



The technical association
of the European lubricants
industry



The technical committee
of petroleum additive
manufacturers in Europe

ATIEL/ATC
Generic Exposure
Scenarios

Document 7: Environmental GES Values Tables

This spreadsheet provides you with values to complete the ATIEL-ATC Generic Exposure Scenarios for the Environmental part.

**Version 1.0
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Purpose

The purpose of this spreadsheet is to provide you with values to complete the ATIEL-ATC Generic Exposure Scenarios for the Environmental part.

What is in this spreadsheet

In this spreadsheet you will find a number of tabs to assist you with completing your task.

In a number of them the values are split according to the ATIEL-ATC Use Groups which have been defined and can be consulted on the ATIEL website.

They are:

[RDS code selection](#)

This helps you with selecting the appropriate RDS code based on the values for four parameters which you should have received on the SDS from your supplier.

[Release fraction air](#)

This shows the assumed release fraction of the RDS to air for the different uses. Justification is provided in the ATIEL-ATC SPERCS Factsheets.

[Release fraction water](#)

This shows the assumed release fraction of the RDS to waste water for the different uses. Justification is provided in the ATIEL-ATC SPERCS Factsheets.

[STP removal](#)

This shows the assumed removal fraction of the RDS in the default Sewage Treatment Plant for the different uses.

[Msafe RDS](#)

This shows the Msafe values for an individual RDS at RDS level which represents the amount that can be used safely at site level for the different uses.

[Msafe Product](#)

This shows the Msafe values for an individual RDS at Product level which represents the amount that can be used safely at site level for the different uses. Note that these values have been based on the treat rate shown in tab "Treat rate".

[Treat rate](#)

This shows the treat rate used to estimate the Release fraction water and to convert the Msafe values at RDS level to Msafe values at product level. This also describes how to scale Msafe and Release fraction water where a actual treat rate of RDS differs from the default assumption.

[Validity Limit](#)

This shows the limits of the treat rate percentages for which the GES can be used in principle.

[EU tonnage](#)

This lists the values for total of EU tonnage used as input to the calculations performed with the ECETOC TRA tool.

[Emission days](#)

This shows the number of days per year which have been used in the calculations.

RDS code assigned on basis of four substance characteristics

Four substance parameters to determine RDS code				RDS Code
log Kow	VP (pa)	Biodegradability	PNEC FW aq mg/l	
<5	<1	Readily biodegradable	$0.00001 \leq - <0.0001$	1.1
<5	<1	Readily biodegradable	$0.0001 \leq - <0.001$	1.2
<5	<1	Readily biodegradable	$0.001 \leq - <0.01$	1.3
TriPP, CAS 115-86-6, EC 204-112-2				1.3.1
<5	<1	Readily biodegradable	$0.01 \leq - <0.1$	1.4
<5	<1	Readily biodegradable	$0.1 \leq - <1.0$	1.5
<5	<1	Not biodegradable	$0.00001 \leq - <0.0001$	2.1
<5	<1	Not biodegradable	$0.0001 \leq - <0.001$	2.2
<5	<1	Not biodegradable	$0.001 \leq - <0.01$	2.3
ZDDP, CAS 68457-79-4, EC 270-608-0				2.3.1
<5	<1	Not biodegradable	$0.01 \leq - <0.1$	2.4
<5	<1	Not biodegradable	$0.1 \leq - <1.0$	2.5
<5	>1	Readily biodegradable	$0.00001 \leq - <0.0001$	3.1
<5	>1	Readily biodegradable	$0.0001 \leq - <0.001$	3.2
<5	>1	Readily biodegradable	$0.001 \leq - <0.01$	3.3
<5	>1	Readily biodegradable	$0.01 \leq - <0.1$	3.4
<5	>1	Readily biodegradable	$0.1 \leq - <1.0$	3.5
<5	>1	Not biodegradable	$0.00001 \leq - <0.0001$	4.1
<5	>1	Not biodegradable	$0.0001 \leq - <0.001$	4.2
<5	>1	Not biodegradable	$0.001 \leq - <0.01$	4.3
<5	>1	Not biodegradable	$0.01 \leq - <0.1$	4.4
<5	>1	Not biodegradable	$0.1 \leq - <1.0$	4.5
>5	<1	Readily biodegradable	$0.00001 \leq - <0.0001$	5.1
>5	<1	Readily biodegradable	$0.0001 \leq - <0.001$	5.2
>5	<1	Readily biodegradable	$0.001 \leq - <0.01$	5.3
>5	<1	Readily biodegradable	$0.01 \leq - <0.1$	5.4
>5	<1	Readily biodegradable	$0.1 \leq - <1.0$	5.5
>5	<1	Not biodegradable	$0.00001 \leq - <0.0001$	6.1
>5	<1	Not biodegradable	$0.0001 \leq - <0.001$	6.2
>5	<1	Not biodegradable	$0.001 \leq - <0.01$	6.3
>5	<1	Not biodegradable	$0.01 \leq - <0.1$	6.4
>5	<1	Not biodegradable	$0.1 \leq - <1.0$	6.5
>5	>1	Readily biodegradable	$0.00001 \leq - <0.0001$	7.1
>5	>1	Readily biodegradable	$0.0001 \leq - <0.001$	7.2
>5	>1	Readily biodegradable	$0.001 \leq - <0.01$	7.3
>5	>1	Readily biodegradable	$0.01 \leq - <0.1$	7.4
>5	>1	Readily biodegradable	$0.1 \leq - <1.0$	7.5
>5	>1	Not biodegradable	$0.00001 \leq - <0.0001$	8.1
>5	>1	Not biodegradable	$0.0001 \leq - <0.001$	8.2
>5	>1	Not biodegradable	$0.001 \leq - <0.01$	8.3
>5	>1	Not biodegradable	$0.01 \leq - <0.1$	8.4
>5	>1	Not biodegradable	$0.1 \leq - <1.0$	8.5

