



**ENVIRONMENT
AGENCY**

RADIOACTIVE SUBSTANCES ACT 1993

**CERTIFICATE OF REGISTRATION
AND
INTRODUCTORY NOTE**

OPEN SOURCES

SABIC UK PETROCHEMICALS

**WILTON INTERNATIONAL MANUFACTURING SITE
PO BOX 99
WILTON
MIDDLESBROUGH
TS10 4YA**

**REGISTRATION NUMBER
BL8791 / CB1559**

INTRODUCTORY NOTE

- IN 1.** This Note does not form part of the Certificate of Registration.
- IN 2.** The following certificate contains details of a registration of the specified premises by the Environment Agency in exercising its powers under the provisions of section 7 of the Radioactive Substances Act 1993 ("the Act"). The registration permits the keeping and use of open sources on one specified premises.

The Certificate of Registration includes a signed certificate and two schedules. Schedule 1 contains standard conditions applied to all holders of radioactive materials in the form of open sources and Schedule 2 contains details of the sources, the purposes for which they are used, any modifications, additions to or deletions of the standard conditions in Schedule 1 and notice of cancellation of any relevant registration under Section 12(2) of the Act.

- IN 3.** The Radioactive Substances Act 1993 is an Act of Parliament consolidating the Radioactive Substances 1960 and all subsequent amending legislation.

The Act is concerned with the control of radioactive material and any subsequent accumulation and disposal of radioactive waste. The conditions attached to the registration are concerned with the control and security of the radioactive material.

- IN 4.** The accumulation and disposal of any radioactive waste associated with the use of this radioactive material will require to be within the terms of Sections 13 and 14 of the Act. It will require appropriate authorisation under those Sections unless covered by an exemption order such as the Radioactive Substances (Substances of Low Activity) Exemption Order (SI/1986/1002).

- IN 5.** The registration does not permit contravention of any other enactment or any order made, granted or issued under any enactment; nor does it permit any contravention of any rule of law or breach of any agreement.

In particular any requirements governing the use of radioactive material under the Health & Safety at Work etc Act 1974 will additionally need to be observed.

- IN 6.** The undertaking to which this certificate relates may use the radionuclides in section 2 for the purposes of industrial process tracer test and environmental tracer test. The radioactive materials included in the provisions of this certificate are in the form of solutions or solids that may be divided (e.g. dilution). Such materials are used where there is a need to manipulate the radioactive materials themselves, rather than simply exploit the properties of their radiations.



RADIOACTIVE SUBSTANCES ACT 1993

Registration - Open Sources

SABIC UK PETROCHEMICALS

BL8791 / CB1559

This certifies that the Environment Agency in exercise of its powers under section 7 of the Radioactive Substances Act 1993 ("the Act") has registered

SABIC UK PETROCHEMICALS

Company Registered No 3767075

("the user")

whose Registered Office is

Wilton International Manufacturing Site
PO Box 99
Wilton
Redcar
TS10 4YA

to keep and use radioactive materials, being the open sources containing the radionuclides specified in the first column of paragraph 1 of Schedule 2 to this certificate on premises used by him at

Wilton International Manufacturing Site
PO Box 99
Wilton
Redcar
TS10 4RF

subject to the limitations and conditions in Schedule 1 to this certificate as modified by paragraph 4 and any subsequent paragraphs of Schedule 2.

Signed

S Firth

Authorised to sign on behalf of the Environment Agency

Dated the

Schedule 1

STANDARD CONDITIONS AND LIMITATIONS

PURPOSES FOR WHICH REGISTERED MATERIALS ARE KEPT OR USED

1. The user shall keep or use the registered materials only for the purposes specified in paragraph 2 of Schedule 2.

MAXIMUM ACTIVITY OF REGISTERED MATERIALS

2. The user shall ensure that the activity of each radionuclide in open sources kept or used on the premises does not exceed the relevant activity specified in the second column of the table in paragraph 1 of Schedule 2.

SUPERVISION OF REGISTERED MATERIALS

3. The user shall ensure -

a. that the keeping and use of the registered materials are supervised by a person competent and able to secure compliance with the limitations and conditions specified in this certificate; and

b. that the name of the person supervising the keeping and use of registered materials is clearly displayed with the copy of this Certificate of Registration posted on the premises as required by section 19 of the Act.

KEEPING AND USE OF REGISTERED MATERIALS

4. The user shall not lend or let on hire a registered material, or cause or permit it to be lent or let on hire except to a person who is registered under the Act to keep or use such a substance.

5. The user shall so far as is reasonably practicable prevent -

a. the loss of any registered material; and

b. access to any registered materials by any person not authorised by the user.

6. The user shall so far as is reasonably practicable ensure that each registered material is kept either -

a. under continuous surveillance; or

b. in a suitable container in a suitable store both of which -

i. are so constructed, maintained and used as to prevent the loss or unauthorised removal of the registered materials;

ii. are constructed of non-combustible materials;

iii. do not contain nor are located close to any corrosive, explosive or flammable material; and

iv. are clearly and legibly marked with the word 'Radioactive' , with the ionising radiation symbol conforming with BS 3510: 1968 or ISO 361 and any other information necessary for the identification of the registered materials present.

7. The user shall so far as is reasonably practicable minimise the amount of radioactive waste which arises from the keeping and use of each registered substance.

