




1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING	
1.1 Product name	STARCOAT R
1.2 Uses and/or applications	Single constituent polyurethane resin; pure polymerised bitumen plastifier.
1.3 Supplier name and contact details	AXTER 8, avenue Felix d'Herelle F 7501 6 PARIS France Tel: 01 46 09 39 60
1.4. Emergency phone number	FR -INRS Tel: 01 .45.42.59.59 UK – National Poisons Information Service Tel: +44 191 225 131 B – Antipoisons Centre Tel: +32 (0) 270 245 245
2. INFORMATION ON COMPOSITION	
2.1 . Description of the preparation	STARCOAT R
3. HAZARDS IDENTIFICATION	
3.1 . Principal dangers	The vapour/air mixture is inflammable. Harmful by inhalation or digestion. The preparation is an irritant to the skin and the respiratory system and prolonged contact can increase the adverse effects. Take extra precautionary measures in confined spaces.
3.2. Specific risks	Contains isocyanates. Can cause allergic reactions.
4. FIRST AID MEASURES	
4.1. General advice:	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
4.2. Inhalation	Move affected person to fresh air, keep the patient warm and relaxed. If breathing is irregular or stops, carry out artificial respiration. Do not give the patient anything by mouth. If the patient is unconscious place in the recovery position and seek medical attention.
4.3. Contact with skin	Wash skin with plenty of soap and water. DO NOT use solvents or thinners. If irritation persists, seek medical attention.
4.4. Contact with eyes	Remove contact lenses, wash eyes with copious quantities of clean, fresh water for at least 10 minutes, holding the eyelids apart. If an irritation develops seek medical attention.
4.5. Ingestion	Rinse mouth but do not give the patient anything to drink. Keep the patient relaxed and take him/her immediately to a doctor or hospital. DO NOT induce vomiting.
5. FIRE-FIGHTING MEASURES	
5.1. Suitable extinguishing media	Foam, carbon dioxide, powder, water mist.
5.2. Extinguishing media which must NOT be used for safety reasons	Do not use a water jet; this could spread the fire.
5.3. Specific method (s)	Cool with water any sealed packaging exposed to fire. Do not allow run-off from fire fighting to enter drains or water courses.
5.4. Specific dangers/risks	Fire will produce dense, black smoke. Decomposition of products may be a hazard to health. Appropriate self-contained breathing apparatus may be required.
5.5. Special protective equipment for fire fighters	Wear self-contained breathing apparatus.
6. ACCIDENTAL RELEASE MEASURES	
6.1. Personal precautions	Eliminate sources of ignition and ventilate the premises. Avoid inhaling vapour and/or particles. Refer to protective measures listed in sections 7 and 8.
6.2. Environmental precautions	Do not allow to enter drains or water courses. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the National Rivers Authority.
6.3. Clean up methods	Contain and collect spillages with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth. Place in a suitable container for disposal in accordance with the waste regulations (see section 13). Clean preferably with a detergent. Avoid the use of solvents.

7. HANDLING AND STORAGE	
7.1. Handling	
Precautions	Avoid direct contact with the product. Vapour is heavier than air and can spread and form an explosive mixture with air. Avoid the creation of inflammable or explosive concentrations in the air and vapour concentration levels that exceed the Recommended Workplace Exposure Limit. Smoking, eating and drinking is forbidden in the place where the preparation is used. See section 8 for personal protection details. Comply with safety at work regulations.
Technical condition(s)	If the workplace with insufficient natural ventilation, install suitable air extraction equipment. The product must only be used in areas with no naked flames or other sources of ignition. Electrical equipment must be properly protected. Never empty the container using compressed air; the container is not suitable for this use.
Safe handling advice	Keep containers firmly closed and keep away from heat, sparks and naked flames. Do not use tools which could produce sparks. Avoid contact with the eyes and skin and do not inhale vapour or spray. Never empty containers by pressure methods and always keep the mixture in original container or in a container or an identical product.
7.2. Storage	
Precautions	Observe the precautions given on the label. Do not smoke. Unauthorised personnel must not enter workplace.
Storage conditions	Store in a dry, well ventilated place away from all sources of fire, heat and direct sunlight. Store at temperatures between 0 C and 40 C. Containers which have been opened should be properly resealed and stored in an upright position. Opened containers should be used as rapidly as possible.
