

SAFETY DATA SHEET
PRODUCT
MKD
VERTICAL/SOLID

**POLYESTER ADHESIVE VERTICAL/SOLID
for MARBLE, AGGLOMERATES, NATURALSTONES
(colours: STRAW-YELLOW, WHITE, BLACK, GREY, JURA, TRAVERTINE etc)**

COMPILATION DATE: 13/10/1993
REVISED: 30/06/2002

SECTION 1 IDENTIFICATION OF THE PRODUCT AND THE MANUFACTURING COMPANY

- 1.01 NAME **MKD VERTICAL/SOLID** (ADHESIVE SUITABLE FOR VERTICAL APPLICATION),
(colours: STRAW-YELLOW, WHITE, BLACK, GREY, TRAVERTINO, JURA, etc.)
- 1.02 CHEMICAL DESCRIPTION MIXTURE OF POLYESTER RESINS CONTAINING STYRENE, MINERAL FILLERS, AND INORGANIC PIGMENTS.
- 1.03 1.03 MANUFACTURER **FEDERCHEMICALS S.R.L.**
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SECTION 2 COMPOSITION / INFORMATION ON THE COMPONENTS

Substances contained which are harmful to the health under directive 67/548/EEC and subsequent amendments, or for which there are recognized exposure limits.

SUBSTANCE	%	CAS n.	EU n.	symbol	R phrases *
STYRENE	15-20	100-42-5	601-026-00-0	Xn	10 - 20 - 36/38

* key: R 10 = Inflammable R 20 = Harmful for inhalation R 36/38 = Irritant for eyes and skin.
THE REMAINING COMPONENTS ARE NOT CLASSIFIED AS DANGEROUS SUBSTANCES ACCORDING TO THEIR U.E. CLASSIFICATION.

SECTION 3 HEALTH HAZARD INFORMATION

HARMFUL FOR INHALATION. IRRITANT OF THE EYES AND SKIN.

SECTION 4 FIRST AID MEASURES

- 4.01 CONTACT WITH THE EYES CAUTIOUSLY WASH THE EYES WITH AN ABUNDANT AMOUNT OF WATER. CONSULT A DOCTOR OR AN OPHTHALMOLOGIST.
- 4.02 CONTACT WITH THE SKIN IMMEDIATELY WASH THE AFFECTED AREA WITH WATER AND REMOVE ANY CONTAMINATED CLOTHING. REMOVE THE RESIDUES WITH SOAP AND WATER. IF IRRITATION PERSISTS, CONSULT A DOCTOR.
- 4.03 IF INGESTED DO NOT INDUCE VOMITING. CALL A DOCTOR AND SHOW HIM THE PACKAGE OR THE LABEL.
- 4.04 IF INHALED MOVE THE AFFECTED PERSON TO A WELL-VENTILATED AREA. CALL A DOCTOR. IF THE AFFECTED PERSON HAS DIFFICULTY BREATHING, ADMINISTER OXYGEN.

PERSISTENT IRRITATION REQUIRES THE ATTENTION OF A DOCTOR.

SECTION 5 FIRE FIGHTING MEASURES

- 5.01 EXTINGUISHING CARBON DIOXIDE, CHEMICAL EXTINGUISHERS, FOAMS, POWDERS.
- 5.02 PRECAUTIONS SPRAY ANY CONTAINERS EXPOSED TO HEAT WITH WATER TO COOL THEM.
- 5.03 PERSONAL PROTECTION WEAR A SELF-CONTAINED BREATHING APPARATUS AND FIREPROOF PROTECTIVE CLOTHING.

SECTION 6 MEASURES TO BE TAKEN IN CASE OF LEAKS OR ACCIDENTAL SPILLS

- 6.01 CLEANUP COLLECT THE PRODUCT IN CONTAINERS THAT CAN BE CLOSED. DISPOSE OF IT IN AUTHORIZED PLANTS.
- 6.02 PERSONAL PRECAUTIONS USE PROTECTIVE CLOTHING AND GLOVES. IF YOU ARE WORKING IN A CLOSED AREA IT IS ADVISABLE TO USE A GAS MASK.
- 6.03 PRECAUTIONS REMOVE AND DISCONNECT HEAT SOURCES AND SOURCES OF IGNITION. EMBANK LARGE SPILLS TO CONTAIN THEM. THE VAPORS ARE HEAVIER THAN AIR AND THEREFORE THERE IS A RISK OF EXPLOSION IN BASEMENTS AND DITCHES.

