Safety Data Sheet
HTPC10 - Miscela ritardante
Safety Data Sheet dated 30/4/2013, version 1
SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier
Mixture identification:
Trade name: Miscela ritardante

Trade code:	HTPC10
1.2. Relevant identified uses of the substance or mixture and uses advised against	
Recommended use:Auxiliary for resins in composite materials	
Uses advised against:	

1.3. Details of the supplier of the safety data sheet	
Company:	
Sirca S.p.A.	
Address:	
Viale Roma, 85	
35010 S.Dono di Massanzago (PD) - ITALY	
Tel. +39 0499322311	
Competent person responsible for the safety data sheet:	
safety@sirca.it	
1.4. Emergency telephone number	
SIRCA S.p.A.- Phone n. +39 499322311	
Sirca S.p.A. +39 049 9322311 (08.00 - 17.00)	

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:
Properties / Symbols:
Toxic for reproduction category 3
F Highly flammable
Xn Harmful
Xi Irritant
C Corrosive
N Dangerous for the environment
R Phrases:
R11 Highly flammable.
R20 Harmful by inhalation.
R34 Causes burns.
R43 May cause sensitization by skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 Possible risk of harm to the unborn child
R65 Harmful: may cause lung damage if swallowed.
Adverse physicochemical, human health and environmental effects:
No other risks known

2.2. Label elements
Symbols:
C Corrosive
F Highly flammable
N Dangerous for the environment
R Phrases:
R11 Highly flammable.
R20 Harmful by inhalation.
R34 Causes burns.
R43 May cause sensitization by skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 Possible risk of harm to the unborn child
R65 Harmful: may cause lung damage if swallowed.
S Phrases:
S16 Keep away from sources of ignition - No smoking.
S23 Do not breathe gas/fumes/vapour/spray.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S33 Take precautionary measures against static discharges.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S43 In case of fire, use CO2, Foam, Chemical powders
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S9 Keep container in a well-ventilated place.
Contents:
styrene
4-tert-butylpyrocatechol
toluene
2.3. Other hazards
vPvB Substances: None - PBT Substances: None
Other Hazards:
No other risks known

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.
3.2. Mixtures
Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:
75% - 100% styrene
REACH No.: 01-2119457861-32-xxxx, Index number: 601-026-00-0, CAS: 100-42-5, EC: 202-851-5

Xn,Xi; R10-20-36/38
2.6/3 Flam. Liq. 3 H226
3.3/2 Eye Irrit. 2 H319
3.2/2 Skin Irrit. 2 H315
3.1/4/Inhal Acute Tox. 4 H332
9.9% - 12.5% toluene
REACH No.: 01-2119471310-51-xxxx, Index number: 601-021-00-3, CAS: 108-88-3, EC: 203-625-9
F,Repr. Cat. 3,Xn,Xi; R11-38-48/20-63-65-67
2.6/2 Flam. Liq. 2 H225
3.7/2 Repr. 2 H361
3.10/1 Asp. Tox. 1 H304
3.9/2 STOT RE 2 H373
3.2/2 Skin Irrit. 2 H315
3.8/3 STOT SE 3 H336
9.9% - 12.5% 4-tert-butylpyrocatechol
CAS: 98-29-3, EC: 202-653-9
Xn,Xi,C,N; R43-50/53-34-21/22
3.1/4/Dermal Acute Tox. 4 H312
3.1/4/Oral Acute Tox. 4 H302
3.2/1B Skin Corr. 1B H314
3.4.2/1 Skin Sens. 1 H317
4.1/C1 Aquatic Chronic 1 H410

SECTION 4: First aid measures

4.1. Description of first aid measures
In case of skin contact:
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediatley and dispose off safely.
In case of eyes contact:
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.
In case of Ingestion:
Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.
In case of Inhalation:
If breathing is irregular or stopped, administer artificial respiration.
In case of inhalation, consult a doctor immediately and show him packing or label.
4.2. Most important symptoms and effects, both acute and delayed
Contact a poisons centre
4.3. Indication of any immediate medical attention and special treatment needed
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
In case of fire, use CO2, Foam, Chemical powders
Extinguishing media which must not be used for safety reasons:
None in particular.
5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
5.3. Advice for firefighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Remove persons to safety.
Use appropriate respiratory protection.
See protective measures under point 7 and 8.
6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
Eliminate all unguarded flames and possible sources of ignition. Do not smoke.
6.3. Methods and material for containment and cleaning up
Collect the spilled product with no-sparking tools.
Rapidly recover the product. To do so, wear a mask and protective clothing.
Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.
After the product has been recovered, rinse the area and materials involved with water.
6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhaltion of vapours and mists.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.
Do not smoke while working.
See also section 8 for recomened protective equipment.
7.2. Conditions for safe storage, including any incompatibilities
Always keep in a well ventilated place.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from flame and sparks. Avoid accumulating electrostatic charge.
Place recipients on the ground whilst decanting, and wear anti-static clothing and shoes.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.
Safety electric system.
7.3. Specific end use(s)
No further recommendations. Refer to point 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Miscela ritardante
TLV TWA - N.A.
TLV STEL - N.A.
VLE 8h - N.A.
VLE short - N.A.
styrene - CAS: 100-42-5
TLV TWA - 20 ppm, A4 - 85,2 mg/m3, A4
TLV STEL - 40 ppm, A4 - 170,4 mg/m3, A4
VLE 8h - N.A.
VLE short - N.A.
toluene - CAS: 108-88-3
04 - LTE: 192 mg/m3, 50 ppm - STE: N.A. N.A. - Behaviour: Binding - Notes: Pelle
EU - LTE: 192 mg/m3, 50 ppm - STE: 384 mg/m3, 100 ppm - Behaviour: N.A. - Notes: Skin
ACGIH - LTE: 188.4 mg/m3, 50 ppm - STE: N.A. N.A. - Behaviour: N.A. - Notes: A4 Skin
4-tert-butylpyrocatechol - CAS: 98-29-3
TLV TWA - N.A.
TLV STEL - N.A.
VLE 8h - N.A.
VLE short - N.A.
8.2. Exposure controls
Eye protection:
Use eye protection devices. Example: closed safety visors, goggles with side protection. Do not wear contact lenses.
Protection for skin:
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
Protection for hands:
Because of the synergetic effect of the substances contained in the formulation it is not possible to identify a unique material that can resist to their fusion. Multi - layer protective gloves can be