Separation of incompatible material/s	Store separately from oxidising agents and strongly alkaline and strongly acidic materials.
Packaging material	Made of the same material as the supply container.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION	
8.1. Technical conditions	The product should be used preferably in naturally ventilated places. If ventilation is not sufficient to keep the concentration of particles and solvent vapour below the Recommended Workplace Exposure Limits, appropriate self-contained breathing apparatus should be worn.
8.2 Exposure limits	<ul style="list-style-type: none"> • o-xylene [1]; p-xylene [2]; m-xylene [3]; xylene [4]: VME ppm = 50 - VME mg/m³ = 221 - VLE ppm = 1 00 - VLE mg/m³ = 442 • methylenediphenyle diisocyanate 4.4#- [1]; methylenediphenyle diisocyanate 2.2#- [2]; o-(p-isocyanatoben-zyl) phenyle isocyanate [3]; methylenediphenyle diisocyanate [4]; 4.4#- diphenylmethane diisocyanate [1]; 2.2#- diphenylmetha diisocyanate: VME ppm = 0,005 - VME mg/m³ = 0,051 • 2-methyl-m-phenylene diisocyanate 2.4- toluylene diisocyanate 2.4-TDI [1]; 4-methyl-m-phenylene diisocyanate 2.6- toluylene diisocyanate 2.6-TDI [2]; m-tolylidene diisocyanate toluylene diisocyanate TDI [3]: VME ppm = 0.005 -VME mg/m³ = 0.036 - VLE ppm = 0.02 - VLE mg/m³ = 0.14 • toluene: VME ppm = 50 - VME mg/m³ = 188
8.3 Exposure control	When workers are exposed to concentration levels greater than the Recommended Workplace Exposure Limits they must wear appropriate and approved masks: organic vapour mask or, if required, self-contained breathing apparatus. These conditions usually only typical in a confined atmosphere.
Respiratory protection	
Hand protection	Wear suitable polyethylene or polypropylene gloves with material lining. Do not wear gloves made from PVC or other plastic materials.
Skin protection	After contact with skin, wash all affected areas.
Eye protection	Eye protection designed to protection against liquid splashes should be worn.
8.4. Hygiene measures	Do not eat, drink or smoke while working.
9. PHYSICAL AND CHEMICAL PROPERTIES	
9.1 General information	
Physical state / form	Viscous liquid
Colour	Dark brown to black
Odour	Solvent characteristic
9.2. Important health, safety and environmental information	
• PH:	Not applicable
• Boiling point/range:	Not determined
• Flash point	22° C
• Auto-inflammability temperature	460 °C (xylene)
• Explosivity limits	1% 6%
• Relative density (water = 1):	1.02-1.05@20 °C
• Water solubility	Absolutely not soluble
• Fat solubility	Practically insoluble
• Solvent solubility:	Soluble in aromatic solvents
• N-octanol/water ratio coefficient	Not determined
• Speed of evaporation	1 13.5 (ether=1)

10 STABILITY AND REACTIVITY	
10.1. Stability	Stable under the recommended storage and handling conditions (see Section 7). The product can be kept unopened in its original packaging for 12 months.
10.2. Conditions to avoid	High humidity during decanting and mixing.
10.3. Material/s to avoid:	Water, aminos, alcohol
10.4. Hazardous decomposition products	Exposed to high temperatures, the preparation can release dangerous decomposition products, such as monoxide and carbon dioxide, smoke, nitrogen oxide.
11 TOXICOLOGICAL INFORMATION	
11.1. General information	There is no data available on the product itself.
11.2. Acute toxicity Inhalation Contact with skin Contact with eyes: Ingestion Sensitization	Inhalation may cause an asthmatic reaction. Inhalation of airborne droplets or aerosols may irritate the respiratory tract. This must be avoided by wearing suitable self-contained breathing apparatus. Repeated or prolonged contact with the skin or mucous membrane can cause symptoms such as flushes, blisters, dermatitis. Splashes in the eyes can cause irritation. Ingestion can result in loss of consciousness, severe respiratory problems and can affect the central nervous system. Allergic skin reactions have also been observed.
11.3. Toxicity resulting from sustained or repeated exposure	Risk of lung damage during repeated or prolonged inhalation of high concentrations. None of the ingredients is registered on the IARC list of carcinogenic products.
12. ECOLOGICAL INFORMATION	
12.1. General information	There is no data available on the product itself. The product should not be allowed to enter drains or water courses.
