

Application to the relevant hazardous substances authority (planning authority)

The Planning (Hazardous Substances) Act 1990 - Section 7(1)

England - The Planning (Hazardous Substances) Regulations 2015 (Regulation 5)

Wales - The Planning (Hazardous Substances) (Wales) Regulations 2015 (Regulation 5)

Application for Hazardous Substances Consent

1	Applicant	Solvay Solutions UK Ltd
	Address	PO Box 80, Trinity Street, Oldbury
		West Midlands
	Post code	
	Telephone number	
		B69 4LN
	0121 552 3333	
	Person in control of the land to which the application relates, if different to above	
	Address	
	Post code	
	Telephone number	
2	Address or other location details of application site	Solvay Solutions UK Ltd
		PO Box 80, Trinity Street, Oldbury
		West Midlands
	Post code	
	OS grid ref	B69 4LN

3 Hazardous substance(s) covered by the application

- (a) List named substances falling within Part 2 of Schedule 1 to the Regulations first, then list any substances falling within the categories in Part 1 of that Schedule; finally list substances falling within the description in Part 3.

- (b) Substances falling within Parts 1 or 3 of Schedule 1 to the Regulations may be listed under the relevant category or description or named specifically. Where a substance falls within Part 1 and 2 list under Part 2 only; where a substance falls within more than one category in Part 1 list under the category which has the lowest controlled quantity. Where a substance falling within Part 1 or 2 also falls within Part 3 list under the Part which has the lowest controlled quantity. The “controlled quantity” means the quantity specified for that substance in column 2 of Parts 1, 2 or 3 of Schedule 1 to the Regulations.

Note: The addition rule as set out in the schedule to the regulations should be applied to determine whether consent is required for substances below the Controlled Quantity. Examples are given in the associated planning guidance. The Planning (Hazardous Substances) (Amendment) Regulations 2017 are relevant to the use of the addition rule in England only. The Planning (Hazardous Substances) (Amendment) Regulations 2015 are relevant to Q* (addition rule) for LPG, and relevant to notes about ammonium nitrate.

Table A

<i>Name, or relevant category or description of substance</i>	<i>Part number in Schedule 1 to the Regulations, and entry number if Part 2, category if Part 1, identity if Part 3</i>	<i>Do you have a current PHS consent* in respect of this substance? (Yes/No)</i>	<i>if “yes”, state quantity for which consent granted</i>	<i>Maximum quantity proposed to be present in tonnes</i>
Octene	<i>P5b – Flammable Liquids E1 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	Yes	25	5
Heptane	<i>P5b – Flammable Liquids E2 – Hazardous to the Aquatic environment – Chronic 2</i>	No	-	20
Di-iso-butylene	<i>P5b – Flammable Liquids E2 – Hazardous to the Aquatic environment – Chronic 2</i>	Yes	35	5
Diisopropylamine	<i>P5b – Flammable Liquids</i>	No	-	5
Acetonitrile	<i>P5b – Flammable Liquids</i>	Yes	5	20

<i>Name, or relevant category or description of substance</i>	<i>Part number in Schedule 1 to the Regulations, and entry number if Part 2, category if Part 1, identity if Part 3</i>	<i>Do you have a current PHS consent* in respect of this substance? (Yes/No)</i>	<i>if "yes", state quantity for which consent granted</i>	<i>Maximum quantity proposed to be present in tonnes</i>
Chromic Acid	<i>H2 – Acute Toxics – Category 2 or 3 P8 – Oxidising Liquids and Solids E1 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	Yes	5	0
Potassium permanganate	<i>P8 – Oxidising Liquids and Solids E1 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	No	-	3
Methanol	<i>H2 – Acute Toxics – Category 2 or 3 H3 – STOT Specific Target Organ Toxicity P5b – Flammable Liquids</i>	Yes	40	10
Di-t-butyl phosphate potassium salt in heptane	<i>P5b – Flammable Liquids E2 – Hazardous to the Aquatic environment – Chronic 2</i>	No	-	30

*a hazardous substances consent

Where in Table A consent is sought for any substance below the relevant Control Quantity, give the reason in the box below including the calculation for each relevant type of hazard (health, physical and/or environmental) with the q/Q fractions that add to greater than or equal to 1.

Not Applicable

4 Manner in which substance(s) are to be kept and used

For each substance, category or description of substance, covered by the application, provide the following information, referring to the substance location plan where appropriate.

“vessel” means any container designed or adapted to contain hazardous substances which is affixed to the land, and includes a container which forms part of plant or machinery which is affixed to the land but does not include a pipeline.

