

2

ORDER NO: 5954350 RELEASE NO: 001 MSDS NO: 049056

B A R N E S D I S T R I B U T I O N

Synonyms: 22023
MATERIAL SAFETY DATA SHEET

HENKEL

REVISION NUMBER: 004.0

ISSUE DATE: 06/24/2013

-----1. PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: BOWMAN F.C. 4 GR CAN - HARDENER

PRODUCT TYPE: EPOXY HARDENER

IDH NUMBER: 901527

ITEM NUMBER: 12082_150445N

REGION: UNITED STATES

COMPANY ADDRESS:
HENKEL CORPORATION
ONE HENKEL WAY
ROCKY HILL, CONNECTICUT 06067

CONTACT INFORMATION:
TELEPHONE: 860.571.5100

MEDICAL EMERGENCY PHONE:
POISON CONTROL CENTER: 1-877-671-4608 (TOLL FREE) OR 1-303-592-1711

TRANSPORT EMERGENCY PHONE:
CHEMTREC: 1-800-424-9300 (TOLL FREE) OR 1-703-527-3887

INTERNET: WWW.HENKELNA.COM

-----2. HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:

PHYSICAL STATE: PASTE

COLOR: BLACK

ODOR: MERCAPTAN

HMIS:
HEALTH 2*
FLAMMABILITY 1
PHYSICAL HAZARD 1

ORDER NO: 5954350 RELEASE NO: 001 MSDS NO: 049056

BARNES DISTRIBUTION
PERSONAL PROTECTION SEE MSDS SECTION 8

WARNING:

CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.

RELEVANT ROUTES OF EXPOSURE: SKIN, INHALATION, EYES, INGESTION

POTENTIAL HEALTH EFFECTS:

INHALATION:

MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE IRRITATION TO NOSE AND THROAT. VAPORS MAY CAUSE HEADACHES, NAUSEA, DIZZINESS AND RESPIRATORY TRACT IRRITATION. SHORTNESS OF BREATH.

SKIN CONTACT:

ALLERGIC SKIN REACTION. MODERATE SKIN IRRITATION. ITCHING. REDNESS. MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

EYE CONTACT: MODERATE EYE IRRITATION. REDNESS.

INGESTION:

INGESTION MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. MAY BE HARMFUL IF SWALLOWED.

EXISTING CONDITIONS AGGRAVATED BY EXPOSURE:

SKIN DISORDERS. SKIN ALLERGIES. RESPIRATORY DISORDERS. EYE DISORDERS.

THIS MATERIAL IS CONSIDERED HAZARDOUS BY THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

SEE SECTION 11 FOR ADDITIONAL TOXICOLOGICAL INFORMATION.

-----3. COMPOSITION / INFORMATION ON INGREDIENTS -----

HAZARDOUS COMPONENTS	CAS NUMBER	%
ALUMINIUM HYDROXIDE	21645-51-2	30 - 60
POLYMERCAPTAN HARDENER	PROPRIETARY	30 - 60
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	90-72-2	5 - 10
DISTILLATES, PETROLEUM, HEAVY THERMAL CRACKED	64741-81-7	5 - 10
STYRENE	100-42-5	1 - 5
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE	112945-52-5	1 - 5
ETHYLENE GLYCOL	107-21-1	1 - 5

ORDER NO: 5954350 RELEASE NO: 001 MSDS NO: 049056

B A R N E S D I S T R I B U T I O N

BIS[(DIMETHYLAMINO)METHYL]PHENOL	71074-89-0	1 - 5
BENZ(A)ANTHRACENE	56-55-3	0.1 - 1

-----4. FIRST AID MEASURES -----

INHALATION:

MOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF SYMPTOMS DEVELOP AND PERSIST, GET MEDICAL ATTENTION.

