

MSDS for: FRP-310**Revised: 24-May-2005****SECTION 1:**

PRODUCT IDENTIFIER: FRP-310 LATEX ADHESIVE FOR FRP
DATE OF PREPARATION: JUNE 7, 2004
PRODUCT USE: ADHESIVE

MANUFACTURED BY: MACCO ADHESIVES
15885 SPRAGUE RD.
STRONGSVILLE, OHIO 44136, U.S.A.

ICI PAINTS (CANADA)
8200 KEELE STREET
CONCORD, ONTARIO L4K 2A5, CANADA

EMERGENCY AND MSDS TELEPHONE NUMBER: 1-800-545-2643

MSDS PREPARED BY: PRODUCT SAFETY AND TOXICOLOGY DEPARTMENT
ICI PAINTS NORTH AMERICA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	WT.%
CHEMICAL NAME: ACRYLIC RESIN COMMON NAME: ACRYLIC RESIN CAS NUMBER: CONFIDENTIAL	10-20
CHEMICAL NAME: LIMESTONE COMMON NAME: LIMESTONE CAS NUMBER: 1317-65-3	30-40
CHEMICAL NAME: KAOLIN COMMON NAME: CLAY CAS NUMBER: 1332-58-7	10-20
CHEMICAL NAME: QUARTZ COMMON NAME: QUARTZ CAS NUMBER: 14808-60-7	0.1-1.0
CHEMICAL NAME: 2-PROPANONE COMMON NAME: ACETONE CAS NUMBER: 67-64-1	1-5
CHEMICAL NAME: WATER COMMON NAME: WATER CAS NUMBER: 7732-18-5	30-40
CHEMICAL NAME: 1,2-BENZENEDICARBOXYLIC ACID, BUTYL PHENYLMETHYL ESTER COMMON NAME: BUTYL BENZYL PHTHALATE CAS NUMBER: 85-68-7	1-5

SECTION 3: HAZARDS IDENTIFICATION

PRIMARY ROUTE(S) OF EXPOSURE: INHALATION, SKIN CONTACT, EYE CONTACT, INGESTION

EFFECTS OF OVEREXPOSURE

INHALATION: IRRITATION OF RESPIRATORY TRACT. PROLONGED INHALATION MAY LEAD TO MUCOUS MEMBRANE IRRITATION, FATIGUE, DROWSINESS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, UNCOORDINATION, NAUSEA, VOMITING, ABDOMINAL PAIN, COUGHING, DIFFICULTY WITH SPEECH, CENTRAL NERVOUS SYSTEM DEPRESSION, DIFFICULTY OF BREATHING, BLOOD ABNORMALITIES, LIVER DAMAGE, KIDNEY DAMAGE, PNEUMOCONIOSIS.

SKIN CONTACT: IRRITATION OF SKIN. PROLONGED OR REPEATED CONTACT CAN CAUSE DERMATITIS, DEFATTING.

EYE CONTACT: IRRITATION OF EYES. PROLONGED OR REPEATED CONTACT CAN CAUSE CONJUNCTIVITIS, TEARING OF EYES, REDNESS OF EYES.

INGESTION: INGESTION MAY CAUSE MOUTH AND THROAT IRRITATION, MUCOUS MEMBRANE IRRITATION, NAUSEA, VOMITING, DIARRHEA, GASTRO-INTESTINAL DISTURBANCES, ABDOMINAL PAIN.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

EYE, SKIN, RESPIRATORY DISORDERS, LUNG DISORDERS, RESPIRATORY DISORDERS

SECTION 4: FIRST-AID MEASURES

INHALATION: REMOVE TO FRESH AIR. RESTORE AND SUPPORT CONTINUED BREATHING. GET EMERGENCY MEDICAL ATTENTION. HAVE TRAINED PERSON GIVE OXYGEN IF NECESSARY. GET MEDICAL HELP FOR ANY BREATHING DIFFICULTY. REMOVE TO FRESH AIR IF INHALATION CAUSES EYE WATERING, HEADACHES, DIZZINESS, OR OTHER DISCOMFORT.

SKIN CONTACT: WASH THOROUGHLY WITH SOAP AND WATER. IF ANY PRODUCT REMAINS, GENTLY RUB PETROLEUM JELLY, VEGETABLE OR MINERAL/BABY OIL ONTO SKIN. REPEATED APPLICATIONS MAY BE NEEDED. REMOVE CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE RE-USE.

EYE CONTACT: FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER, ESPECIALLY UNDER LIDS FOR AT LEAST 15 MINUTES. IF IRRITATION OR OTHER EFFECTS PERSIST, OBTAIN MEDICAL TREATMENT.

