

MATERIAL SAFETY DATA SHEET

ACCUMETRIC LLC
350 RING ROAD
ELIZABETHTOWN, KY 42701

270-769-3385

BOSS ® 333 EXPANDING FOAM SEALANT

SECTION 1. IDENTIFICATION

CHEMICAL PRODUCT

BOSS 333 EXPANDING FOAM SEALANT

MANUFACTURER

ACCUMETRIC LLC
350 RING ROAD
ELIZABETHTOWN, KY 42701

EMERGENCY OVERVIEW

PRODUCT INFORMATION 800-928-2677
TRANSPORTATION EMERGENCY: CHEMTREC: 800-424-9830 (24 HOUR SERVICE)
BOSS EXPANDING FOAM SEALANT IS REGISTERED BY ACCUMETRIC, LLC.

SECTION 2. COMPOSITION (HAZARDOUS COMPONENTS)

- **CHEMICAL CHARACTERIZATION**
- **DESCRIPTION:** MIXTURE OF THE SUBSTANCES LISTED BELOW WITH NONHAZARDOUS ADDITIONS.
- **DANGEROUS COMPONENTS:**

<u>CHEMICAL NAME</u>	<u>CASE NUMBER</u>	<u>PERCENTAGE</u>
Diphenylmethanediisocyanate, Isomeres and Homologues Xn: R 20-36/37/38-42/43	9016-87-9	30-60%
Butane	106-97-8	<10%

F+: R 12

Propane
F+: R 12

74-98-6

<10%

SECTION 3. HAZARDS IDENTIFICATION

HAZARD DESCRIPTION:

Xn: HARMFUL

F+: EXTREMELY FLAMMABLE

R 20 HARMFUL BY INHALATION.

R 36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

R 42/43 MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.
CONTAINS ISOCYANATES. SEE INFORMATION SUPPLIED BY THE
MANUFACTURER.

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT
EXPOSE TO TEMPERATURES EXCEEDING 50°C/122°F, I.E. ELECTRIC LIGHTS.
DO NOT PIERCE OR BURN, EVEN AFTER USE.

DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL.
KEEP AWAY FROM SOURCES OF IGNITION – NO SMOKING.

CLASSIFICATION SYSTEM:

THE CLASSIFICATION IS IN LINE WITH INTERNATIONALLY APPROVED
CALCULATION STANDARDS. IT IS EXPANDED, HOWEVER, BY
INFORMATION FROM TECHNICAL LITERATURE AND BY INFORMATION
FURNISHED BY SUPPLIER COMPANIES.

- **NEPA RATINGS (SCALE 0-4)**
HEALTH = 2
FIRE = 4
REACTIVITY = 3

- **HMIS RATINGS (SCALE 0-4)**
HEALTH = 2
FIRE = 4
REACTIVITY = 3

ADDITIONAL INFORMATION:

EMERGENCY OVERVIEW

EXTREMELY FLAMMABLE. CONTENTS UNDER PRESSURE. DO NOT SMOKE
WHILE USING NOR USE NEAR OPEN FLAME. CONTAINER MAY EXPLODE
IF HEATED IN ANY MANNER. EYE IRRITANT. MAY IRRITATE OR
CAUSE ALLERGIC SKIN REACTION TO SKIN. INHALATION OF VAPOR
MAY RESULT IN RESPIRATORY ALLERGIES INCLUDING ASTHMA.

POTENTIAL HEALTH EFFECTS:

IRRITATION FROM CONTACT WITH UNCURED PRODUCT PARTICULARLY EYES AND MUCOUS MEMBRANES. MAY CAUSE SKIN IRRITATION AND AGGRAVATE ALLERGIC SKIN CONDITIONS. PERSONS WITH KNOWN ISOCYANATE ALLERGIES SHOULD AVOID ANY SKIN OR RESPIRATORY CONTACT WITH PRODUCT INGREDIENTS.

EYE:

UNCURED PRODUCT IS IRRITATING TO THE EYES. EYE CONTACT MAY RESULT IN MODERATE CORNEAL INJURY AND CONSIDERABLE REDNESS LASTING A WEEK OR MORE.

SKIN:

FREQUENT OR PROLONGED CONTACT MAY IRRITATE THE SKIN AND CAUSE DERMATITIS. MAY CAUSE SLIGHT REDDENING IF EXPOSURE IS LONG OR REPEATED.