SKIN CONTACT:

IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER (USING SOAP, IF AVAILABLE). REMOVE CONTAMINATED CLOTHING AND FOOTWEAR. GET MEDICAL ATTENTION. WASH CLOTHING BEFORE REUSE. THOROUGHLY CLEAN SHOES BEFORE REUSE.

EYE CONTACT:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.

-----5. FIRE FIGHTING MEASURES -----

FLASH POINT: >93 DEG. C (>199.4 DEG. F) TAGLIABUE CLOSED CUP

AUTOIGNITION TEMPERATURE: NOT AVAILABLE.

FLAMMABLE/EXPLOSIVE LIMITS - LOWER: NOT AVAILABLE.

FLAMMABLE/EXPLOSIVE LIMITS - UPPER: NOT AVAILABLE.

EXTINGUISHING MEDIA: FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

SPECIAL FIREFIGHTING PROCEDURES:

WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING, SUCH AS TURN-OUT GEAR.

UNUSUAL FIRE OR EXPLOSION HAZARDS:

CLOSED CONTAINERS MAY RUPTURE (DUE TO BUILD UP OF PRESSURE) WHEN EXPOSED TO EXTREME HEAT.

HAZARDOUS COMBUSTION PRODUCTS:

OXIDES OF CARBON. OXIDES OF NITROGEN. OXIDES OF SULFUR. ALCOHOLS. ALDEHYDES. AMMONIA. ETHERS. HYDROGEN SULFIDE. NITRIC ACID. TOXIC FUMES. IRRITATING VAPORS.

-----6. ACCIDENTAL RELEASE MEASURES -----

B A R N E S D I S T R I B U T I O N

USE PERSONAL PROTECTION RECOMMENDED IN SECTION 8. ISOLATE THE HAZARD AREA AND DENY ENTRY TO UNNECESSARY AND UNPROTECTED PERSONNEL.

ENVIRONMENTAL PRECAUTIONS: DO NOT ALLOW PRODUCT TO ENTER SEWER OR WATERWAYS.

CLEAN-UP METHODS:

REMOVE ALL SOURCES OF IGNITION. ENSURE ADEQUATE VENTILATION. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. REFER TO SECTION 8 "EXPOSURE CONTROLS / PERSONAL PROTECTION" PRIOR TO CLEAN UP. SOAK UP WITH INERT ABSORBENT MATERIAL (E.G. SAND, SILICA GEL, ACID BINDER, UNIVERSAL BINDER, SAWDUST). SCRAPE UP SPILLED MATERIAL AND PLACE IN A CLOSED CONTAINER FOR DISPOSAL.

-----7. HANDLING AND STORAGE -----

HANDLING:

PREVENT CONTACT WITH EYES, SKIN AND CLOTHING. DO NOT BREATHE VAPOR AND MIST. WASH THOROUGHLY AFTER HANDLING. DO NOT TASTE OR SWALLOW. ENSURE ADEQUATE SUCTION. KEEP CONTAINER CLOSED.

STORAGE:

KEEP CONTAINER TIGHTLY CLOSED AND IN A COOL, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS. KEEP AWAY FROM HEAT, SPARK AND FLAME. STORE IN ORIGINAL CONTAINER UNTIL READY TO USE.

FOR INFORMATION ON PRODUCT SHELF LIFE CONTACT HENKEL CUSTOMER SERVICE AT (800) 243-4874.

-----8. EXPOSURE CONTROLS / PERSONAL PROTECTION -----

EMPLOYERS SHOULD COMPLETE AN ASSESSMENT OF ALL WORKPLACES TO DETERMINE THE NEED FOR, AND SELECTION OF, PROPER EXPOSURE CONTROLS AND PROTECTIVE EQUIPMENT FOR EACH TASK PERFORMED.