INGESTION: IF SWALLOWED, OBTAIN MEDICAL TREATMENT IMMEDIATELY.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT (SETA): ABOVE 200F/93C LOWER EXPLOSIVE LIMIT: NOT AVAILABLE
UPPER EXPLOSIVE LIMIT: 13.0 %

FIRE EXTINGUISHING MEDIA: DRY CHEMICAL OR FOAM, WATER FOG, CARBON DIOXIDE

UNUSUAL FIRE AND EXPLOSION HAZARDS

VAPORS MAY IGNITE EXPLOSIVELY AT AMBIENT TEMPERATURES. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL LONG DISTANCES TO A SOURCE OF IGNITION AND FLASH BACK. CLOSED CONTAINERS MAY BURST IF EXPOSED TO EXTREME HEAT OR FIRE. MAY DECOMPOSE UNDER FIRE CONDITIONS EMITTING IRRITANT AND/OR TOXIC GASES.

FIRE FIGHTING PROCEDURES

WATER MAY BE USED TO COOL AND PROTECT EXPOSED CONTAINERS. FIREFIGHTERS SHOULD USE FULL PROTECTIVE CLOTHING, EYE PROTECTION, AND SELF-CONTAINED BREATHING APPARATUS.

HAZARDOUS DECOMPOSITION OR COMBUSTION PRODUCTS

CARBON MONOXIDE, CARBON DIOXIDE, ACRYLIC MONOMERS,
OXIDES OF CALCIUM

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

COMPLY WITH ALL APPLICABLE HEALTH AND ENVIRONMENTAL REGULATIONS. ELIMINATE ALL SOURCES OF IGNITION. VENTILATE AREA. SPILLS MAY BE COLLECTED WITH ABSORBENT MATERIALS. EVACUATE ALL UNNECESSARY PERSONNEL. PLACE COLLECTED MATERIAL IN PROPER CONTAINER. COMPLETE PERSONAL PROTECTIVE EQUIPMENT MUST BE USED DURING CLEANUP.

LARGE SPILLS: SHUT OFF LEAK IF SAFE TO DO SO. DIKE AND CONTAIN SPILL. PUMP TO STORAGE OR SALVAGE VESSELS. USE ABSORBENT TO PICK UP EXCESS RESIDUE. KEEP SALVAGEABLE MATERIAL AND RINSE WATER OUT OF SEWERS AND WATER COURSES.

SMALL SPILLS: USE ABSORBENT TO PICK UP RESIDUE AND DISPOSE OF PROPERLY.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: STORE BELOW 100F (38C). KEEP FROM FREEZING.

OTHER PRECAUTIONS

USE ONLY WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. AVOID CONTACT WITH SKIN AND EYES, AND BREATHING OF VAPORS. WASH HANDS THOROUGHLY AFTER HANDLING, ESPECIALLY BEFORE EATING OR SMOKING. KEEP CONTAINERS TIGHTLY CLOSED AND UPRIGHT WHEN NOT IN USE. GROUND EQUIPMENT WHEN TRANSFERRING TO PREVENT ACCUMULATION OF STATIC CHARGE.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

COMMON NAME: LIMESTONE
CAS NUMBER: 1317-65-3
ACGIH(TWA): 10 MG/M3 OSHA(TWA): 5 MG/M3

COMMON NAME: CLAY
CAS NUMBER: 1332-58-7
ACGIH(TWA): 2 MG/M3 OSHA(TWA): 5 MG/M3

COMMON NAME: QUARTZ
CAS NUMBER: 14808-60-7
ACGIH(TWA): 0.05MG/M3 OSHA(TWA): 0.1 MG/M3

COMMON NAME: ACETONE
CAS NUMBER: 67-64-1
ACGIH(TWA): 500PPM OSHA(TWA): 1000 PPM
ACGIH(STEL): 750PPM

COMMON NAME: BUTYL BENZYL PHTHALATE
CAS NUMBER: 85-68-7
ACGIH(TWA): 5 MG/M3 OSHA(TWA): 5 MG/M3

RESPIRATORY PROTECTION

WHERE RESPIRATORY PROTECTION IS REQUIRED, USE ONLY NIOSH/MSHA APPROVED RESPIRATORS IN ACCORDANCE WITH OSHA STANDARD 29 CFR 1910.134.

VENTILATION

PROVIDE DILUTION VENTILATION OR LOCAL EXHAUST TO PREVENT BUILD-UP OF VAPORS. USE EXPLOSION-PROOF EQUIPMENT.

