Safety Data Sheet

STARCOAT COLOUR 60

Section 1: Identification of the mixture and of the company/undertaking

1.1 **Product identifier**
Product Name: STARCOAT COLOUR 60
Product Code: 19646--

1.2 **Relevant identified uses of the mixture and uses advised against.** Coating

1.3 **Details of the supplier of the safety data sheet**

Axter Ltd
West Road, Ransomes Europark Ipswich, Suffolk IP3 9SX

tel: +44 1473 724056
email: info@axterltd.co.uk

Emergency telephone number: +44 1473 724056 (8.00am to 5.30pm, Monday to Friday - NOT 24 HOURS).
In the event of a medical enquiry relating to this product, please contact your doctor or local hospital accident and emergency department.

Section 2: Hazards identification

2.1 Classification of the mixture.

In accordance with Directive 1999/45/EC: Xn

Flammable.
Harmful by inhalation and in contact with skin.
May cause sensitisation by inhalation and skin contact.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling in accordance with Directive 1999/45/EC :

Symbols:

Xn

Harmful

R Phrases:

R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R42/43	May cause sensitisation by inhalation and skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrases:

S23	Do not breathe gas/fumes/vapour/spray
S40	To clean the floor and all objects contaminated by this material, use ... (With Rayston Solvent).
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S57	Use appropriate container to avoid environmental contamination.
S60	This material and its container must be disposed of as hazardous waste.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.
S36/37	Wear suitable protective clothing and gloves.

P Phrases:
Contains isocyanates. See the information provided by the manufacturer.
Restricted to professional uses: Attention - avoid exposure - ask for special instructions prior to use.
Restricted to professional users.

Contains:
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate,isophorone di-isocyanate
1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate
xylene (Mixture of isomers)
Aliphatic polyurethane polymer

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

Section 3: Composition/information on ingredients.

3.1 Mixtures.

Substances posing a danger to health or the environment in accordance with the Hazardous Substances Directive 67/548/EEC or Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

Identifiers	Name	Concentrate	(*)Classification Regulation (EC) No 1272/2008	(*)Classification Directive 67/548/CEE
Index No: 601-023-00-4 CAS No: 100-41-4 EC No: 202-849-4 Registration No: 01- 2119489370-35-XXXX	ethylbenzene	2.5 - 25 %	Acute Tox. 4, H332 - Asp. Tox. 1, H304 - Flam. Liq. 2, H225	F Xn R11 R20 R65
Index No: 607-281-00-4 CAS No: 127519-17-9 EC No: 407-000-3 Registration No: 01- 0000015648-61-XXXX	A mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates	0 - 2.5 %	Flam. Liq. 3, H226	N R51/53
Index No: 615-008-00-5 CAS No: 4098-71-9 EC No: 223-861-6 Registration No: 01- 2119490408-31-XXXX	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate,isophorone di-isocyanate	0.5 - 2 %	Flam. Liq. 3, H226 - Repr. 1B, H360D *** - STOT SE 3, H335	T Xi Xn N R23 R36/37/38 R42/43 R51/53

Identifiers	Name	Concentrate	(*)Classification Regulation (EC) No 1272/2008	(*)Classification Directive 67/548/CEE
Index No: 616-079-00-5 CAS No: 140921-24-0 EC No: 411-700-4 Registration No: 01- 2119890830-32-XXXX	1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	1 - 10 %	Aquatic Chronic 2, H411	Xi R43
Index No: 601-022-00-9 CAS No: 1330-20-7 EC No: 215-535-7 Registration No: 01- 2119488216-32-XXXX	xylene (Mixture of isomers)	12.5 - 20 %	Acute Tox. 3 *, H331 - Aquatic Chronic 2, H411 - Eye Irrit. 2, H319 - Resp. Sens. 1, H334 - Skin Irrit. 2, H315 - Skin Sens. 1, H317 - STOT SE 3, H335	Xi Xn R10 R38 R20/21
Index No: CAS No: 41556-26-7 EC No: 255-437-1 Registration No: N/D	bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	0 - 0.25 %	Skin Sens. 1, H317	N Xi R50/53 R43
Index No: CAS No: 39323-37-0 EC No: 609-647-9 Registration No: N/D	Aliphatic polyurethane polymer	1 - 75 %	Acute Tox. 4, H312 - Acute Tox. 4, H332 - Flam. Liq. 3, H226 - Skin Irrit. 2, H315	Xi R43

(*)The complete text of the R and H phrases is given in section 16 of this Safety Data Sheet.
*,*** See Regulation (EC) No. 1272/2008, Annex VI, section 1.2. [1] Substance with a Community workplace exposure limit (see section 8.1).