8. The user shall so far as is reasonably practicable ensure that all relevant parts of the premises are constructed, maintained and used in such a manner that -

- a. they do not readily become contaminated; and
- b. any contamination which does occur can easily be removed.

LOSS OR THEFT OF REGISTERED MATERIALS

9. If the user believes or has reasonable grounds for believing that a registered material has been lost or stolen he shall -

- a. without delay inform the Police and the Environment Agency;
- b. so far as is reasonably practicable recover the substances; and
- c. as soon as is practicable report the circumstances in writing to the Environment Agency.

ESCAPE OF REGISTERED MATERIALS

10. If the user believes or has reasonable grounds for believing that a registered material is escaping or has escaped from any container or location in which it is kept or used he shall -

- a. without delay inform the Environment Agency;
- b. so far as is reasonably practicable -
 - i. prevent any further escape; and
 - ii. minimise the spread of any contamination;
- c. ensure that any discharge of radioactive gas to the atmosphere is made in a manner which prevents so far as is reasonably practicable its entry into any building; and
- d. as soon as is practicable report the circumstances in writing to the Environment Agency.

CHANGE OF NAME OR CESSATION OF USE

11. The user shall give the Environment Agency not less than 21 days notice in writing of his intention to -
- a. change the name of the user; or
 - b. cease to occupy the premises; or
 - c. cease to keep or use registered substances on the premises.

RECORDS

12. The user shall make up-to-date, clear and legible records for each registered material showing -
- a. the radionuclide present, the date on which it was received and the activity on that date;
 - b. so far as is reasonably practicable its location on the premises;
 - c. if it has been removed from the premises, the date of removal, the activity on that date and the name and address of the person to whom it was transferred;
 - d. the activity present on the premises at the end of each calendar month; and
 - e. such other information as an authorised person may require.
13. The user shall keep, unless notified to the contrary in writing by an authorised person, the records referred to in this certificate and in any certificate referred to in paragraph 3 of Schedule 2 available for inspection at any reasonable time by an authorised person in such a place and in such a manner as an authorised person may require.
14. The user shall supply on demand and without charge such copy or copies of all or part of the records kept as referred to in this certificate as an authorised person may reasonably require.

INTERPRETATION

15. In this certificate -

"activity", expressed in becquerels, means the number of spontaneous nuclear transformations occurring in a period of one second in a radioactive substances;

"authorised person" means a person authorised in writing under section 108 of the Environment Act 1995

"Bq, kBq, MBq, GBq, TBq and PBq" if used in Schedule 2 are used as abbreviations meaning becquerels, kilobecquerels, megabecquerels, gigabecquerels, terabecquerels and petabecquerels respectively;

"closed source" means an object free from patent defect which is radioactive material because it consists of, or includes, one or more radionuclides firmly incorporated on or in, or sealed within, solid inert non-radioactive material so as to prevent in normal use the dispersion of any radioactive material;

"decay products" means, in relation to any radionuclide, the radionuclides succeeding it in the radioactive series in which it and they occur;

"half life" means the time taken for the activity of a radionuclide to lose half its value by decay;

"maximum activity" in the table in paragraph 1 of Schedule 2 refers to the activities of the specified radionuclides and excludes the activities of any associated decay products which may be present in amounts not exceeding those which could be present through radioactive decay of the specified radionuclides;

"modifications" includes additions, alterations and omissions;

"open sources" means the radioactive materials, not being closed sources, containing the radionuclides specified in the table in paragraph 1 of Schedule 2 and any associated decay products;

"radionuclide" means a species of atom characterised by its mass number and atomic number and subject to radioactive decay;

"relevant parts of the premises" includes for the purpose of paragraph 7 of this Schedule, the floor, ceiling, walls, fixtures, fittings and furniture in any area where registered substances are kept or used and any associated drainage and ventilation systems;

"Schedule" means a Schedule which forms part of this certificate; and

"the Act" means the Radioactive Substances Act 1993.

"up-to-date" in paragraphs 12a, 12b and 12c of this Schedule means that the records are made on the day of receipt or removal as appropriate and in paragraph 12d means that the records are made by the end of the following month.

Schedule 2

1. REGISTERED MATERIALS

Table

RADIONUCLIDES	MAXIMUM ACTIVITY
Krypton 85 (gas)	370 GBq
Tritium (gas)	185 GBq
Tritium (Liquid)	80 GBq
Krypton 79 (gas)	74 GBq
Bromine 82 (gas)	10 GBq
Other non alpha emitting (liquid)	40 GBq

2. PURPOSES FOR WHICH REGISTERED MATERIALS ARE KEPT OR USED

Industrial process tracer test

Environmental tracer test

3. CANCELLATION OF ANY OTHER REGISTRATION

This gives notice in accordance with Section 12(2) of the Act that the Environment Agency has cancelled the registration under Section 7 of the Radioactive Substances Act 1993 in respect of substances issued to Huntsman Petrochemicals Ltd in respect of premises at Wilton International Manufacturing Site, PO Box 54, Wilton, Middlesbrough TS90 8JA details of which were contained in the certificate dated 25/01/02 and referenced BL8791.

4. MODIFICATIONS

The company shall ensure at the time any of its products leave the premises that:

- a) the product shall contain no radionuclides derived from the tracer study, of half life greater than 40 hours; and
- b) the concentration in the product of all radionuclides derived from the tracer study, taken together, shall not exceed 0.4 Bq/g.