INGESTION:

SWALLOWING LARGE AMOUNTS MAY CAUSE DIGESTIVE DISCOMFORT.

INHALATION:

MAY CAUSE MILD RESPIRATORY IRRITATION IN UNCURED STATE.

CHRONIC:

REPEATED OR PROLONGED CONTACT MAY CAUSE SKIN SENSITIZATION. REPEATED OR PROLONGED INHALATION EXPOSURE MAY CAUSE ASTHMA.

SECTION 4. FIRST AID MEASURES**GENERAL INFORMATION:**

SYMPTOMS OF POISONING MAY EVEN OCCUR AFTER SEVERAL HOURS; THEREFORE MEDICAL OBSERVATION FOR AT LEAST 48 HOURS AFTER THE ACCIDENT.

AFTER INHALATION:

ALLOW THE VICTIM TO REST IN AN WELL VENTILATED AREA IN A HALF-UPRIGHT POSITION. SEEK IMMEDIATE MEDICAL ATTENTION. LOOSEN

TIGHT FITTING CLOTHING. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF THE VICTIM IS NOT BREATHING, PERFORM MOUTH-TO-MOUTH RESUSCITATION. SEEK MEDICAL ATTENTION.

AFTER SKIN CONTACT:

IMMEDIATELY WASH WITH WATER AND SOAP AND RINSE THOROUGHLY. IF THE CHEMICAL TOUCHES THE VICTIM'S EXPOSED SKIN, GENTLY AND THOROUGHLY WASH THE CONTAMINATED SKIN WITH RUNNING WATER AND NON-ABRASIVE SOAP. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. WASH CONTAMINATED CLOTHING BEFORE REUSING.

AFTER EYE CONTACT:

FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING THE UPPER AND LOWER EYELIDS. CHECK FOR AND REMOVE ANY CONTACT LENS. DO NOT USE AN EYE OINTMENT WITHOUT SEEKING MEDICAL ATTENTION.

AFTER SWALLOWING:

DO NOT INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ATTENTION.

SECTION 5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING AGENTS:

USE WATER FOG, DRY CHEMICAL, FOAM FIRE EXTINGUISHING MEDIA OR CARBON DIOXIDE EXTINGUISHING MEDIA. KEEP CONTAINERS COOL. USE EQUIPMENT OR SHIELDING TO PROTECT AGAINST BUSTING OR VENTING OF CONTAINERS.

FOR SAFETY REASONS UNSUITABLE EXTINGUISHING AGENTS:

WATER
WATER WITH FULL JET

SPECIAL HAZARDS CAUSED BY THE MATERIAL, ITS PRODUCTS OF COMBUSTION OR RESULTING GASES:

GENERAL HAZARD:

UNCURED PRODUCT CONTAINS DISHENYLMETHANE-4,4'DIISOCYANATE THAT CAN CAUSE ALLERGIC REACTION TO THE SKIN. INHALATION OF THE VAPOR MAY RESULT IN RESPIRATORY ALLERGIES. PROPELLANTS ARE EXTREMELY FLAMMABLE. PRESSURE IN CONTAINER RISES WITH HEATING. IF CONTAINER IS HEATED, THE CONTAINER COULD BURST.

HAZARDOUS COMBUSTION PRODUCT:

CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF NITROGEN, SHORT-CHAINED CARBON AND NITROGEN CONTAINING COMPOUNDS.

PROTECTIVE EQUIPMENT:

RESPIRATORY AND EYE PROTECTION REQUIRED FOR FIRE FIGHTING PERSONNEL. FULL PROTECTIVE EQUIPMENT AND A SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED FOR ALL INDOOR FIRES AND ANY SIGNIFICANT OUTDOOR FIRES. FOR SMALL OUTDOOR FIRES, WHICH MAY EASILY BE EXTINGUISHED WITH A PORTABLE FIRE EXTINGUISHER, USE OF SCBA MAY NOT BE REQUIRED.

ADDITIONAL INFORMATION:

FLAMMABLE LIMITS: LOWER 4% UPPER 8%
AUTOIGNITION TEMPERATURE: N/A

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSON-RELATED SAFETY PRECAUTIONS:

WEAR PROTECTIVE EQUIPMENT. KEEP UNPROTECTED PERSON AWAY.