SECTION 7 HANDLING AND STORAGE

- 7.01 HANDLING DO NOT SMOKE AND DO NOT EAT OR DRINK WHILE USING THIS PRODUCT. WORK IN A WELL-VENTILATED AREA AWAY FROM HEAT SOURCES OR SOURCES OF IGNITION. COMPLY WITH THE MEASURES IN SECTION 8 AND WITH PERSONAL HYGIENE PRACTICES.
- 7.02 STORAGE STORE THE HERMETICALLY SEALED CONTAINERS IN COOL, DRY, WELL-VENTILATED PLACES AWAY FROM DIRECT SUNLIGHT. AVOID TEMPERATURES OF MORE THAN 40°C.

SECTION 8 CONTROLLING EXPOSURE - PERSONAL PROTECTION

- 8.01 RESPIRATORY PROTECTION IT IS ADVISABLE TO WEAR A SOLVENT MASK OR A BREATHING APPARATUS WITH A TYPE "A" GAS FILTER.
- 8.02 HAND PROTECTION WEAR IMPERMEABLE GLOVES (MADE OF PVC OR RUBBER).
- 8.03 EYE PROTECTION WEAR GOGGLES, AND FACE PROTECTION IF NECESSARY.
- 8.04 SKIN PROTECTION WEAR IMPERMEABLE CLOTHING.

SECTION 9 CHEMICAL AND PHYSICAL PROPERTIES

- 9.01 PHYSICAL STATE PASTE
- 9.02 pH (50% AQUEOUS) 6-7
- 9.03 MELTING POINT -30.6°C (STYRENE)
- 9.04 BOILING POINT 145°C (STYRENE)
- 9.05 FLASH POINT 110°C
- 9.06 DENSITY 2.23 at 25°C
- 9.07 SOLUBILITY INSOLUBLE IN WATER, STYRENE 300 mg/l
- 9.08 PERCENTAGE OF ACTIVE SUBSTANCE
- 9.09 DECOMPOSITION TEMPERATURE
- 9.10

SECTION 10 STABILITY AND REACTIVITY

- 10.01 PRECAUTIONS AVOID EVERY HEAT SOURCE OR SOURCE OF IGNITION.
- 10.02 MATERIALS TO BE AVOIDED STRONG OXIDIZING SUBSTANCES.
- 10.03 DANGEROUS PRODUCTS OF DECOMPOSITION NONE IF THIS PRODUCT IS HANDLED AND STORED CORRECTLY.
- 10.04 DANGEROUS REACTIONS NONE IF THIS PRODUCT IS HANDLED AND STORED CORRECTLY.
- 10.99 NOTES STYRENE CAN POLYMERIZE IF IT IS HEATED TO TEMPERATURES HIGHER THAN 65°C, RESULTING IN A FIRE HAZARD.

SECTION 11 TOXICOLOGICAL INFORMATION

- 11.01 TWL = TWA = 50 mg/m³ (STYRENE) STEL = 425 mg/m³ (STYRENE)
- 11.02 PENETRATION INGESTION: YES INHALATION: YES CONTACT: YES
- 11.03 ACUTE ORAL TOXICITY DL 50 = 5000 mg/hg (RAT), STYRENE.
- 11.04 ACUTE INHALATION TOXICITY CL 50 = 4930 PPM/2 HOURS (MOUSE), STYRENE.
- 11.05 ACUTE DERMAL TOXICITY DL 50 =
- 11.06 CHRONIC TOXICITY THE MONOMER STYRENE, LIKE ALL STYRENE DERIVATIVES, IS A SUSPECTED CARCINOGEN WITH REPEATABLE AND CONFIRMED DATA. IT IS POISONOUS FOR MAN IF INGESTED AND IS FAIRLY TOXIC IF INHALED. THESE EFFECTS ARE GENERALLY TEMPORARY.
- 11.07 CORROSIVENESS, IRRITANT CAPABILITY SKIN: PROLONGED & REPEATED CONTACT COULD CAUSE IRRITATION. EYES: IRRITANT. RESPIRATORY PASSAGES: IRRITANT.
- 11.99 OTHERS THERE HAVE BEEN SOME CASES OF ALLERGIC REACTIONS OF THE SKIN.