Section 4: First aid measures.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

Eye contact.

If wearing contact lenses, remove them. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigourously with water and soap or a suitable skin cleaner. **NEVER** use solvents or thinners.

Ingestion.
If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed.
Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.

4.3 Indication of any immediate medical attention and special treatment needed.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Section 5: Firefighting measures.

Flammable product, the necessary prevention measures should be taken in order to avoid risks, In case of fire, the following measures are recommended:

5.1 Extinguishing media.
Recommended extinguishing methods.
Extinguisher powder or CO_2. In case of more serious fires, also alcohol-resistant foam and water spray. Do not use a direct stream of water to extinguish.

5.2 Special hazards arising from the mixture.
Special risks.
Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.
Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.
Fire protection equipment.
According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

Section 6: Accidental release measures.

6.1 Personal precautions, protective equipment and emergency procedures.
Eliminate possible ignition points and ventilate the area. Avoid breathing fumes.For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.
Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.
Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator. Pour the decontaminator on the remains in an opened container and let it act for several days until no further reaction is produced.

6.4 Reference to other sections.
For exposure control and individual protection measures, see section 8.
For later elimination of waste, follow the recommendations under section 13.

Section 7: Handling and storage.

7.1 Precautions for safe handling.

The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The product must only be used in areas where all unprotected flames and other ignition points have been eliminated. Electrical equipment has to be protected according to applicable standards.
The product can be electrostatically charged: always use earth grounds when transferring the product. Operators must use antistatic footwear and clothing, and floors must be conductors.
Keep the container tightly closed and isolated from heat sources, sparks, and fire. Do not use tools that can cause sparks. For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers.
In the application area, smoking, eating, and drinking must be prohibited.
Follow legislation on occupational health and safety.
Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 35º C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

7.3 Specific end use(s).

Section 8: Exposure controls/personal protection.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Breathing protection:

PPE: Filter mask for protection against gases and particles.
Characteristics: «CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.
CEN standards: EN 136, EN 140, EN 405

Maintenance: Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.
Observations: Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.

Hand protection:

PPE: Protective gloves against chemicals.
Characteristics: «CE» marking, category III.
CEN standards: EN 374-1, En 374-2, EN 374-3, EN 420

Maintenance: Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.
Observations: Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.

Protective creams can help to protect exposed areas of the skin. These creams must NEVER be applied once exposure has occurred.

Eye protection:

PPE: Protective goggles with built-in frame.
Characteristics: «CE» marking, category II. Eye protector with built-in frame for protection against dust, smoke, fog and vapour.
CEN standards: EN 165, EN 166, EN 167, EN 168

Maintenance: Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.
Observations: Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.

Skin protection:

PPE: Anti-static protective clothing.
Characteristics: «CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.
CEN standards: EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5

Maintenance: In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations: The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.

PPE: Anti-static safety footwear.
Characteristics: «CE» marking, category II.
CEN standards: EN ISO 13287, EN ISO 20344, EN ISO 20346

Maintenance: The footwear should be checked regularly

Observations: The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths.

Section 9: Physical and chemical properties.

9.1 Information on basic physical and chemical properties.

Appearance:Liquid with characteristic odour and colour
Odour:solvent
Odour threshold:N.A./N.A.
pH:n.a.
Melting point:n.d. ºC
Boiling Point: 236 ºC
Flash point: 36 ºC

Evaporation velocity: n.d.
Inflammability (solid, gas): flammable
Lower Explosive Limit: n.d.
Upper Explosive Limit: N.A./N.A.
Vapour pressure: not determined
Vapour density:n.d.
Relative density:0,95 g/cm3
Solubility:organic solvents
Liposolubility: soluble
Hydrosolubility: not soluble
Partition coefficient (n-octanol/water): not determined
Auto-ignition temperature: N.A./N.A.
Decomposition temperature: N.A./N.A.
Viscosity: 500-1000 mPa.s at 20ºC
Explosive properties: not determined
Oxidizing properties: not determined

N.A./N.A.= Not Available/Not Applicable due to the nature of the product.

