVES. NEVER USE PRESSURE TO EMPTY CONTAINER AND DO NOT RETURN PRODUCT TO THE EMPTY CONTAINER AFTER IT HAS BEEN REMOVED.

XI. SHIPPING INFORMATION

NOTE!

THE PACKING GROUP (PG) IS LISTED BELOW INDICATES A PG II DESIGNATION WHICH CORRESPONDES TO A 20-60% CONCENTRATION. FOR CONCENTRATIONS OVER 60% A PG I REQUIREMENT IS NECESSARY.

PRIMARY HAZARD: OXIDIZER

SECONDARY HAZARD: CORROSIVE

DOT SHIPPING NAME: HYDROGEN PEROXIDE SOLUTION

HAZARD CLASS: OXIDIZER UN #: 2015 UN CLASS: 5.1 PG #: II

49 CFR REFERENCE: 173.266

LABEL(S): OXIDIZER CORROSIVE

PLACARD(S): OXIDIZER CORROSIVE

SHIPPING RESTRICTIONS: FORBIDDEN FOR AIR TRANSPORTATION.

AUTHORIZED CONTAINER TYPE(S): IM 101 PORTABLE TANKS

XII. ADDITIONAL INFORMATION

PRODUCT IS A RCRA CHARACTERISTIC HAZARDOUS WASTE. RA = 100#
PQ = 1#

FOR ADDITIONAL NON-EMERGENCY MSDS INFORMATION, CONTACT OR WRITE YOUR LOCAL DEGUSSA SALES/MARKETING REPRESENTATIVE OR:

APPLIED TECHNOLOGY GROUP
PEARL COURT
LENDALE, NJ 07401
(201) 818-3700

CORPORATE SAFETY DEPARTMENT
DEGUSSA CORPORATION
P.O. BOX 606, THEODORE, AL 36590
(205) 443-4000

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