suitable for mixes of substances. Pay attention to the data about grade of protection and of permeation rate furnished by the producer of the gloves about the substances listed on point 3 of this sheet.
Respiratory protection:
Use adequate protective respiratory equipment, e.g. CEN/FFP-2(S) or CEN/FFP-3(S).
Thermal Hazards:
None known
Environmental exposure controls:
None known

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Appearance and colour: liquid
Odour: characteristic
Odour threshold: N.A.
pH: N.A.
Melting point / freezing point: < 1° C
Initial boiling point and boiling range: > 55° C
Solid/gas flammability: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Flash point: < 21 °C
Evaporation rate: N.A.
Vapour pressure: N.A.
Relative density: 0.888 Kg/l a 20°C
Solubility in water: N.A.
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: > 250° C
Decomposition temperature: N.A.
Viscosity (typical value): 19 cPs Brookfield
Explosive properties: N.A.

Oxidizing properties:	N.A.
9.2. Other information	

Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.
Substance Groups relevant properties N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
No dangerous reaction is stored and used appropriately.
10.4. Conditions to avoid
Avoid accumulating electrostatic charge.
Vapours can form explosive mixtures with air.
10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.
10.6. Hazardous decomposition products
vapours potentially dangerous to health may be released.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.
Toxicological information on main components of the mixture:
styrene - CAS: 100-42-5
Test: LC50 - Route: Inhalation - Species: Rat = 11.8 mg/l - Duration: 4h - Source: N.A. - Notes: N.A.
Test: LD50 - Route: Oral - Species: Rat = 2650 mg/kg - Duration: N.A. - Source: N.A. - Notes: N.A.
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Duration: N.A. - Source: N.A. - Notes: N.A.
toluene - CAS: 108-88-3
Test: LD50 - Route: Oral - Species: Rat N.A. 636 mg/kg - Duration: N.A. - Source: N.A. - Notes: N.A.
Possible risk of harm to the unborn child
Toxic for reproduction category 3

SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
styrene - CAS: 100-42-5
Endpoint: LC50 - Species: Fish - Duration h: 96 - mg/l: N.A.
Endpoint: EC50 - Species: Algae - Duration h: 72 - mg/l: N.A.
Endpoint: EC50 - Species: Daphnia - Duration h: 48 - mg/l: N.A.
toluene - CAS: 108-88-3
Endpoint: EC50 - Species: Algae - Duration h: 72 - mg/l: N.A.
Endpoint: EC50 - Species: Algae - Duration h: 96 - mg/l: N.A.
Endpoint: NOEC - Species: Daphnia - Duration h: 504 - mg/l: N.A.
4-tert-butylpyrocatechol - CAS: 98-29-3
Endpoint: LC50 - Species: Fish - Duration h: N.A. - mg/l: 3.5
Endpoint: EC50 - Species: Daphnia - Duration h: 48 - mg/l: 0.48
12.2. Persistence and degradability
None known
12.3. Bioaccumulative potential
N.A.
12.4. Mobility in soil
N.A.
12.5. Results of PBT and vPvB assessment
List of substances dangerous for the environment and corresponding classification:
10 % 4-tert-butylpyrocatechol
CAS: 98-29-3
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

vPvB Substances: None - PBT Substances: None
12.6. Other adverse effects
None known

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.
Where applicable, refer to the following regulatory provisions : 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

SECTION 14: Transport information

ADR/RID: 1263,Paint related material,3,II,ADR
IMCO: 3 UN1263 P.G. II MARINE POLLUTANT
ICAO/IATA-DGR: 3 UN1263 P.G. II P.I. 364
Marine pollutant: Marine pollutant
IMDG-EMS: F-E , S-E

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n.1272/2008 (CLP), Regulation (CE) n.790/2009.
Where applicable, refer to the following regulatory provisions :
Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work.
1999/13/EC (VOC directive)
Directive 1999/13/CE
Total Volatile Organic Compounds (typical value): 90 %
Of which reactive monomers: 80 %
Total Volatile Organic Carbon (typical value): 82.96 %
Of which reactive monomers: 73 %
Total solids content: 9.8 - 10.2 %
15.2. Chemical safety assessment
No

SECTION 16: Other information

Text of phrases referred to under heading 3:
R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.

R21/22 Harmful in contact with skin and if swallowed.
R34 Causes burns.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R43 May cause sensitization by skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 Possible risk of harm to the unborn child
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H225 Highly flammable liquid and vapour.
H361 Suspected of damaging fertility or the unborn child.
H304 May be fatal if swallowed and enters airways.
H373 May cause damage to organs through prolonged or repeated exposure.
H336 May cause drowsiness or dizziness.
H312 Harmful in contact with skin.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.
This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.
This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eighth Edition - Van Nostrand Reinold
ACGIH - Threshold Limit Values - 2004 edition
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It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.