



MATERIAL SAFETY DATA SHEET
GENERAL
VERTICAL/SOLID or/and SEMI-SOLID
colours: STRAW/BEIGE, WHITE, RED, BLACK, GREY, etc.

Revision nr. 7
Dated 19/11/2010
Printed on 19/11/2010
Product code: MP03-04
MSDS no.: MP03-04
Page n.1 / 4

1. Identification of the substance / preparation and the Company

1.1 IDENTIFICATION OF THE SUBSTANCE OR PREPARATION

Product name **GENERAL vertical/solid or/and semi-solid**
Chemical name and synonym Mix of polyester resins containing styrene, inert mineral fillers, pigments

1.2 USE OF THE SUBSTANCE / PREPARATION Adhesive/Glue for marble, terrazzo, agglomerates

1.3 COMPANY IDENTIFICATION

Name INDUSTRIA CHIMICA GENERAL S.R.L.
Full address Via Repubblica S. Marino, 8
District and Country 41122 MODENA (MO), ITALY
Tel. (+39) 059.450991 fax (+39) 059.450615
E-MAIL: mail@generalchemical.it

*e-mail address of the competent person
responsible for the Material Safety Data Sheet* ricerca@generalchemical.it

1.4 EMERGENCY TELEPHONE

For urgent inquiries refer to (+39) 02.6610.1029 Anti-poison Center Milano Niguarda, Milano, Italy
CHEMTREC USA (+1) 800-424-9300
(+1) 703-527-3887 INTERNATIONAL PHONE NUMBER

2. Hazards Identification

2.1 SUBSTANCE/PREPARATION CLASSIFICATION

This product is dangerous under 67/548/EEC and 1999/45/EC directives and subsequent amendments. Therefore, this product requires a safety data sheet according to the Regulation (EC) 1907/2006 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 R PHRASES: 10-20-36/38

2.2 DANGER IDENTIFICATION

Because of its chemical-physical features, this product is graded as flammable having flash-point 21°C (69.8°F) or higher and 55°C (131°F) or lower. HARMFUL BY INHALATION. IRRITATING TO EYES AND SKIN.

3. Composition / Information on ingredients

Substances contained which are harmful to health under directive 67/548/CEE (E.U.) and subsequent amendments or for which there are recognized exposure limits:

Name	Concentration % (C)	Classification
STYRENE	12,5 ≤ C < 14	R10
Cas No 100-42-5		Xn R20
CE No 202-851-5		Xi R36/38
Index No 601-026-00-0		Note D

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

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 again.

INHALATION: Remove to open 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

GENERAL INFORMATION Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Excess pressure may form in containers exposed to fire at a risk of explosion. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water and the remains of the fire according to applicable regulations.

SUITABLE EXTINGUISHING MEDIA The extinction equipment should contain carbon dioxide, foam or chemical powders. For product leaks and spills that have not caught fire, nebulised water can be used to dispel flammable fumes and protect the individuals taking part in stemming the leak.

EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS Hardhat with visor, fireproof clothing (fireproof jacket and trousers with ties around arms, legs and waist) work gloves (fireproof, cut proof and dielectric), self-respirator (self-protector).



MATERIAL SAFETY DATA SHEET

GENERAL

VERTICAL/SOLID or/and SEMI-SOLID

colours: STRAW/BEIGE, WHITE, RED, BLACK, GREY, etc.

Revision nr. 7
Dated 19/11/2010
Printed on 19/11/2010
Product code: MP03-04
MSDS no.: MP03-04
Page n.2 / 4

6. Accidental release measures

PERSONAL PRECAUTIONS Eliminate sources of ignition (cigarettes, flames, sparks, etc.) from the air in which the leak occurred. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or leaked product before donning appropriate protective gear. Send away individuals who are not suitably equipped. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, refer to the other sections of this sheet.

ENVIRONMENTAL PRECAUTIONS The product must not penetrate the sewers, surface water, ground water and neighbouring areas.

METHODS FOR CLEANING UP For liquid products, suck into a suitable container (made of material not incompatible with the product) and soak up any leaked product with absorbent inert material (sand, vermiculite, diatomaceous earth, Kieselguhr, etc). Collect the majority of the remaining material and deposit in containers for disposal. For solid products, use spark proof mechanical tools to collect the leaked product and place in plastic containers. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

7. Handling and storage

Store in a well ventilated place, keeping the containers closed when not used. Do not smoke while handling. Keep far away from sources of heat, bright flames and sparks and other sources of ignition.

8. Exposure control / personal protection.

8.1 EXPOSURE LIMIT VALUES

Name	Type	Country	TWA/8h		STEL/15min		
			mg/m ³	ppm	mg/m ³	ppm	
STYRENE	TLV-ACGIH		85		170	Skin	
	OEL	IRL	20		40	Skin	
	WEL	UK	100		250	Skin	

8.2 EXPOSURE CONTROLS

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Ask your chemical substance suppliers for advice when choosing personal protection equipment. Personal protection equipment must comply with the rules in force indicated below.

