



CHEMICAL ENGINEERING

KKW

## TRANSPARENT VERTICAL

Revision nr. 1  
Date: 03/09/2000  
Printed on 1/14/04  
page 1 of 4

## Safety Data Sheet

## 1. Identification of the preparation and the Company

## 1.1 Identification of the preparation

Product name  
Intended useKKW TRANSPARENT VERTICAL  
POLYESTER TRANSPARENT VERTICAL/SOLID ADHESIVES FOR  
MARBLE, AGGLOMERATES, NATURAL STONES

## 1.2 Identification of the Company

Name  
Full address  
District and CountryIndustria Chimica General s.n.c.  
Via Repubblica S. Marino, 8  
41100 Modena (MO)  
ITALY  
tel. +39-059-450978

## 2. Composition/information on ingredients

Name	Concentr.(C)	Classification
STYRENE	25,9 <= C < 27,5	R10 Xn R20 Xi R32/38
N° Cas 100-42-5		
N° CE 202-851-5 N° Index 601-026-00-0		

The complete text of -R- phrases is specified in section 16.

## 3. Danger Identification

## 3.1 Substance/Preparation Classification

This preparation is dangerous under 67/548/EEC and 1999/45/EC regulations and subsequent amendments. This preparation requires a safety data sheet according to the 91/155/EC regulation and subsequent amendments. Further information on health and/or environmental hazards can be found in sections 11 and 12 of this sheet.

Danger Symbols: Xn Phrases R: 10-20-36/38

## 3.2 Danger Identification

Because of its chemical-physical features, this product is graded as flammable (flash-point 21°C or higher and 55°C or lower).  
HARMFUL BY INHALATION.  
IRRITATING TO EYES AND SKIN.

## 4. First-aid measures

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.

SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists seek medical attention. Wash contaminated clothing before using them.

INHALATION: Remove to fresh air. If breathing is irregular seek medical advice.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

## 5. Fire-fighting measures

Closed containers exposed to the heat of a fire may lead to pressure rise and explode. For information on environmental and health risks, protection of the respiratory airways, ventilation and individual protective measures refer to the other sections of this sheet.

Extinguishing measures: CO<sub>2</sub>, foam, AFFF, chemical powder for flammable liquids. Water may not be effective to extinguish the fire, nevertheless it should be used to cool the containers exposed to flames and prevent fires and explosions. For leakage and spillage that have not caught fire, nebulized water may be used to disperse the flammable vapours and protect the people involved in stopping the leakage.

Equipment: wear equipment complete with helmet and face shield and protection of the neck, selfbreathing apparatus at pressure or demand, insulative jacket and trousers, with bands around the arms, legs and waist.



CHEMICAL ENGINEERING

# KKW TRANSPARENT VERTICAL

 Revision nr. 1  
 Dated on 02/03/03  
 Printed on 1/14/04  
 page 2 of 4

## 6. Accidental release measures

Exclude sources of ignition and ventilate the area. Cover with inert absorbent material. Collect spillages by means of sparkproof equipment. Use water only to remove residuals, so as not to run the risk of enter the sewer.

Do not let the product dry. Contaminated clothes must be left to soak in water before washing. In order to choose safety measures and protection equipment, please see the other sections of this sheet.

Spillage in waters: remove the liquid from the surface with flameproof pumps or manual pumps or suitable absorbent material. Resort to sinking and/or dispersion of the product with suitable substances in open waters, if permitted by the law.

## 7. Handling and storage

Store in a wellventilated place keeping the containers closed when not used. Do not smoke while handling. Keep far away from sources of heat, naked flames and sparks and other sources of ignition; do not spray in the vicinity of flames or incandescent materials.

For information on environmental and health risks, protection of the respiratory airways, ventilation and individual protective measures refer to the other sections of this sheet.

## 8. Exposure controls/personal protection.

STYRENE			
- TLV TWA	85	mg/m <sup>3</sup>	ACGIH
- TLV STEL	170	mg/m <sup>3</sup>	ACGIH

In order to minimize exposure as far as possible, it is strongly recommended to use adequate individual protective measures such as: masks suitable for the product, goggles, gloves and overalls. Do not eat, drink or smoke while handling it. Accurately wash the hands with soap and water before meals and at the end of the work shift.

## 9. Physical and chemical properties

Color	Straw
Odour	Characteristic
Physical state	Paste
Solubility	Insoluble in water
Viscosity	N.A.
Vapour density	N.A.
Evaporation speed	N.A.
Comburent properties	N.A.
Partition coefficient: n-octanol/water	N.A.
pH	N.A.
Boiling point	N.A.
Flash point	31°C
Explosive properties	N.A.
Vapour pressure	N.A.
Specific gravity	1,220 Kg/l

## 10. Stability and reactivity

The product can decompose and/or violently react.