HAZARDOUS COMPONENTS	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
ALUMINIUM HYDROXIDE	10 MG/M3 TWA (AS A1) TOTAL DUST. 1 MG/M3 TWA RESPIRABLE FRACTION.	15 MG/M3 TWA (AS A1) TOTAL DUST. 5 MG/M3 TWA (AS A1) RESPIRABLE FRACTION.	NONE	NONE
POLYMERCAPTAN HARDENER	NONE	NONE	NONE	NONE
2,4,6-TRIS(DI- METHYLAMINOMETHYL)PHENOL	NONE	NONE	NONE	NONE

	B A R N E S	D I S T R I B U T I O N		
DISTILLATES, PETROLEUM, HEAVY THERMAL CRACKED	NONE	NONE	NONE	NONE
STYRENE	40 PPM STEL 20 PPM TWA	100 PPM TWA 200 PPM CEILING 600 PPM MAX. CONC 5 MINUTES IN ANY 3 HOURS	NONE	NONE
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE	10 MG/M3 TWA INHALABLE DUST. 3 MG/M3 TWA RESPIRABLE FRACTION.	20 MPPCF TWA 0.8 MG/M3 TWA	NONE	NONE
ETHYLENE GLYCOL	100 MG/M3 CEILING AEROSOL.	NONE	NONE	NONE
BIS[(DIMETHYLAMINO)- METHYL]PHENOL	NONE	NONE	NONE	NONE
BENZ(A)ANTHRACENE	INCLUDED IN THE REGULATION BUT WITH NO DATA VALUES. SEE REGULATION FOR FURTHER DETAILS EXPOSURE BY ALL ROUTES SHOULD BE CAREFULLY CONTROLLED TO LEVELS AS LOW AS POSSIBLE.	NONE	NONE	NONE

ENGINEERING CONTROLS:

USE LOCAL VENTILATION IF GENERAL VENTILATION IS INSUFFICIENT TO MAINTAIN VAPOR CONCENTRATION BELOW ESTABLISHED EXPOSURE LIMITS.

RESPIRATORY PROTECTION:

USE A NIOSH APPROVED AIR-PURIFYING RESPIRATOR IF THE POTENTIAL TO EXCEED ESTABLISHED EXPOSURE LIMITS EXISTS.

EYE/FACE PROTECTION: SAFETY GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS.

SKIN PROTECTION:

USE CHEMICAL RESISTANT, IMPERMEABLE CLOTHING INCLUDING GLOVES AND EITHER AN APRON OR BODY SUIT TO PREVENT SKIN CONTACT.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

ORDER NO: 5954350 RELEASE NO: 001 MSDS NO: 049056

B A R N E S D I S T R I B U T I O N

PHYSICAL STATE: PASTE

COLOR: BLACK

ODOR: MERCAPTAN

ODOR THRESHOLD: NOT AVAILABLE.

PH: NOT APPLICABLE

VAPOR PRESSURE: NEGLIGIBLE

BOILING POINT/RANGE: >149 DEG. C (>300.2 DEG. F)

MELTING POINT/RANGE: NOT AVAILABLE.

SPECIFIC GRAVITY: 1.4

VAPOR DENSITY: NOT AVAILABLE.

FLASH POINT: >93 DEG. C (>199.4 DEG. F) TAGLIABUE CLOSED CUP

FLAMMABLE/EXPLOSIVE LIMITS - LOWER: NOT AVAILABLE.

FLAMMABLE/EXPLOSIVE LIMITS - UPPER: NOT AVAILABLE.

AUTOIGNITION TEMPERATURE: NOT AVAILABLE.

EVAPORATION RATE: NOT AVAILABLE.

SOLUBILITY IN WATER: SLIGHT

PARTITION COEFFICIENT (N-OCTANOL/WATER): NOT AVAILABLE.

VOC CONTENT: 0.04% (VALUE FOR RESIN AND HARDENER TOGETHER)

-----10. STABILITY AND REACTIVITY -----

STABILITY: STABLE UNDER NORMAL CONDITIONS OF STORAGE AND USE.

HAZARDOUS REACTIONS: NONE UNDER NORMAL PROCESSING.

