



SAFETY DATA SHEET
according to Directive 2001/58/EC

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

1.1. Identification of the preparation :

- Product Name : CA 40000 Topcoat Yellow
- Product identification : 5690/C4648

1.2. Use of the preparation :

- Aerospace coatings

1.3. Company identification :

PPG Industries (UK) Ltd
3 Darlington Road
Shildon
Co Durham DL4 2QP
England

- Technical contact : Aerospace Laboratory
- Tel : +44 (0) 1388 772 541
- Fax : +44 (0) 1388 774 373

1.4. Emergency telephone :

- Company emergency telephone number : +44 (0) 1388 772 541

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical family : Polyurethane

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EC and amendments.
For the hazards of the preparation, see Section 3.

SUBSTANCES % by Wt in the product	SYMBOL and R(*) phrases of the pure substances	CAS number	EINECS / ELINCS
2-METHOXYPROPYL ACETATE 0.1 - < 0.2 %	T R61,R37	70657-70-4	274-724-2
METHYL-(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL) SEBACATE 0.2 - < 0.5 %	Xi N R43,R50/53	82919-37-7	280-060-4
BIS(1;2;2;6;6-PENTAMETHYL-4-PIPERIDYL) SEBACATE 0.5 - < 1 %	Xi N R43,R50/53	41556-26-7	255-437-1
ETHYLBENZENE 1 - < 2 %	Xn F R20,R11	100-41-4	202-849-4
ETHYL ACETATE 3 - < 5 %	Xi F R36,R66,R67,R11	141-78-6	205-500-4
N-BUTYL ACETATE 3 - < 5 %	R66,R67,R10	123-86-4	204-658-1
4-METHYLPENTAN-2-ONE / METHYL ISOBUTYL KETONE 5 - < 7 %	Xn F R20,R36/37,R66,R11	108-10-1	203-550-1

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XYLENE (MIXTURE OF ISOMERS) 7 - < 10 %	Xn	R20/21,R38,R10	1330-20-7	215-535-7
2-METHOXY-1-METHYLETHYL ACETATE 20 - < 25 %	Xi	R36,R10	108-65-6	203-603-9

(*) See full text of phrases under Section 16.

3. HAZARDS IDENTIFICATION

- F - Xi - HIGHLY FLAMMABLE - IRRITANT
- Irritating to eyes.
- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

General :

In all cases of doubt or when symptoms persist, seek medical attention. Have Safety Data Sheet information available. Never give anything by mouth to an unconscious person.

Inhalation :

Remove to fresh air, keep patient warm and at rest. If breathing has stopped, administer artificial respiration. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice.

Eye contact :

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart, and seek medical advice.

Skin contact :

Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognized skin cleaners. Do NOT use solvents or thinners.

Ingestion :

If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

5. FIRE-FIGHTING MEASURES

Extinguishing media :

- . Recommended: universal resistant foam, CO2, powder.
- . Not to be used: water jet.

Recommendations :

- . Fire will produce dense black smoke. Exposure to decomposition products may cause a Health Hazard. Fire fighters should wear self-contained breathing apparatus.
- . Water mist may be used to cool closed containers to prevent pressure build-up and possible auto-ignition and explosion when exposed to extreme heat.
- . Do not weld, expose to extreme heat or ignition sources, empty containers which have contained flammable products.
- . Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

- Exclude sources of ignition and ventilate the area. Avoid breathing vapours by using appropriate respiratory protective equipment. Refer to protective measures listed in sections 7 & 8.

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- Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with local regulations (see section 13). Do not allow to enter drains or watercourses.
- Clean preferably with a detergent ; avoid use of solvents.
- If the product contaminates lakes, rivers or sewers, inform water authorities in accordance with local regulations.

7. HANDLING AND STORAGE

7.1 Handling

- Smoking, eating and drinking should be prohibited during handling.
- Keep container tightly closed. Any containers which are open should be carefully resealed.
- Avoid skin and eye contact. Avoid inhalation of vapour and spray mist.
- An eye wash station and safety shower should be in close proximity within the area of use.

Packaging materials :

- . Recommended : keep preferably in original container.
- . Avoid :
 - * Those sensitive to solvents

- Handle and open containers with care to avoid sudden ejections. Never use pressure to empty : container is not a pressure vessel. Clean or discard contaminated clothing and shoes.
- Preparation may charge electrostatically : always use earthing leads when transferring between containers. Operators should wear antistatic footwear and clothing, and floors should be electrically conductive.
- Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air, and avoid vapour concentration higher than the Occupational Exposure Limits.
- Additionally, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Isolate from sources of heat, sparks and open flame. Non-sparking tools should be used.
- Wear appropriate respiratory equipment when paint spraying, even outdoors. In all cases when working in a confined area or spraybooth, or where ventilation is unlikely to be sufficient to control particulates and solvent vapour, operators should wear a compressed airfed respirator during the spraying process.

7.2 Storage

Observe label precautions. Store between 0 and 35°C in a dry, clean and well ventilated place, away from sources of heat, ignition, and direct sunlight.
For flash points below 23 °C store in accordance with the Petroleum (Mixtures) Order SRO 1929 No. 993.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Engineering measures

Avoid the inhalation of vapour, spray mist and particulates. This should be achieved by the provision of local exhaust ventilation and good general extraction to keep air-borne concentration below the Occupational Exposure Limits (OEL). If these are not sufficient to comply with OEL, suitable respiratory protection must be worn.