“Buried” or “Mounded” vessel includes a vessel which is only partially buried or partially mounded.

“moveable container” means any container designed or adapted to contain hazardous substances other than a vessel.

(a) Tick one box below to show whether the substance(s) will be present for storage only or will be stored and involved in a manufacturing, treatment or other industrial process:

Table B

<i>Substance including Part no. in Sch. 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3</i>	<i>Storage only</i>	<i>Stored and involved in an industrial process</i>
Octene <i>P5b – Flammable Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	-	Yes
Heptane <i>P5b – Flammable Liquids E2 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	-	Yes
Di-iso-Butylene <i>P5b – Flammable Liquids</i>	-	Yes
Diisopropylamine <i>P5b – Flammable Liquids</i>	-	Yes
Acetonitrile <i>P5b – Flammable Liquids</i>	-	Yes
Chromic Acid <i>H2 – Acute Toxics P8 – Oxidising Solids and Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	-	N/A
Potassium Permanganate <i>P8 – Oxidising Solids and Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	-	Yes
Methanol <i>H2 – Acute Toxics H3 – STOT Specific Target Organ Toxicity P5b – Flammable Liquids</i>	-	Yes

<i>Substance including Part no. in Sch. 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3</i>	<i>Storage only</i>	<i>Stored and involved in an industrial process</i>
Di-t-Butyl Phosphate Potassium Salt in Heptane <i>P5b – Flammable Liquids</i> <i>E2 – Hazardous to the Aquatic Environment</i> <i>– Category Acute 1 or Chronic 1</i>	-	Yes

(b) For each vessel to be used for storing the substance(s) give the following information:

Table C (i)

<i>Vessel No*</i>	<i>Substance including Part no. in Sch. 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3</i>	<i>Installed above ground† (Yes/No)</i>	<i>Buried (Yes/No)</i>	<i>Mounded (Yes/No)</i>	<i>Maximum capacity (cubic metres)</i>	<i>Highest vessel design temperature °C</i>	<i>Highest vessel design pressure (bar absolute)</i>
N/A	Octene <i>P5b – Flammable Liquids</i> <i>E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	-	-	-	-	-	-
N/A	Heptane <i>P5b – Flammable Liquids</i> <i>E2 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	-	-	-	-	-	-
N/A	Di-iso-Butylene <i>P5b – Flammable Liquids</i>	-	-	-	-	-	-
N/A	Diisopropylamine <i>P5b – Flammable Liquids</i>	-	-	-	-	-	-
N/A	Acetonitrile <i>P5b – Flammable Liquids</i>	-	-	-	-	-	-

Vessel No*	Substance including Part no. in Sch. 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3	Installed above ground† (Yes/No)	Buried (Yes/No)	Mounded (Yes/No)	Maximum capacity (cubic metres)	Highest vessel design temperature °C	Highest vessel design pressure (bar absolute)
N/A	Chromic Acid <i>H2 – Acute Toxics P8 – Oxidising Solids and Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	-	-	-	-	-	-
N/A	Potassium Permanganate <i>P8 – Oxidising Solids and Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	-	-	-	-	-	-
N/A	Methanol <i>H2 – Acute Toxics H3 – STOT Specific Target Organ Toxicity P5b – Flammable Liquids</i>	-	-	-	-	-	-
N/A	Di-t-Butyl Phosphate Potassium Salt in Heptane Waste <i>P5b – Flammable Liquids E2 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	-	-	-	-	-	-

* identify by reference to substance location plan

† if “Yes”, specify whether or not it will be provided with full secondary containment

- (c) For each substance, category, or description of substance, state the largest size (capacity in cubic metres) of any **moveable** container(s) to be used for that substance, category, or description of substances:

Table C (ii)

<i>Substance including Part no. in Sch. 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3</i>	<i>Storage area on site*</i>	<i>Maximum capacity (cubic metres) of individual moveable containers</i>
Octene <i>P5b – Flammable Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	Doc Bi – Hatched Area	1
Heptane <i>P5b – Flammable Liquids E2 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	Doc Bi – Hatched Area	1
Di-iso-Butylene <i>P5b – Flammable Liquids</i>	Doc Bi – Hatched Area	1
Diisopropylamine <i>P5b – Flammable Liquids</i>	Doc Bi – Hatched Area	0.21
Acetonitrile <i>P5b – Flammable Liquids</i>	Doc Bi – Hatched Area	0.21
Chromic Acid <i>H2 – Acute Toxics P8 – Oxidising Solids and Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	N/A	N/A
Potassium Permanganate <i>P8 – Oxidising Solids and Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	Doc Bi – Hatched Area	0.02
Methanol <i>H2 – Acute Toxics H3 – STOT Specific Target Organ Toxicity P5b – Flammable Liquids</i>	Doc Bi – Hatched Area	1
Di-t-Butyl Phosphate Potassium Salt in Heptane <i>P5b – Flammable Liquids E2 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	Doc Bi – Hatched Area	1