12.2. Effects on the environment	Toxicological problems are not known or expected with normal use.
12.3. General harmful effects	
13. DISPOSAL CONSIDERATIONS	
13.1. Waste/unused products	Do not dispose of into drains or water courses.
13.2. Contaminated packaging:	Wastes and emptied containers should be disposed of in accordance with current local regulations.
13.3. Other information	
14. TRANSPORT INFORMATION	
14.1. General information	The product must be transported in accordance with current road, rail, sea and air transport regulations.
14.2. UN No.	1139
14.3. Land transport (Road / Rail: ADR/RID)	Name of consignment: COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle under coating, drum or barrel lining) Danger classification: 3 Packaging category: III Labels ADR/RID: 3 C Danger code: 30 Classification code and special measures: F1 640E Packaging instructions : P001 IBC03LP01 R001
14.4. IMDG(sea)	Name of consignment: SOLUTION D'ENROBAGE - COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle under coating, drum or barrel lining) Danger classification: 3 Packaging category: III Marine polluting agent: N °FS:F-R,S-E Labels IMDG: 3 Packaging instructions: P001 LP01
14.5. OACI/IATA (air)	Name of consignment: SOLUTION D'ENROBAGE ICAO/IATA class : 3 Packaging category: III Labels OACI/IATA: 3 Important note: Aeronet passenger and cargo
15 REGULATORY INFORMATION	
15.1. Labelling:	The product is labelled in accordance with 1 999/45/EC Directives
15.2. EC No.	Non applicable.
15.3. Contains	Xylene
Symbol(s)	Xn - harmful 

15.4. Risk (R) Phrases	<p>10 Flammable 20/21 Harmful by inhalation and in contact with skin. 38 Irritating to skin. 42/43 May cause sensitization by inhalation and skin contact. 48 Danger of serious damage to health by prolonged exposure. 63 Possible risk of harm to the unborn child. 65 Harmful: may cause lung damage if swallowed. 67 Vapours may cause drowsiness and dizziness.</p>
15.5. Safety (S) Phrases	<p>2 Keep out of the reach of children. 22 Do not breathe dust. 23 Do not breathe gas / fumes / vapours / spray. 29 Do not empty into drains. 36/37 Wear suitable protective clothing and gloves. 45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible). 46 If swallowed, seek medical advice immediately and show this container or label. 51 Use only in well-ventilated areas. 61 Avoid release to the environment. Refer to special instructions/safety data sheet. 62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.</p>
15.6. Other information	<p>Contains isocyanates. See manufacturer's information. Contains methylenediphenyle diisocyanate 4.4#- [1]; methylenediphenyle diisocyanate 2.2#- [2]; o-(p-isocyanatobenzyl)phenyle isocyanate [3]; methylenediphenyle diisocyanate [4]; 4.4#- diphenylmethane diisocyanate [1]; 2.2#- diphenylmethane diisocyanate, 2-methyl-m-phenylene diisocyanate 2.4-toluylene diisocyanate 2.4-TDI [1]; 4-methyl-mphenylene diisocyanate 2.6- toluylene diisocyanate 2.6-TDI [2]; m-tolyldene diisocyanate toluylene diisocyanate TDI [3]. May cause an allergic reaction.</p>
16. OTHER INFORMATION	
16.1. Heading n°2 : Risk (R) Phrases	<p>R10 Flammable R20/21 Harmful by inhalation and in contact with skin. R38 Irritating to skin. R20 Harmful by inhalation. R36/37/38 Irritating to eyes, respiratory system and skin. R42/43 May cause sensitization by inhalation and skin contact. R26 Very toxic by inhalation. R40 Limited evidence of a carcinogenic effect R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R11 Highly flammable. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. R63 Possible risk of harm to the unborn child. R65 Harmful: may cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness.</p>
16.2. Important notes	<p>As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The user is always responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet is based on the present state of knowledge and current national legislation . It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.</p>
16.3. Uses and/or applications	<p>Single constituent polyurethane resin: pure polymerised bitumen plastifier.</p>
16.4. Restrictions	<p>The product should not be used for purposes other than those shown in Section 16 without first referring to the supplier and obtaining written handling instructions.</p>
16.5 History Date of first edition Version Written by	<p>07.12.2009 1 AXTER - dda@courchelettes.axter.fr; (English: marketing@axterltd.co.uk)</p>