SECTION 12 ECOLOGICAL INFORMATION

12.01 DEGRADABILITY

12.02 BIOLOGICAL BUILDUP

12.03 ECOLOGICAL TOXICITY

ACUTE BACTERIAL TOXICITY: EC = 72 mg/l, 16-HOUR TEST.

ACUTE TOXICITY IN FISH (SPECIES: LEUCISCUS IDUS; 48-HOUR TEST): CL 50 = 7 mg/l (JUHNKE); CL 50 = 66 mg/l (LUEDEMANN).

12.99 NOTES

ACUTE TOXICITY IN DAPHNIDS: EC 50 = 182 mg/l (24-HOUR TEST).

SECTION 13 DISPOSAL

DO NOT DISCARD THIS PRODUCT IN THE ENVIRONMENT. DO NOT POUR IT INTO DRAINS OR WATER. DISPOSE OF IN AUTHORIZED PLANTS ACCORDING TO THE LAWS AND LOCAL REGULATIONS IN FORCE.

SECTION 14 TRANSPORT INFORMATION

14.01 UN

UN 3269 (POLYESTER RESIN KIT)

14.02 ROAD TRANSPORT (ADR)

CLASS 3.31c LABEL 3 No. KEMLER 30

14.03 MARITIME TRANSPORT (IMCO)

CLASS 3 UN 3269 P.G.III EmS n° 3-07 (MFAG n° 310 page 3377-1)

14.04 AIR TRANSPORT (IATA)

CLASS 3 UN 3269 P.G.III

14.05 RAIL TRANSPORT (RID)

CLASS 3.31c LABEL 3 N° KEMLER 30

14.06 CUSTOMS TARIFF

3506-1000

SECTION 15 REGULATION/LABELING



15.01 HAZARD SYMBOL

Xn

15.02 R CLASSIFICATIONS

R 20 HARMFUL FOR INHALATION.
R 36/38 IRRITANT OF THE EYES AND SKIN.

15.03 S CLASSIFICATIONS

S 2 KEEP OUT FROM CHILDREN REACH.
S 16 KEEP FAR FROM FLAMES AND SPARKS. DO NOT SMOKE.
S 23 DO NOT BREATHE THE VAPOURS.
S 24/25 AVOID CONTACT WITH THE EYES AND SKIN.
S 33 AVOID THE BUILDUP OF STATIC ELECTRICITY.

SECTION 16 OTHER INFORMATION

THE PERSONNEL WHO WORK WITH THE PRODUCT MUST BE INFORMED OF THE RISKS INVOLVED WITH HANDLING AND USING IT AND OF THE PROPER SAFETY AND INTERVENTION MEASURES.

POISON CONTROL CENTERS:

BOLOGNA +39-051-533133

MILAN +39-02-66101029

ROME +39-06-3054343

key

N.A. = not applicable

N.AV. = not available

N.C. = not classified

NOTES

THE HAZARD DATA REFERS MAINLY TO STYRENE. AFTER THE PRODUCT HAS BEEN CATALYZED AND HARDENED, IT BECOMES AN INERT MASS THAT IS NOT CLASSIFIED AS A DANGEROUS SUBSTANCE.

The information on this sheet is based on our current knowledge and is also taken from bibliographies, tests, and safety sheets on the raw materials we use. It is not to be considered a specific product guarantee, but only suggestions and information regarding safety. Under no circumstances can FEDERCHEMICALS S.R.L. company be held responsible for the improper use of this product. It is the full and complete responsibility of the user to comply with current safety laws and regulations.