* identify by reference to substance location plan

- (d) Where a substance, category or description of substance is to be used in a **manufacturing, treatment or other industrial process(es)**, give a general description of the process(es), describe the major items of plant which will contain the substance(s); and state the maximum quantity (in tonnes) which is liable to be present in the major items of the plant, and the maximum temperature (°C) and pressure (bar absolute) at which the substance, category or description of substance is liable to be present:

Table D

<i>Substance including Part no. in Schedule 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3</i>	<i>Description of process(es)</i>	<i>Major items of plant*</i>	<i>Max. quantity (tonnes)</i>	<i>Max. temp. (°C)</i>	<i>Max. pressure (bar absolute)</i>
Octene <i>P5b – Flammable Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	Batch Chemical Manufacture	Reactor T160	5	160	2.5
Heptane <i>P5b – Flammable Liquids E2 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	Batch Chemical Manufacture	Reactor T160	4	35	1
Di-iso-Butylene <i>P5b – Flammable Liquids</i>	Batch Chemical Manufacture	Reactor T160	4	125	4.5
Diisopropylamine <i>P5b – Flammable Liquids</i>	Batch Chemical Manufacture	Reactor T160	4	85 (b.pt.)	1
Acetonitrile <i>P5b – Flammable Liquids</i>	Batch Chemical Manufacture	Reactor T160	5	85 (b.pt.)	1
Chromic Acid <i>H2 – Acute Toxics P8 – Oxidising Solids and Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	N/A	-	-	-	-

<i>Substance including Part no. in Schedule 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3</i>	<i>Description of process(es)</i>	<i>Major items of plant*</i>	<i>Max. quantity (tonnes)</i>	<i>Max. temp. (°C)</i>	<i>Max. pressure (bar absolute)</i>
Potassium Permanganate <i>P8 – Oxidising Solids and Liquids</i> <i>E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	Batch Chemical Manufacture	Reactor T160	1.5	35	1
Methanol <i>H2 – Acute Toxics</i> <i>H3 – STOT Specific Target Organ Toxicity</i> <i>P5b – Flammable Liquids</i>	Batch Chemical Manufacture	Reactor T160	1	140	1
Di-t-Butyl Phosphate Potassium Salt in Heptane <i>P5b – Flammable Liquids</i> <i>E2 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	Batch Chemical Manufacture	Reactor T160	4	35	1

* identify by reference to substance location plan

5 Additional Information

- (a) If you have an existing PHS consent(s) as referred to in Table A, **attach a copy of each consent** to this application.
- (b) **List the maps or plans** or any explanatory scale drawings of plant/buildings submitted with this application (as a minimum submit a site map and a substance location plan – see **Notes** below).
- Document A – Planning Hazardous Substance Consent Deemed Consent – Application N^{os} HS/026 and HS/034
 - Document Bi – Site Plan – Hazardous Substance Locations
 - Document Bii – Google Earth View – Site – Emergency Access
 - Document Ci – OS Map 1-10,000 – Site Location
- (c) Provide a brief overview description of the **main activities** carried out or proposed to be carried out on the land to which the application relates.

The Oldbury facility is operated as an 'Upper-Tier' Control of Major Accident Hazards (COMAH) Establishment under the COMAH Regulations 2015. Solvay produces around 15,000 tonnes of chemicals per annum on a number of production plants. The Solvay COMAH plants on the site are:

- Phosphorus Receipt/Storage
- Perform
- Technical Products Unit – Blends
- Technical Products Unit – Reactors
- Semi-Works
- Phosphine / Tetrakis (Hydroxymethyl) Phosphonium Salts (THPX)

Chromic Acid will no longer be stored on site and thus process conditions have not been included.

- (d) Provide details of how each relevant substance is proposed to be transported to and from the land to which the application relates, for example the size and frequency of vehicle deliveries, the size or maximum flow rate of pipeline imports/exports.