8.2 Exposure limits

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Substances	----- Exposure limits (.)-----				Note
	LTEL		STEL		
	ppm	mg/m3	ppm	mg/m3	
ETHYLBENZENE	100	441	125	552	O S
ETHYL ACETATE	200	700	400	-	O
N-BUTYL ACETATE	150	724	200	966	O
4-METHYLPENTAN-2-ONE / METHYL ISOBUTYL KETONE	50	208	100	416	O S
XYLENE (MIXTURE OF ISOMERS)	50	220	100	441	O S
2-METHOXY-1-METHYLETHYL ACETATE	50	274	100	548	O S

(.) : See Guidance Note EH 40 : " Occupational exposure limits "
 LTEL : Long Term Exposure Limit, 8 hours time weighted average
 STEL : Short Term Exposure Limit, 15 minutes time weighted average
 S : Can be absorbed through skin
 M : Maximum exposure limit
 O : Occupational exposure standard
 RD : Respirable dust
 SE : Sensitising
 - : Not estimated

8.3 Personal protection

All Personal Protective Equipment, including Respiratory Protective Equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH Regulations.

Respiratory protection :

Appropriate certified respiratory protective equipment should be selected according to the type of contaminants, following official and manufacturers instructions including proper fitting.

Hand protection :

For prolonged or repeated contact, we recommend gloves type : polyvinyl alcohol, neoprene rubber. Barrier creams may help to protect exposed areas of the skin. However, they should not be applied once exposure has occurred.

Eye protection :

Use chemical goggles to protect against splashes.

Skin protection :

Personnel should wear protective clothing made of antistatic and fire resistant fibres. All parts of the body should be washed after contact.

Use good hygiene and industrial practices, keeping working clothes clean.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state at 20°C : Liquid
- Flash point : -5°C Method : ISO 3679
- Viscosity : 60 ~ 100 secs Method : ISO 2431 (6mm)
- Specific gravity at 20°C : 1.2 g/cm3 Method : ISO 2811
- Vapour density : > air
- Lower explosion limit (vol %) : 1
- Upper explosion limit (vol %) : 11.5
- Miscibility in water at 20°C : not miscible
- pH : not applicable
- Percent volatile by weight : 43.0 by volume : 54.0
- Vapour pressure at 20°C : 12 mm Hg

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10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see section 7).
In case of combustion, may produce hazardous decomposition products such as :
- Carbon monoxide

11. TOXICOLOGICAL INFORMATION

There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 2 and 15 for details.

Exposure to component solvents vapours at concentrations in excess of the stated Occupational Exposure Limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness, and in extreme cases loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic dermatitis and absorption through the skin.
The liquid splashed in the eyes may cause irritation and reversible damage.

12. ECOLOGICAL INFORMATION

There is no data available on the preparation itself.
The product should not be allowed to enter drains or water courses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See Sections 2 and 15 for details.

13. DISPOSAL CONSIDERATIONS

The provisions of Council Directive 91/689/EEC and subsequent Amendments and Decisions apply to wastes from the product as supplied.

Hazardous Properties :
H3-A Highly flammable
H4 Irritant

Do not allow into drains or water courses.
Waste and emptied containers must be disposed in accordance with :
- Control of Pollution Act 1974,
- Special Waste Regulations 1996,
- Duty of Care Regulations 1992.
They should be recycled or disposed of through a licenced waste management facility.

14. TRANSPORT INFORMATION

- PROPER SHIPPING NAME : Paint 640D
- ADR/RID
Hazard class : 3
Packaging group : II
ADR hazard : 33

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UN number : 1263
Label : 3

- Items with no more than 5 litres per inner packaging and not more than 20 litres per package are classified as limited quantities according to chapter 3.4.6.

- OACI

Hazard class : 3

Packaging group : II

UN number : 1263

IATA passenger : 305 5L

IATA cargo : 307 60L

Label : FLAMMABLE LIQUID

- IMDG

Hazard class : 3

Packaging group : II

UN number : 1263

Label : 3

15. REGULATORY INFORMATION

LABEL

According to the Directive (1999/45/EC), relating to the classification packaging and labelling of dangerous substances and preparations, the product is labelled as follows :



- F - Xi - HIGHLY FLAMMABLE - IRRITANT

Contains : 'METHYL-(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL) SEBACATE, BIS(1;2;2;6;6-PENTAMETHYL-4-PIPERIDYL) SEBACATE'. May produce an allergic reaction.

- R36 Irritating to eyes.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- S16 Keep away from sources of ignition - No smoking.
- S23+S38 Do not breathe vapour / spray. In case of insufficient ventilation, wear suitable respiratory equipment.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S57 Use appropriate container to avoid environmental contamination.

16. OTHER INFORMATION

Full text of R phrases with N° appearing in Section 2 :

- R61 May cause harm to the unborn child.
- R37 Irritating to respiratory system.
- R43 May cause sensitization by skin contact.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R20 Harmful by inhalation.
- R11 HIGHLY FLAMMABLE.
- R36 Irritating to eyes.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

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- R10 FLAMMABLE.
- R36/37 Irritating to eyes and respiratory system.
- R20/21 Harmful by inhalation and in contact with skin.
- R38 Irritating to skin.

The information contained in this data sheet is based on present scientific and technical knowledge. AS OF : 28-1-2003

The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

- The information contained in this Safety Data Sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) Regulations.
- The provision of the Health and Safety at Work Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

END OF SAFETY DATA SHEET