HAZARDOUS DECOMPOSITION PRODUCTS:

OXIDES OF CARBON. OXIDES OF NITROGEN. OXIDES OF SULFUR. ALCOHOLS. ALDEHYDES.
AMMONIA. ETHERS. HYDROGEN SULFIDE. NITRIC ACID. TOXIC FUMES. IRRITATING
VAPORS.

INCOMPATIBLE MATERIALS:

ACIDS. BASES. OXIDIZING AGENTS. SODIUM HYPOCHLORITE. PEROXIDES. COPPER.
COPPER ALLOYS. HALOGENS. METAL SALTS.

CONDITIONS TO AVOID: EXCESSIVE HEAT. STORE AWAY FROM INCOMPATIBLE MATERIALS.

B A R N E S D I S T R I B U T I O N

-----11. TOXICOLOGICAL INFORMATION -----

HAZARDOUS COMPONENTS	NTP CARCINOGEN	IARC CARCINOGEN	OSHA CARCINOGEN (SPECIFICALLY REGULATED)
ALUMINIUM HYDROXIDE	NO	NO	NO
POLYMERCAPTAN HARDENER	NO	NO	NO
2,4,6-TRIS(DI- IMETHYLAMINOMETHYL) PHENOL	NO	NO	NO
DISTILLATES, PETROLEUM, HEAVY THERMAL CRACKED	NO	GROUP 2B	NO
STYRENE	REASONABLY ANTICIPATED TO BE A HUMAN CARCINOGEN.	GROUP 2B	NO
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE	NO	NO	NO
ETHYLENE GLYCOL	NO	NO	NO
BIS[(DIMETHYLAMINO) METHYL]PHENOL	NO	NO	NO
BENZ(A)ANTHRACENE	REASONABLY ANTICIPATED TO BE A HUMAN CARCINOGEN.	GROUP 2B	NO

HAZARDOUS COMPONENTS	HEALTH EFFECTS/TARGET ORGANS
ALUMINIUM HYDROXIDE	IRRITANT, LUNG, RESPIRATORY
POLYMERCAPTAN HARDENER	NO RECORDS
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	IRRITANT, ALLERGEN
DISTILLATES, PETROLEUM, HEAVY THERMAL CRACKED	NO TARGET ORGANS
STYRENE	BLOOD, EAR, EYES, IRRITANT, LIVER, MUTAGEN, NERVOUS SYSTEM, SOME EVIDENCE OF CARCINOGENICITY
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE	NUISANCE DUST

ORDER NO: 5954350 RELEASE NO: 001 MSDS NO: 049056

	B A R N E S D I S T R I B U T I O N
ETHYLENE GLYCOL	BLOOD, BONE MARROW, CENTRAL NERVOUS SYSTEM, DEVELOPMENTAL, EYES, IRRITANT, KIDNEY, LIVER, METABOLIC
BIS[(DIMETHYLAMINO)METHYL]PHENOL	NO RECORDS
BENZ(A)ANTHRACENE	BLOOD, IMMUNE SYSTEM, IRRITANT, LIVER, MUTAGEN, RESPIRATORY, SKIN, SOME EVIDENCE OF CARCINOGENICITY

-----12. ECOLOGICAL INFORMATION -----

ECOLOGICAL INFORMATION: NOT AVAILABLE.

-----13. DISPOSAL CONSIDERATIONS -----

INFORMATION PROVIDED IS FOR UNUSED PRODUCT ONLY.

RECOMMENDED METHOD OF DISPOSAL:
FOLLOW ALL LOCAL, STATE, FEDERAL AND PROVINCIAL REGULATIONS FOR DISPOSAL.

HAZARDOUS WASTE NUMBER: NOT A RCRA HAZARDOUS WASTE.