RESPIRATORY PROTECTION. If workplace maximum concentration thresholds are exceeded, wear a partial facemask with an ABEK2P3 fume and powder mask (see standard EN 141). If no technical measures are defined, to limit worker exposure, airway protection equipment, such as masks with cartridges for organic fumes and for powders/dusts, must be used. Facemasks only provide limited protection. For high concentrations in the workplace or in the case of an emergency, when exposure levels are unknown, wear an open circuit compressed air self-respirator (see standard EN 137) or an external air intake respirator with mask, partial mask or snorkel (see standard EN 138).

HAND PROTECTION. Protect hands using Laminated LCT Film work gloves. We recommend applying protective hand cream. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.

EYE PROTECTION. Wear sealed protective goggles with side shields (see standard EN 166).

SKIN PROTECTION. Wear overalls with long sleeves and professional safety footwear (see standard EN 344). Wash with soap and water after removing protective clothing. Wash clothing before reuse.

9. Physical and chemical properties

COLOUR	Different colours
ODOUR	Characteristic
PHYSICAL STATE	Paste
SOLUBILITY	Insoluble in water
VISCOSITY	Not available
VAPOUR DENSITY	Not available
EVAPORATION SPEED	Not available
COMBURENT PROPERTIES	Not available
PARTITION COEFFICIENT: N-OCTANOL/WATER	Not available
PH	Not available
BOILING POINT	Not available
FLASH POINT	31°C (87.8°F)
EXPLOSIVE PROPERTIES	Not available
VAPOUR PRESSURE	Not available
SPECIFIC GRAVITY	kg/l. 1,65
VOC (DIRECTIVE 1999/13/EC) :	13,28% - 219,12 g/litre of preparation
VOC (VOLATILE CARBON) :	12,24% - 201,97 g/litre of preparation



MATERIAL SAFETY DATA SHEET
GENERAL
VERTICAL/SOLID or/and SEMI-SOLID
colours: STRAW/BEIGE, WHITE, RED, BLACK, GREY, etc.

Revision nr. 7
Dated 19/11/2010
Printed on 19/11/2010
Product code: MP03-04
MSDS no.: MP03-04
Page n.3 / 4

10. Stability and reactivity

The product can decompose and/or violently react.

Styrene easily polymerizes above 65°C (149°F) 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 (<77°F). Avoid oxidizing agents; it dissolves different types of plastic materials except polychloroprene and alcohol polyvinyl (ref. Fiche toxicologique, 1992, N. 2).

11. Toxicological information

Acute effects: inhalation of this product is harmful. This product may irritate mucosas, 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).

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 cancerogenic, 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 tract 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 tract with chronic bronchitis and dermatosis.

BARIUM SULFATE: oral LD50 (mg/kg) > 3000 (mouse). CALCIUM CARBONATE: oral LD50 (mg/kg) 6450 (rat).

12. Ecological information

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

Styrene is biodegradable (ref. Jetoc, Information sheet, 1984).

13. Disposal consideration

Re-use, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information

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 packagings or in packagings 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/RID class: 3
UN: 3269
Packing Group: III
Label: 3
Nr. Kemler: 30
Proper Shipping Name: Polyester resin kit
Special Provision: 640E



Transport by sea:

IMO class: 3
UN: 3269
Packing Group: III
Label: 3
EMS: F-E, S-D
Marine Pollutant
Proper Shipping Name: Polyester resin kit

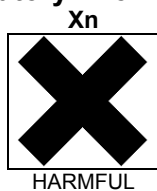


Transport by air:

IATA class: 3
UN: 3269
Packing Group: III
Label: 3
Cargo: Packaging instructions: 312 Maximum quantity: 5 L.
Pass. : Packaging instructions: 312 Maximum quantity: 5 L.



15. Regulatory information



R 10 FLAMMABLE.
R 20 HARMFUL BY INHALATION.
R 36/38 IRRITATING TO EYES AND SKIN.
S 2 KEEP OUT OF THE REACH OF CHILDREN.
S 13 KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.
S 23 DO NOT BREATHE GAS/FUMES/VAPOURS
S 46 IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL.
Contains: STYRENE

Danger labelling under directives 67/548/EEC and 1999/45/EC and following amendments and adjustments.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

16. Other information

Text of -R- phrases quoted in section 3 of the sheet.

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

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments;
2. Directive 67/548/EEC and following amendments and adjustments (technical adjustment XXIX);
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament;
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 the 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.

Changes to previous revision

The following sections have been modified:01 / 08 / 09 / 13 / 14 / 15