
MATERIAL SAFETY DATA SHEET (IntegraFlex 1980 Hardener)

EMERGENCY CONTACT: (864) 680-1547

SECTION I. IDENTIFICATION

TRADE NAME: *IntegraFlex*

PRODUCT CLASS: MODIFIED EPOXY HARDENER (AMINE)

FOR INDUSTRIAL USE ONLY

PRODUCT TYPE: IntegraFlex 1980 HARDENER

IMPORTANT: THIS MATERIAL WILL NOT BE SOLD FOR USE IN PRODUCTS FOR WHICH PROLONGED CONTACT WITH MUCOUS MEMBRANES, ABRADED SKIN, OR IMPLANTATION WITHIN THE HUMAN BODY IS SPECIFICALLY INTENDED. BECAUSE OF THE WIDE RANGE OF SUCH POTENTIAL USES, WOLVERINE COATINGS CORPORATION IS NOT ABLE TO RECOMMEND THIS MATERIAL AS SAFE AND EFFECTIVE FOR SUCH USES AND ASSUMES NO LIABILITY FOR ANY SUCH USES.

HAZARD STATEMENT: THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200. THIS PRODUCT IS CONSIDERED TO BE A HAZARDOUS CHEMICAL UNDER THAT STANDARD.

SECTION II. HAZARDOUS INGREDIENTS

<u>INGREDIENTS</u>	<u>CAS NO.</u>
AMINOETHYL PIPERAZINE, 1-(2-, AEP)	140-64-8
NONYLPHENOL	25154-52-3

SUSPECTED CANCER AGENT: NO

SECTION III. PHYSICAL DATA

APPEARANCE AND ODOR: AMBER LIQUID WITH A FISHY ODOR

BOILING POINT: >392°F (200°C)

VAPOR PRESSURE: <1.00 mmHg at 21°C

pH: ALKALINE

SPECIFIC GRAVITY: 0.97

SOLUBILITY IN WATER: COMPLETELY SOLUBLE

SECTION IV. FIRE AND EXPLOSION DATA

FLASH POINT: 214°F (101°C)

DOT LABELING: CORROSIVE LIQUID

UN NO: U.N. 1760

EXTINGUISHING MEDIA: FOAM, CARBON DIOXIDE, DRY CHEMICAL, DRY SAND, LIMESTONE POWDER

SPECIFIC HAZARDS: MAY GENERATE AMMONIA GAS. MAY GENERATE TOXIC NITROGEN OXIDE GASES. USE OF WATER MAY RESULT IN THE FORMATION OF TOXIC AQUEOUS SOLUTIONS. DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS OR WATER COURSES. INCOMPLETE COMBUSTION MAY FORM CARBON MONOXIDE. DOWNWIND PERSONNEL MUST BE EVACUATED. BURNING PRODUCES OBNOXIOUS AND TOXIC FUMES.

SPECIAL FIRE FIGHTING PROCEDURES: FIREFIGHTERS SHOULD WEAR GOGGLES AND SELF-CONTAINED BREATHING APPARATUS TO AVOID INHALATION OF SMOKE OR VAPORS.

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SECTION V. REACTIVITY DATA

STABILITY: STABLE

INCOMPATIBILITY: ORGANIC ACIDS (I.E.ACETIC ACID, CITRIC ACID), SODIUM HYPOCHLORITE, MINERAL ACIDS, PEROXIDES, REACTIVE METALS (I.E. SODIUM , CALCIUM, ZINC), HYDROXYL COMPOUNDS, AND OXIDIZING AGENTS. AVOID LONG TERM CONTACT WITH COPPER, ALUMINUM, ZINC AND GALVANIZED SURFACES DUE TO SLOW CORROSION.

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, NITRIC ACID, AMMONIA, NITROGEN OXIDES, ALDEHYDES, FLAMMABLE HYDROCARBON FRAGMENTS (I.E. ACETYLENE)

SECTION VI. HEALTH HAZARDOUS DATA

ENTRY ROUTES: EYE AND SKIN CONTACT

MEDICAL CONDITIONS AGGRAVATED: ALLERGIES, SKIN DISORDERS, EYE DISEASE

PRIMARY RATES OF EXPOSURE:

ORAL: LD50 RATS >1620 MG/KG. HARMFUL IF SWALLOWED. IF INGESTED, SEVERE BURNS OF THE MOUTH AND THROAT CAN OCCUR, AS WELL AS DANGER OF PERFORATION OF THE ESOPHAGUS AND THE STOMACH.

DERMAL: LD50 RABBIT >1000 MG/KG. HARMFUL IN CONTACT WITH SKIN. CAUSES SKIN BURNS. SYMPTOMS OF OVEREXPOSURE MAY BE HEADACHE, DIZZINESS, TIREDNESS, NAUSEA, AND VOMITING.

IRRITATION:

SKIN: SEVERE SKIN IRRITATION

EYE: SEVERE EYE IRRITATION

SENSITIZATION: POTENTIAL SENSITIZER

INHALATION: CAN CAUSE SEVERE EYE, SKIN, AND RESPIRATORY TRACT BURNS.

EFFECTS OF OVEREXPOSURE: OVEREXPOSURE TO THIS MATERIAL CAN RESULT IN SEVERE SKIN AND EYE IRRITATION. PROLONGED CONTACT WILL RESULT IN CHEMICAL BURNS. REPEATED OR PROLONGED CONTACT CAN CAUSE SENSITIZATION, ASTHMA, OR ECZEMA.