MEASURES OF ENVIRONMENTAL PROTECTION:

DO NOT ALLOW TO ENTER SEWERS/SURFACE OR GROUND WATER.

MEASURES FOR CLEANING/COLLECTING:

DISPOSE CONTAMINATED MATERIAL AS WASTE ACCORDING TO ITEM 13.
ENSURE ADEQUATE VENTILATION.
DO NOT FLUSH WITH WATER OR AQUEOUS CLEANSING AGENTS.

ADDITIONAL INFORMATION:

LAND SPILL:

NOTIFY THE APPROPRIATE AUTHORITIES IMMEDIATELY. TAKE ALL ADDITIONAL ACTION NECESSARY TO PREVENT AND REMEDY THE ADVERSE EFFECTS OF SPILL. ELIMINATE IGNITION SOURCES. ISOLATE HAZARD AREA AND DENY ENTRY TO UNAUTHORIZED OR UNPROTECTED PERSONNEL.

SECTION 7. HANDLING AND STORAGE

HANDLING:

INFORMATION FOR SAFE HANDLING:

ENSURE GOOD VENTILATION/EXHAUSTION AT THE WORKPLACE.

INFORMATION ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES:

KEEP IGNITION SOURCES AWAY – DO NOT SMOKE.

PROTECT AGAINST ELECTROSTATIC CHARGES.

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50°C/ 122°F, I.E. ELECTRIC LIGHTS. DO NOT PIERCE OR BURN, EVEN AFTER USE. DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL.

STORAGE:

REQUIREMENTS TO BE MET BY STOREROOMS AND RECEPTACLES:

OBSERVE OFFICIAL REGULATIONS ON STORING PACKAGINGS WITH PRESSURIZED CONTAINERS.

STORE IN A COOL DRY LOCATION IN CLOSED PACKING AT TEMPERATURES BETWEEN 41°F AND 77°F.

INCOMPATIBLE WITH STRONG CAUSTICS, AMINES, ALKALI METAL COMPOUNDS, ALCOHOLS AND WATER.

FOLLOW ALL MSDS/LABEL WARNINGS EVEN AFTER CONTAINER IS EMPTIED.

FURTHER INFORMATION ABOUT STORAGE CONDITIONS:

KEEP RECEPTACLE TIGHTLY SEALED

STORE IN COOL, DRY CONDITIONS IN WELL SEALED RECEPTACLES.

STORAGE CLASS:

CLASS ACCORDING TO REGULATION ON FLAMMABLE LIQUIDS: ORM-D

SECTION 8. EXPOSURE CONTROLS /PERSONAL PROTECTION

COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:

106-97-8 BUTANE

ACGIH TLV - 1900 mg/m³, 800 ppm

NIOSH REL - 1900 mg/m³, 800 ppm

74-98-6 PROPANE

ACGIH TLV - 4508 mg/m³, 2500 ppm

NIOSH REL - 1800 mg/m³, 1000 ppm

OSHA PEL - 1800 mg/m³, 1000 ppm

9016-87-9 DISHENYLMETHANEDIISOCYANATE, ISOMERES AND HOMOLOGUES

ACGIH TLV – 0.005 ppm

OSHA TLV - 0.02 ppm

ADDITIONAL INFORMATION:

THE LISTS THAT WERE VALID DURING THE CREATION WERE USED AS BASIS.

GENERAL PROTECTIVE AND HYGIENIC MEASURES:

KEEP AWAY FROM FOODSTUFFS, BEVERAGES AND FEED.

IMMEDIATELY REMOVE ALL SOILED AND CONTAMINATED CLOTHING.

WASH HANDS BEFORE BREAKS AND AT THE END OF WORK.

AVOID CONTACT WITH THE EYES AND SKIN.

BREATHING EQUIPMENT:

IN CASE OF BRIEF EXPOSURE OR LOW POLLUTION USE RESPIRATORY FILTER DEVICE. IN CASE OF INTENSIVE OR LONGER EXPOSURE USE RESPIRATORY PROTECTIVE DEVICE THAT IS INDEPENDENT OF CIRCULATING AIR.