PERSONAL PROTECTIVE EQUIPMENT

EYE WASH, SAFETY SHOWER, SAFETY GLASSES OR GOGGLES,
IMPERVIOUS GLOVES, IMPERVIOUS CLOTHING

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE:	NOT AVAILABLE	SPECIFIC GRAVITY:	1.436
BOILING RANGE (F/C):	133-698/ 56-370	WEIGHT PER GALLON:	11.96/ 14.36 IMP
APPEARANCE:	TAN	%VOLATILE BY VOLUME:	56.24
PHYSICAL STATE:	PASTE	SOLUBLE IN WATER:	Y
PH:	9.60		

SECTION 10: STABILITY AND REACTIVITY

UNDER NORMAL CONDITIONS: STABLE (SEE SECTION 5 FIRE FIGHTING MEASURES)

MATERIALS TO AVOID: OXIDIZERS, ACIDS, AMINES, NITRIC ACID,
STYRENE MONOMER.

CONDITIONS TO AVOID: ELEVATED TEMPERATURES, FREEZING, SPARKS,
OPEN FLAME, IGNITION SOURCES

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

COMMON NAME: LIMESTONE
CAS NUMBER: 1317-65-3
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO
LD50: 6450.00 MG/KG ORL RAT

COMMON NAME: CLAY
CAS NUMBER: 1332-58-7
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME: QUARTZ
CAS NUMBER: 14808-60-7
CARCINOGENICITY LISTED BY: NTP YES IARC YES 1 OSHA NO ACGIH NO

COMMON NAME: ACETONE
CAS NUMBER: 67-64-1
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO
LD50: 5800.00 MG/KG ORL RAT
LD50: > 9400.00 MG/KG SKN GPG

COMMON NAME: BUTYL BENZYL PHTHALATE
CAS NUMBER: 85-68-7
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO
LD50: 2330.00 MG/KG ORL RAT
LD50: 6700.00 MG/KG SKN RAT

SUPPLEMENTAL HEALTH INFORMATION

CONTAINS A CHEMICAL THAT MAY BE ABSORBED THROUGH SKIN.

NOTICE - REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

CARCINOGENICITY: CONTAINS CRYSTALLINE SILICA WHICH IS CONSIDERED A HAZARD BY INHALATION. IARC HAS CLASSIFIED CRYSTALLINE SILICA AS CARCINOGENIC TO HUMANS (GROUP 1). CRYSTALLINE SILICA IS ALSO A KNOWN CAUSE OF SILICOSIS, A NONCANCEROUS LUNG DISEASE. THE NATIONAL TOXICOLOGY PROGRAM (NTP) HAS CLASSIFIED CRYSTALLINE SILICA AS A KNOWN HUMAN CARCINOGEN.

REPRODUCTIVE EFFECTS: NO REPRODUCTIVE EFFECTS ARE ANTICIPATED

MUTAGENICITY: NO MUTAGENIC EFFECTS ARE ANTICIPATED

TERATOGENICITY: NO TERATOGENIC EFFECTS ARE ANTICIPATED

SECTION 12: ECOLOGICAL INFORMATION

NO ECOLOGICAL TESTING HAS BEEN DONE BY ICI PAINTS ON THIS PRODUCT AS A WHOLE.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.AVOID DISCHARGE TO NATURAL WATERS.

SECTION 14: TRANSPORT INFORMATION

DOT: ADHESIVE
IMDG: NOT AVAILABLE
IATA: NOT AVAILABLE
TDG: NOT AVAILABLE

SECTION 15: REGULATORY INFORMATION

	SARA 302	SARA 313	CERCLA 302.4	HAZ AIR POLLUTANT	MARINE POLTNT
CAS NUMBER: 67-64-1 COMMON NAME: ACETONE	NO	NO	YES	NO	NO
CAS NUMBER: 85-68-7 COMMON NAME: BUTYL BENZYL PHTHALATE	NO	NO	YES	NO	

AS OF THE DATE OF THIS MSDS, ALL OF THE COMPONENTS IN THIS PRODUCT ARE LISTED (OR ARE OTHERWISE EXEMPT FROM LISTING) ON THE TSCA INVENTORY. THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR (CONTROLLED PRODUCTS REGULATIONS) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

SECTION 16: OTHER INFORMATION

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE AT THE TIME OF PREPARATION OF THIS DATA SHEET AND WHICH ICI PAINTS BELIEVES TO BE RELIABLE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA. ICI PAINTS SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS INFORMATION, OR OF ANY PRODUCT, METHOD OR APPARATUS MENTIONED AND YOU MUST MAKE YOUR OWN DETERMINATION OF ITS SUITABILITY AND COMPLETENESS FOR YOUR OWN USE, FOR THE PROTECTION OF THE ENVIRONMENT, AND THE HEALTH AND SAFETY OF YOUR EMPLOYEES AND USERS OF THIS MATERIAL. COMPLIES WITH OSHA HAZARD COMMUNICATION STANDARD 29CFR1910.1200.