EMERGENCY AND FIRST AID PROCEDURES:

EYES - FOR EYE CONTACT, IMMEDIATELY FLUSH EYES FOR AT LEAST FIFTEEN MINUTES WITH RUNNING WATER. HOLD EYELIDS APART TO ENSURE RINSING OF THE ENTIRE EYE SURFACE AND LIDS WITH WATER. IF PHYSICIAN IS NOT AVAILABLE, FLUSH FOR AN ADDITIONAL FIFTEEN MINUTES. GET IMMEDIATE MEDICAL ATTENTION.

SKIN - FOR SKIN CONTACT, IMMEDIATELY REMOVE CONTAMINATED CLOTHING AND SHOES UNDER A SAFETY SHOWER. WASH AFFECTED AREAS THOROUGHLY WITH PLENTY OF WATER AND SOAP FOR AT LEAST FIFTEEN MINUTES. GET IMMEDIATE MEDICAL ATTENTION. DISCARD OR DECONTAMINATE CLOTHING BEFORE RE-USE, AND DESTROY CONTAMINATED SHOES. COVER WOUND WITH STERILE DRESSING. NOTE TO PHYSICIANS: CORTICOSTEROID CREAM HAS BEEN EFFECTIVE IN TREATING SKIN IRRITATION.

INGESTION - IF SWALLOWED, DO NOT INDUCE VOMITING WITHOUT MEDICAL ADVISE. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. GET IMMEDIATE MEDICAL ATTENTION.

INHALATION - MOVE TO FRESH AIR

SECTION VII. SPILL OR LEAK PROCEDURES

SPILL PROCEDURES: USE A SELF-CONTAINED BREATHING APPARATUS AND CHEMICALLY PROTECTIVE CLOTHING. WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION. PLACE IN A STEEL CHEMICAL WASTE CONTAINER. KEEP OUT OF PUBLIC SEWERS AND WATERWAYS.

WASTE DISPOSAL METHODS: IN SEPARATE, CLOSED METAL CONTAINER IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION VIII. SPECIAL PROTECTION INFORMATION

VENTILATION: GOOD GENERAL MECHANICAL VENTILATION AND LOCAL EXHAUST IS REQUIRED.

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PROTECTIVE GLOVES: WEAR IMPERVIOUS GLOVES (NEOPRENE OR OTHER SUITABLE MATERIAL).

EYE PROTECTION: WEAR SPLASH-PROOF CHEMICAL RESISTANT GOGGLES OR FACE SHIELD.

RESPIRATORY PROTECTION: NOT REQUIRED FOR PROPERLY VENTILATED AREAS.

OTHER PROTECTIVE EQUIPMENT FOR APPLICATION OR CLEAN-UP: FULL PROTECTIVE CLOTHING.

HYGENIC PRACTICES: WASH THOROUGHLY BEFORE EATING, SMOKING, OR USING WASHROOM. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. DISCARD CONTAMINATED LEATHER ARTICLES.

SECTION IX. SPECIAL PRECAUTIONS

HMIS CODE:

HEALTH: 3 FIRE: 1 REACTIVITY: 0

HANDLING, SHIPPING, AND STORING PRECAUTIONS: KEEP CONTAINER TIGHTLY CLOSED, UPRIGHT WHEN NOT IN USE. STORE IN COOL, DRY, WELL-VENTILATED AREA. STORE IN STEEL CONTAINERS.

OTHER PRECAUTIONS: DO NOT TAKE INTERNALLY. AVOID CONTACT WITH SKIN AND EYES. DO NOT STORE IN REACTIVE METAL CONTAINERS.

SECTION X. REGULATORY INFORMATION

DOT CLASS: PAINT OR PAINT RELATED PRODUCT

DOT NUMBER: UN 3066

RCRA STATUS: NOT A HAZARDOUS WASTE UNDER RCRA (40 CFR 261)

CERCLA STATUS: NOT LISTED

SARA/TITLE III-"TOXIC CHEMICAL LIST: THIS PRODUCT DOES NOT CONTAIN A TOXIC CHEMICAL FOR ROUTINE ANNUAL "TOXIC CHEMICAL RELEASE REPORTING" UNDER SECTION 313 (40 CFR 372)

OSHA STATUS: THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH FEDERAL OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200. THIS PRODUCT IS CONSIDERED TO BE A HAZARDOUS CHEMICAL UNDER THAT STANDARD: CORROSIVE. SENSITIZER.

TSCA INVENTORY STATUS: CHEMICAL COMPONENTS LISTED ON TSCA INVENTORY.

ISSUE DATE: 07/2006

FOR FURTHER INFORMATION, PLEASE CONTACT PRODUCT SAFETY DIRECTOR.

THE INFORMATION AND RECOMMENDATIONS 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 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 THAT EXIST. FINAL DETERMINATION OF SUITABILITY OF THE CHEMICAL IS THE SOLE RESPONSIBILITY OF THE USER. USERS 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 EXPRESSED OR IMPLIED OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER NATURE, ARE MADE HEREUNDER WITH RESPECT TO THE INFORMATION CONTAINED HEREIN, OR TO THE CHEMICAL TO WHICH THE USER REFERS.