<i>Substance including Part number in Schedule 1 to the Regulations, and entry number if Part 2, category if Part 1, identity if Part 3</i>	<i>How, and other details such as frequency and quantity, transported to and from the land to which the application relates</i>	
	<i>Transported to site</i>	<i>Transported from site</i>
Octene <i>P5b – Flammable Liquids E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	1m ³ IBC; 10pa	N/A
Heptane <i>P5b – Flammable Liquids E2 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	1m ³ IBCs; 50pa	N/A

Substance including Part number in Schedule 1 to the Regulations, and entry number if Part 2, category if Part 1, identity if Part 3	How, and other details such as frequency and quantity, transported to and from the land to which the application relates	
	Transported to site	Transported from site
Di-iso-Butylene <i>P5b – Flammable Liquids</i>	1m ³ IBCs; 10pa	N/A
Diisopropylamine <i>P5b – Flammable Liquids</i>	0.21m ³ drums; 25tonnes pa	N/A
Acetonitrile <i>P5b – Flammable Liquids</i>	0.21m ³ drums; 45tonnes pa	N/A
Chromic Acid <i>H2 – Acute Toxics</i> <i>P8 – Oxidising Solids and Liquids</i> <i>E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	NA	N/A
Potassium Permanganate <i>P8 – Oxidising Solids and Liquids</i> <i>E1 – Hazardous to the Aquatic Environment – Chronic Acute 1 or Chronic 1</i>	25kg bags; 15 tonnes pa	N/A
Methanol <i>H2 – Acute Toxics</i> <i>H3 – STOT Specific Target Organ Toxicity</i> <i>P5b – Flammable Liquids</i>	1m ³ IBCs; 10pa	N/A
Di-t-Butyl Phosphate Potassium Salt in Heptane <i>P5b – Flammable Liquids</i> <i>E2 – Hazardous to the Aquatic Environment – Category Acute 1 or Chronic 1</i>	NA	1m ³ IBCs; 50pa

- (e) Provide details of the vicinity of the land to which the application relates, where such details are relevant to the risks or consequences of a major accident (relevant details include numbers of people in neighbouring developments that could be affected by a major accident and details about environmentally sensitive receptors).

Solvay is situated in a heavily built-up area on the outskirts of Birmingham. It is an area of long-term industrial development, but with nearby housing. The site is sandwiched between the M5 to the West, and the Titford Canal and Oldbury spur of the rail line to the East. The site is on moderately high ground, with land falling away to the North and West. The sites positioning is Latitude 52° 29' 34" N; longitude 2° 0' 33" S. The grid reference for the site is SO 993 883. Views from the vicinity are generally dominated by the chimneys and buildings of existing and derelict industry, and by raised sections of the M5.

There are several canals nearby. To the North and West of the site is the Wolverhampton level of the Birmingham canal. The canal in part runs underneath the M5 and continues North East to join with other parts of the Birmingham Canal complex.

The Titford Canal is situated on the East of the site and collects water from the surrounding district to feed into the local canal system. Titford Canal is a spur off the Birmingham Canal

and is about 2 km long, running SW/NE. The canal is connected to the Wolverhampton level via the Oldbury Locks situated on the North of the site. Water flows from the Titford Canal to the Wolverhampton level.

The Northern arm of the Titford Canal ends at Tat Bank, where it is culverted into the Titford feeder to Edgbaston Reservoir about 4 km to the East. The reservoir is used to balance water levels in the canal system. The Southern end of the canal terminates at Titford Pool, adjacent to the M5.

- (f) Provide a brief overview of the measures taken or proposed to be taken to limit the consequences of a major accident.

The Oldbury site is operated as an 'Upper-Tier' Control of Major Accident Hazards (COMAH) Establishment under the COMAH Regulations 2015 and as such a COMAH Safety Report has been submitted to the Competent Authority related to the Site activities.

- (g) Give any further information which you consider to be relevant to the determination of this application. (For example, details about any exempted established substances on site or a copy of any notification about 'other establishments'/exempted established substances if already submitted).

Solvay Solutions UK Limited are an experience operator of COMAH establishments.

The Solvay group currently operate several additional Upper Tier COMAH sites.

I/We hereby apply for hazardous substances consent in accordance with the proposals described in the application



Signed J Kelsall
on behalf of Solvay Solutions UK Ltd

Date 18th June 2021

To be accompanied by the notices and certificates required by regulations 6 and 7 of the Regulations.

Notes

“**Site map**” is a map, reproduced from, or based on, an Ordnance Survey map with a scale of not less than 1:10,000, which identifies the land to which the application relates and shows National Grid lines and reference numbers.

“Substance location plan” is a plan of the land to which the application relates, drawn to a scale of not less than 1:2,500, which identifies-

- (a) any area of land intended to be used for the storage of the substance;
- (b) where the substance is to be used in a manufacturing, treatment or other industrial process, the location of the major items of plant involved in that process in which the substance will be present; and
- (c) access points to and from the land.