9.2. Other information.

Volatile organic compound (VOC)
Product Subcategory: **One-pack performance coatings, solvent-borne**
Phase I* (from 01/01/2007): **600** g/l
Phase II* (from 01/01/2010): **500** g/l
(*) g/l ready to use

VOC content (p/p): 40 %
VOC content: **393** g/l
Colour: colourless
Pour point: n.d.
Blink: n.d.
Kinematic viscosity: n.d.

Section 10: Stability and reactivity.

10.1 Reactivity.
The product does not present hazards by their reactivity.

10.2 Chemical stability.
Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.
The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.
Avoid temperatures near or above the flash point. Do not heat closed containers.
Avoid direct sunlight and heat, as these may cause a risk of fire.

10.5 Incompatible materials.
Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.
In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

Section 11: Toxicological information.

11.1 Information on toxicological effects.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Exposure to concentrations of solvent fumes above the work exposure limit can have negative effects (for example, irritation of the mucous membranes and respiratory system, adverse effects on the kidneys, liver, and the central nervous system). Among the symptoms are headaches, vertigo, fatigue, muscular weakness, drowsiness, and in extreme cases, unconsciousness. Splatters in the eyes can cause irritation and reversible damage.

Based on the properties of isocyanates and taking into account existing technical data on similar products, it appears that this product may cause irritation and / or acute awareness of the respiratory system, leading to an asthmatic condition, a wheezing and chest pressure. Therefore, sensitized individuals may show asthmatic symptoms when exposed to atmospheres containing concentrations below the level of exposure. Repeated exposure can lead to chronic respiratory diseases.

Toxicological information about the substances present in the composition.

Name	Acute toxicity			
	Type	Test	Kind	Value
xylene (Mixture of isomers) CAS No: 1330-20-7 EC No: 215-535-7	Oral	LD50	Rata/Rat	4300 mg/kg bw
	Dermal	LD50	Rabbit/Conejo	> 1700 mg/kg bw
	Inhalation	LC50	Rat/Rata	21,7 mg/l/4 h

Section 12: Ecological information.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
xylene (Mixture of isomers) CAS No: 1330-20-7 EC No: 215-535-7	Fish	LC50	Fish/Pez	15,7 mg/l (96 h)
	Aquatic invertebrates	LC50	Crustáceo	8,5 mg/l (48 h)
	Aquatic plants			

12.2 Persistence and degradability.

No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.
No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.
No information is available about other adverse effects for the environment.

Section 13: Disposal considerations.

13.1 Waste treatment methods.
Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

Section 14: Transport information.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.
Land: Transport by road: ADR, Transport by rail: RID.
Transport documentation: Consignment note and written instructions
Sea: Transport by ship: IMDG.
Transport documentation: Bill of lading
Air: Transport by plane: ICAO/IATA.
Transport document: Airway bill.

14.1 UN number.
UN No: UN1866

14.2 UN proper shipping name.
Description: UN 1866 RESIN SOLUTION, 3, PG III, (D/E)

14.3 Transport hazard class(es).
Class(es): 3

14.4 Packing group.
Packing group: III

14.5 Environmental hazards.
Marine pollutant: No

14.6 Special precautions for user.
Labels: 3

Hazard number: 30
ADR LQ: 5 L

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-E,S-E
Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.
The product is not transported in bulk.

Section 15: Regulatory information.

15.1 Safety, health and environmental regulations/legislation specific for the mixture.
The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.
See annex I of the Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances and the Regulation (EC) No 689/2008 of the european parliament and of the council of 17 June 2008 concerning the export and import of dangerous chemicals and its subsequent updates.
The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

15.2 Chemical safety assessment.
There has been no evaluation a chemical safety assessment of the product.

Section 16: Other information.

Complete text of the R phrases that appear in section 3:

R10	Flammable.
R11	Highly flammable.
R20	Harmful by inhalation.
R23	Toxic by inhalation.
R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R65	Harmful: may cause lung damage if swallowed.
R20/21	Harmful by inhalation and in contact with skin.
R36/37/38	Irritating to eyes, respiratory system and skin.
R42/43	May cause sensitisation by inhalation and skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Complete text of the H phrases that appear in section 3:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.

H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H360D	May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Information on the TSCA Inventory (Toxic Substances Control Act) USA:

CAS No	Name	State
100-41-4	ethylbenzene	
127519-17-9	A mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates	
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate,isophorone di-isocyanate	
140921-24-0	1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	
1330-20-7	xylene (Mixture of isomers)	
41556-26-7	bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	
39323-37-0	Aliphatic polyurethane polymer	

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.