

===== Product Identification =====

Product ID:UNSATURATED POLYESTER RESIN

MSDS Date:09/01/1990

FSC:8040

NIIN:00-291-0164

MSDS Number: BTTSM

=== Responsible Party ===

Company Name:ARISTECH CHEMICAL CORPORATION

Address:600 GRANT STREET

City:PITTSBURGH

State:PA

ZIP:15230-0250

Country:US

Info Phone Num:412-433-7654

Emergency Phone Num:412-433-7654/412-433-5811

CAGE:94977

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Address:600 GRANT STREET

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===== Composition/Information on Ingredients =====

Ingred Name:UNSATURATED POLYESTER BASE RESIN

Fraction by Wt: 38-80%

Other REC Limits:NONE SPECIFIED

Ingred Name:STYRENE, MONOMER (SARA III)

CAS:100-42-5

RTECS #:WL3675000

Fraction by Wt: 20-62%

Other REC Limits:NONE SPECIFIED

OSHA PEL:100 PP

M  
ACGIH TLV:S,50PPM/100STEL;9293  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:INHALATION: MAY CAUSE DROWSINESS,  
NAUSEA, HEADACHE, FATIGUE, NARCOSIS & DIZZINESS. SEVERE EXPOSURE  
MAY CAUSE A CONFUSED STATE. IRRITATION OF THE MUCOUS MEMBRANES OF  
THE UPPER RESPIRATORY TRACT MAY O  
CC UR. SKIN: IRRITATION MAY OCCUR  
WITH PROLONGED EXPOSURE, POSSIBLY DEVELOPING TO DERMATITS.  
Explanation of Carcinogenicity:IARC HAS CLASSIFIED STYRENE FROM A GROUP  
3 SUBSTANCE TO A GROUP 2B, AS :POSSIBLY CARCINOGENIC TO HUMANS."  
Effects of Overexposure:IF ECZEMATOUS DEVELOPS, THIS MOST OFTEN OCCURS  
ON THE BACKS OF THE HANDS, WRISTS AND FOREARMS. MAY BE ABSORBED  
THROUGH THE SKIN. EYE: IRRITATION OF THE MUCOUS MEMBRANES, PAIN AND  
REDNESS MAY OCCUR. IN GESTION: SORE THROAT, ABD  
OMINAL PAIN AND  
VOMITING MAY OCCUR.  
Medical Cond Aggravated by Exposure:INDIVIDUALS WITH CHRONIC  
RESPIRATORY CONDITIONS (I.E., ASTHMA, CHRONIC BRONCHITIS,  
EMPHYSEMA, ETC.) MAY BE ADVERSELY AFFECTED BY ANY LUME OR AIRBORNE  
PARTICULATE MATTER EXPOSURE.

===== First Aid Measures =====

First Aid:INHALATION: REMOVE FROM EXPOSURE. IF BREATHING IS STOPPED OR  
DIFFICULT, GIVE ARTIFICIAL RESPIRATION OR OXYGEN AS INDICATED. SEEK  
MEDICAL AID. SK  
IN: REMOVE CONTAMINATED CLOTHING. WASH SKIN  
THOROUGHLY W /SOAP & WATER. IF IRRITATION OCCURS, SEEK MEDICAL AID.  
EYE: FLUSH W/LARGE AMOUNTS WATER, LIFT UPPER & LOWER EYELIDS  
OCCASIONALLY. SEEK MEDICAL AID. INGESTION: DO NOT INDUCE VOMITING.  
SEEK MEDICAL AID.

===== Fire Fighting Measures =====

Flash Point Method:PMCC  
Flash Point:90.0F,32.2C  
Lower Limits:1.1  
Upper Limits:6.1  
Extinguishing Media:CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES), ALCOHOL

FOAM AND WATER FOG (LARGE FIRES).

Fire Fighting Procedures:COOL TANKS AND DRUMS WITH WATER. FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING EQUIPMENT.

Unusual Fire/Explosion Hazard:HIGH TEMPERATURE EXPOSURE FOR EXTENDED PERIODS OF TIME WILL RESULT IN SPONTANEOUS UNCONTROLLED EXOTHERMIC POLYMERIZATION.

===== Accidental Release Measures =====

Spill Release Procedures:REMOVE ALL IGNITION SOURCES AND OPEN FLAMES. INCREASE VENT TO MAXIMIZE VAPOR DISP

ERSAL. DIKE LARGE SPILLS TO

PREVENT RUNOFF INTO SEWERS OR WATERWAYS. COVER SPILL W/INORGANIC ABSORBENT MATERIAL (VERMIC ULITE). SWEEP UP AND PLACE IN LABELLED DRUM.

===== Handling and Storage =====

Handling and Storage Precautions:AVOID PROLONGED OR REPEATED CONTACT WITH THE SKIN. AVOID EYE CONTACT. STORE IN A COOL DRY AREA AWAY FROM OXIDIZERS. DO NOT STORE IN DIRECT SUNLIGHT.

Other Precautions:WORK WITH ADEQUATE GENERAL AND LOCAL EXHAUST VENTILATION TO MINIMIZE EXPOSURE TO AVPORS. BOND AND GROUND ALL CONTAINERS FOR TRANSFER OF THIS PRODUCT TO PREVENT STATIC DISCHARGE.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:RESPIRATORY PROTECTION APPROVED BY NIOSH/MSHA FOR PROTECTION AGAINST ORGANIC VAPORS SHOULD BE USED TO AVOID INHALATION OF EXCESSIVE AIR CONTAMINANTS. APPROPRIATE RESPIRATOR SELECTION DEPENDS ON THE TY PE AND MAGNITUDE OF EXPOSURE.

Ventilation:USE LOC

AL EXHAUST VENTILATION SHOULD BE USED TO CONTROL THE EMISSIONS OF AIR CONTAMINANTS.

Protective Gloves:CHEMICAL RESISTANT.

Eye Protection:CHEMICAL SAFETY GLASSES & FACE SHIELD.

Other Protective Equipment:EMERGENCY EYE WASH STATION AND DELUGE SAFETY SHOWERS SHOULD BE AVAILABLE IN WORK AREA.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

STYRENE VAPORS ARE UNIHIBITED AND MAY CAUSE BLOCKAGE OF VENTILATION VENTS DUE TO PLOYMERIZATION. PERIODIC INSPE

CTION MAY BE NECESSARY  
TO PREVENT BLOCKAGE.

===== Physical/Chemical Properties =====

HCC:F3

Boiling Pt:B.P. Text:293F,145C

Vapor Pres:4.5 MM HG

Vapor Density:3.6

Spec Gravity:1.1

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLEAR, VISCOUS LIQUID; SHARP STYRENATED ODOR.

Percent Volatiles by Volume:20-62

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:NO

STRONG ACIDS, PEROXIDES AND OTHER OXIDIZING  
AGENTS.

Stability Condition to Avoid:EXPOSURE TO EXCESSIVE HEAT OR OPEN FLAME;  
STORAGE IN OPEN CONTAINERS; PROLONGED STORAGE (6 MONTHS).

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE, LOW  
MOLECULAR WEIGHT HYDROCARBONS, ORGANIC ACIDS.

Conditions to Avoid Polymerization:EXPOSURE TO HEAT, OPEN FLAME OR  
CONTAMINATION WITH OXIDIZING AGENTS. AVOID STORAGE ABOVE 38 C (100  
F).

===== Disposal Considerations =====

Waste Disposal Methods:

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND  
FEDERAL REGULATIONS.

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