-----14. TRANSPORT INFORMATION -----

U.S. DEPARTMENT OF TRANSPORTATION GROUND (49 CFR):
PROPER SHIPPING NAME: NOT REGULATED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE

INTERNATIONAL AIR TRANSPORTATION (ICAO/IATA):
PROPER SHIPPING NAME: NOT REGULATED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE

WATER TRANSPORTATION (IMO/IMDG):
PROPER SHIPPING NAME: NOT REGULATED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE

-----15. REGULATORY INFORMATION -----

UNITED STATES REGULATORY INFORMATION:

ORDER NO: 5954350 RELEASE NO: 001 MSDS NO: 049056

B A R N E S D I S T R I B U T I O N

TSCA 8 (B) INVENTORY STATUS:

ALL COMPONENTS ARE LISTED OR ARE EXEMPT FROM LISTING ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY.

TSCA 12(B) EXPORT NOTIFICATION: NONE ABOVE REPORTING DE MINIMUS

CERCLA/SARA SECTION 302 EHS: NONE ABOVE REPORTING DE MINIMIS

CERCLA/SARA SECTION 311/312: IMMEDIATE HEALTH, DELAYED HEALTH

CERCLA/SARA 313:

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 (40 CFR 372). STYRENE (CAS# 100-42-5). ETHYLENE GLYCOL (CAS# 107-21-1). BENZ(A)ANTHRACENE (CAS# 56-55-3).

CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS A CHEMICAL KNOWN IN THE STATE OF CALIFORNIA TO CAUSE CANCER. THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

CANADA REGULATORY INFORMATION:

CEPA DSL/NDL STATUS:

CONTAINS ONE OR MORE COMPONENTS LISTED ON THE NON-DOMESTIC SUBSTANCES LIST. ALL OTHER COMPONENTS ARE LISTED ON OR ARE EXEMPT FROM LISTING ON THE DOMESTIC SUBSTANCES LIST. COMPONENTS LISTED ON THE NDSL MUST BE TRACKED BY ALL CANADIAN IMPORTERS OF RECORD AS REQUIRED BY ENVIRONMENT CANADA. THEY MAY BE IMPORTED INTO CANADA IN LIMITED QUANTITIES. PLEASE CONTACT REGULATORY AFFAIRS FOR ADDITIONAL DETAILS.

WHMIS HAZARD CLASS: D.2.A, D.2.B

-----16. OTHER INFORMATION -----

THIS MATERIAL SAFETY DATA SHEET CONTAINS CHANGES FROM THE PREVIOUS VERSION IN SECTIONS: 1, 2, 3, 4, 5, 6, 7, 8, 10

PREPARED BY: RENA PETRIDES, REGULATORY AFFAIRS SPECIALIST

DISCLAIMER:

THE DATA CONTAINED HEREIN ARE FURNISHED FOR INFORMATION ONLY AND ARE BELIEVED TO BE RELIABLE. HOWEVER, HENKEL CORPORATION AND ITS AFFILIATES ("HENKEL") DOES NOT ASSUME RESPONSIBILITY FOR ANY RESULTS OBTAINED BY PERSONS OVER WHOSE METHODS HENKEL HAS NO CONTROL. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF HENKEL'S PRODUCTS OR ANY PRODUCTION METHODS MENTIONED HEREIN FOR A PARTICULAR PURPOSE, AND TO ADOPT SUCH PRECAUTIONS AS MAY BE ADVISABLE FOR THE PROTECTION OF PROPERTY AND PERSONS AGAINST ANY HAZARDS THAT MAY BE INVOLVED IN THE HANDLING AND USE OF ANY HENKEL'S PRODUCTS. IN LIGHT OF THE FOREGOING, HENKEL SPECIFICALLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARISING FROM SALE OR USE OF HENKEL'S PRODUCTS. HENKEL FURTHER

ORDER NO: 5954350 RELEASE NO: 001 MSDS NO: 049056

BARNES DISTRIBUTION
DISCLAIMS ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND,
INCLUDING LOST PROFITS.