PROTECTION OF HANDS:

PROTECTIVE GLOVES

EYE PROTECTION:

TIGHTLY SEALED GOGGLES

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: AEROSOL

COLOR: BLACK/GREEN/CREAM

ODOR: AMINE-LIKE

MELTING POINT/MELTING RANGE: N/A

BOILING POINT/BOILING RANGE: N/A

FLASH POINT: <0°C (<32°F)

IGNITION TEMPERATURE: 235°C (455°F)

AUTO IGNITING: PRODUCT IS NOT SELF-IGNITING

DANGER OF EXPLOSION: HEATING MAY CAUSE AN EXPLOSION

DENSITY: 1.01

SPECIFIC GRAVITY: AT 20°C (68°F): .996 g/ml

SOLUBILITY IN WATER: INSOLUABLE, REACTS SLOWLY WITH WATER OR MIST OF WATER DURING CURE, RELEASING TRACES OF CO₂

PH-VALUE: 20°C (68°F): N/A

SECTION 10. STABILITY AND REACTIVITY

THERMAL DECOMPOSITION / CONDITIONS TO BE AVOIDED:

NO DECOMPOSITION IF USED ACCORDING TO SPECIFICATIONS.

DANGEROUS REACTIONS:

REACTION AT HIGH TEMPERATURES MAY BE VIOLENT. (FOLLOW TEMPERAATURE TEMPERATURE STORAGE CONDITIONS SUGGESTED IN SECTION 7)

DANGEROUS PRODUCTS OF DECOMPOSITION:

NO DANGEROUS DECOMPOSITION PRODUCTS KNOWN.

ADDITIONAL INFORMATION:

STABLE UNDER NORMAL STORAGE CONDITIONS (SEE SECTION 7 IN THE MSDS), INSTALLED FOAM IS STABLE. AVOID WATER CONTAMINATION, AVOID ALCOHOLS, STRONG BASES WITH METAL COMPOUNDS AND CONTACT WITH AMMONIA.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

PRIMARY IRRITANT EFFECT:

ON THE SKIN:

IRRITANT TO SKIN AND MUCOUS MEMBRANES.

ON THE EYE:

IRRITATING EFFECT

SENSITIZATION:

SENSITIZATION POSSIBLE THROUGH INHALATION.

SENSITIZATION POSSIBLE THROUGH SKIN CONTACT.

OTHER INFORMATION (ABOUT EXPERIMENTAL TOXICOLOGY):

TOXICITY TO ANIMALS:

INHALATION, LD50 RAT. INHALATION (mg/l/4hr): UNKNOWN

INGESTION, LD50 RAT, ORAL (mg/kg): UNKNOWN

SKIN CONTACT, LD50 RAT, DEMATOLOGICAL (mg/kg): UNKNOWN

EYE CONTACT, LD50 RAT, DEMATOLOGICAL (mg/kg): >5000 mg/kg

SUBACUTE TO CHRONIC TOXICITY:

CHRONIC EFFECTS ON:

NOT LISTED AS A CARCINOGEN. POTENTIAL SKIN AND RESPIRATORY SENSITIZATION.

ADDITIONAL TOXICOLOGICAL INFORMATION:

THE PRODUCT SHOWS THE FOLLOWING DANGERS ACCORDING TO INTERNALLY APPROVED CALCULATION METHODS FOR PREPARATIONS.

HARMFUL.

IRRITANT.

SECTION 12. ECOLOGICAL INFORMATION

GENERAL NOTES:

WATER HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER
DO NOT ALLOW PRODUCT TO REACH GROUND WATER, WATER COURSE OR SEWAGE SYSTEM.

DANGER TO DRINKING WATER IF EVEN SMALL QUANTITIES LEAK INTO THE GROUND.

SECTION 13. DISPOSAL CONSIDERATIONS

PRODUCT:

RECOMMENDATION:

MUST NOT BE DISPOSED OF TOGETHER WITH HOUSEHOLD GARBAGE. DO NOT ALLOW PRODUCT TO REACH SEWAGE SYSTEM.

UNCLEANED PACKAGINGS:

RECOMMENDATION:

DISPOSAL MUST BE MADE ACCORDING TO OFFICIAL REGULATIONS.