Styrene easily polymerizes above 65°C with the risk of causing fire and explosions; it is added to an inhibitor which needs a small quantity of dissolved oxygen melted at temperatures <25°C. Avoid oxidizing agents; it dissolves different types of plastic materials except polychloroprene and alcohol polyvinyl (ref. Fiche toxicologique, 1992, N. 2).



CHEMICAL ENGINEERING

KKW

## TRANSPARENT VERTICAL

 REVISION Nr. 1  
 Date: 14/01/2004  
 Printed on 1/14/04  
 page 3 of 4

## 11. Toxicological Information

**Acute effects:** Inhalation of this product is harmful. This product may irritate mucosae, the upper respiratory tract, eyes, and skin. Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness.

In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema and irritation, chemical pneumonia and pulmonary edema. Ingestion of even small amounts of product may cause health problems (stomach pain, nausea, sickness, diarrhoea, etc.).

**Styrene:** possibly carcinogenic in humans according to IARC (group 2B), but despite the cases of leukemia encountered in subjects exposed to styrene, it is not possible to draw any conclusions on the role of this substance from the carcinogenic, teratogenic and mutagenic standpoint.

Acute toxicity following inhalation at 1000 ppm involves the central nervous system with headache and dizziness, lack of coordination; irritation of the mucous membranes of the eyes and respiratory airways occurs at 500 ppm concentrations.

Chronic exposure produces depression of the Central and peripheral nervous system with loss of memory, headache and somnolence starting at 20 ppm; digestive disorders with nausea and loss of appetite; irritation of the respiratory airways with chronic bronchitis and dermatosis.

## 12. Ecological Information

Use this product according to good working practices. Avoid litter. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

Styrene is biodegradable (ref. Jetoc, Information sheet, 1994).

## 13. Disposal considerations

Consider the possibility of burning the product in a suitable incinerator. Acid or basic products must always be neutralized before undergoing any treatment, including biological treatment whenever feasible. If the waste is solid, it can be disposed of in a landfill.

## 14. Transport Informations

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packings or in packings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

### Road and rail transport:

ADR:	3,	PG III	UN 3269
Label:	3		
Nr. Kemler:	30		
Proper Shipping Name:	POLYESTER RESIN KIT		

### Carriage by sea (shipping):

IMO class:	3	UN 3269
Packing Group:	III	
EMS:	3-07	
Marine Pollutant	YES	
Proper Shipping Name:	POLYESTER RESIN KIT	

### Transport by air:

IATA:	3	UN 3269		
Packing Group:	III			
Label:	3			
Cargo: Packaging Instructions:	310		Maximum quantity:	220 L
Pass.: Packaging Instructions:	309		Maximum quantity:	60 L



CHEMICAL ENGINEERING

KKW

## TRANSPARENT VERTICAL

 REVISION nr. 1  
 Date: 06/06/2003  
 Printed on 1/14/04  
 page 4 of 4

## 15. Regulatory information

Health hazard symbol



Xn

HARMFUL

- R10 FLAMMABLE.
- R20 HARMFUL BY INHALATION.
- R36/38 IRRITATING TO EYES AND SKIN.
- S 2 KEEP OUT OF THE REACH OF CHILDREN.
- S13 KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.
- S26 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
- S46 IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL.

Contains: STYRENE

Danger labelling under regulations 67/548/CEE and 1999/45/CE and following amendments and adjustments.

Workers exposed to this chemical agent must undergo health checks according to regulation 98/24/CE.

## 16. Further information

Text of -R- phrases quoted in section 2 of the sheet.

- R10 FLAMMABLE.
- R20 HARMFUL BY INHALATION.
- R36/38 IRRITATING TO EYES AND SKIN.

## GENERAL BIBLIOGRAPHY

1. Regulation 1999/45/CE and following amendments;
2. Regulation 67/548/CEE and following amendments and adjustments (technical adjustment XXVIII);
3. Regulation 91/155/CEE and following amendments;
4. The Merck Index. - 10th Edition;
5. Handling Chemical Safety;
6. NIOSH - Registry of Toxic Effects of Chemical Substances;
7. INRS - Fiche Toxicologique (toxicological sheet);
8. Patty - Industrial Hygiene and Toxicology;
9. N.I. Sax-Dangerous properties of Industrial Materials-7, 1989 Edition;

## Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.