SECTION 14. TRANSPORTATION

DOT REGULATIONS:

HAZARD CLASS: 2.1
IDENTIFICATION NUMBER: UN1950
PROPER SHIPPING NAME: AEROSOLS, FLAMMABLE, N.O.S.
LABEL: 2.1

LAND TRANSPORT ADR/RID (CROSS - BORDER):

ADR/RID CLASS: 2 (5F) GASES
DANGER CODE: 23
UN-NUMBER: 1950
DESCRIPTION OF GOODS: 1950 AEROSOLS

MARITIME TRANSPORT IMDG:

IMDG CLASS: 2.1
UN NUMBER: 1950
LABEL: 2.1
EMS NUMBER: 2-13
MARINE POLLUTANT: NO

AIR TRANSPORT ICAO-TI AND IATA-DGR:

ICAO/IATA CLASS: 2.1
UN/ID NUMBER: 1950
LABEL: 2.1
PROPER SHIPPING NAME: AEROSOLS, FLAMMABLE, N.O.S.

SECTION 15. REGULATORY INFORMATION

SARA:

SECTION 355 (EXTREMELY HAZARDOUS SUBSTANCES):

NONE OF THE INGREDIENT IS LISTED.

SECTION 313 (SPECIFIC TOXIC CHEMICAL LISTINGS):

PRODUCT CONTAINS DIPHENYLMETHANE DIISOCYANATE (CAS 101-68-8)
SUBJECT TO THE REPORTING LIMITS OF SARA 313 AND IS SPECIFICALLY
UNDER CA,FL,MA,MN,NJ AND PA STATE REGULATIONS. FOR SPECIFIC

SARA REPORTING REQUIREMENTS IN YOUR JURISDICTION CONTACT YOUR SPECIFIC STATE AGENCY HAVING JURISDICTION OVER COMMUNITY RIGHT TO KNOW AND EMERGENCY PLANNING.
9016-87-9 DIPHENYLMETHANEDIISOCYANATE, ISOMERES
HOMOLOGUES

TSCA (TOXIC SUBSTANCES CONTROL ACT):
ALL INGREDIENTS ARE LISTED.

PROPOSITION 65:
CHEMICALS KNOWN TO CAUSE CANCER:
NONE OF THE INGREDIENTS IS LISTED.

CHEMICALS KNOWN TO CAUSE REPRODUCTIVE TOXICITY:
NONE OF THE INGREDIENTS IS LISTED.

CANCEROGENICITY CATEGORIES:
EPA (ENVIRONMENTAL PROTECTION AGENCY)
9016-87-9 DIPHENYLMETHANEDIISOCYANATE, ISOMERES AND
HOMOLOGUES D;CBD

MAK (GERMAN MAXIMUM WORKPLACE CONCENTRATION)
9016-87-9 DIPHENYLMETHANEDIISOCYANATE, ISOMERES AND
HOMOLOGUES 3

PRODUCT RELATED HAZARD INFORMATION:

HAZARDS SYMBOLS:
X_n HARMFUL
F+ EXTREMELY FLAMMABLE

RISK PHRASES:
20 HARMFUL BY INHALATION
36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN
42/43 MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.

SAFETY PHRASES:
2 KEEP OUT OF THE REACH OF CHILDREN
23 DO NOT BREATHE GAS/FUMES/VAPOUR/SPRAY
24/25 AVOID CONTACT WITH SKIN AND EYES
36/37 WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES
45 IN CASE OF ACCIDENT OR IF FEEL UNWELL, SEEK MEDICAL ADVICE
IMMEDIATELY
51 USE ONLY IN WELL-VENTILATED AREAS

SPECIAL LABELING OF CERTAIN PREPARATIONS:

CONTAINS ISOCYANATES. SEE INFORMATION SUPPLIED BY THE MANUFACTURER

PRESSURIZED CONTAINER: PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50°C/ 122°F, I.E. ELECTRIC LIGHTS. DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL. KEEP AWAY FROM SOURCES OF IGNITION – NO SMOKING.

NATIONAL REGULATIONS:

WATER HAZARD CLASS:

WATER HAZARD CLASS 2 (SELF-ASSESSMENT): HAZARDOUS FOR WATER

OTHER REGULATIONS, LIMITATIONS AND PROHIBITIVE REGULATIONS:

CERCLA

COMPONENTS OF THIS PRODUCT ARE LISTED UNDER THIS STATUE.

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PREPARED: DECEMBER 18, 2002