Release fractions (RF) to three environmental compartments for different use groups: AIR

Notes

Note 1: Analysis of products assigned to use group Di has determined that typically they do not contain environmentally classified components.

Note 2: for industrial processes the RF air has been based on results from an ATC-ATIEL questionnaire, for professional and consumer uses they have been based on A&B tables.

RDS Code	ATIEL ATC Use group Release Fraction (RF) to air from process (after typical onsite RMMs)											
	Ai-add pack	Ai-lubes	Bi	Bp	Bc	Ci	Cp	Cc	Di	Ei	Fi	Fp
1.1	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03	see note 1 above	5.00E-05	5.00E-05	1.00E-04
1.2	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
1.3	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
1.3.1	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
1.4	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
1.5	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
2.1	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03	see note 1 above	5.00E-05	5.00E-05	1.00E-04
2.2	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
2.3	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
2.3.1	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
2.4	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
2.5	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
3.1	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	see note 1 above	5.00E-05	5.00E-05	5.00E-04
3.2	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		5.00E-05	5.00E-05	5.00E-04
3.3	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		5.00E-05	5.00E-05	5.00E-04
3.4	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		5.00E-05	5.00E-05	5.00E-04
3.5	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		5.00E-05	5.00E-05	5.00E-04
4.1	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		see note 1 above	5.00E-05	5.00E-05
4.2	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	5.00E-05		5.00E-05	5.00E-04
4.3	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	5.00E-05		5.00E-05	5.00E-04
4.4	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	5.00E-05		5.00E-05	5.00E-04
4.5	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	5.00E-05		5.00E-05	5.00E-04
5.1	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03	see note 1 above		5.00E-05	5.00E-05
5.2	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
5.3	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
5.4	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
5.5	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		5.00E-05	5.00E-05	1.00E-04
6.1	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03		see note 1 above	5.00E-05	5.00E-05
6.2	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03	5.00E-05		5.00E-05	1.00E-04
6.3	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03	5.00E-05		5.00E-05	1.00E-04
6.4	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03	5.00E-05		5.00E-05	1.00E-04
6.5	5.00E-07	5.00E-05	5.00E-05	1.00E-04	5.00E-03	5.00E-05	1.00E-04	5.00E-03	5.00E-05		5.00E-05	1.00E-04
7.1	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	see note 1 above		5.00E-05	5.00E-05
7.2	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		5.00E-05	5.00E-05	5.00E-04
7.3	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		5.00E-05	5.00E-05	5.00E-04
7.4	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		5.00E-05	5.00E-05	5.00E-04
7.5	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		5.00E-05	5.00E-05	5.00E-04
8.1	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03		see note 1 above	5.00E-05	5.00E-05
8.2	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	5.00E-05		5.00E-05	5.00E-04
8.3	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	5.00E-05		5.00E-05	5.00E-04
8.4	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	5.00E-05		5.00E-05	5.00E-04
8.5	5.00E-07	5.00E-05	5.00E-05	5.00E-04	5.00E-03	5.00E-05	5.00E-04	5.00E-03	5.00E-05		5.00E-05	5.00E-04

Release fractions (RF) to three environmental compartments for different use groups: WASTE WATER

Notes

Note 1: Analysis of products assigned to use group Di has determined that typically they do not contain environmentally classified components.
 Note 2: For industrial processes the RF water has been based on results from an ATC-ATIEL questionnaire for generic information and the assumed treat rate is shown in table "Treat Rate".
 Note 3: For professional and consumer uses in use groups B and C they have been based on A&B tables, for Fp on sector practices.

RDS Code	ATIEL ATC Use group Release Fraction (RF) to water from process (after typical onsite RMMs)											
	Ai-add pack	Ai-lubes	Bi	Bp	Bc	Ci	Cp	Cc	Di	Ei	Fi	Fp
1.1	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	see note 1 above	2.00E-11	2.00E-11	1.00E-03
1.2	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
1.3	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
1.3.1	1E-10	1E-11	1E-11	5.00E-04	5.00E-04	1E-11	5.00E-04	5.00E-04		1.00E-11	1.00E-11	1.00E-03
1.4	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
1.5	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	2.00E-11	2.00E-11	1.00E-03	
2.1	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	see note 1 above	2.00E-11	2.00E-11	1.00E-03
2.2	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
2.3	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
2.3.1	1.40E-10	1.40E-11	1.40E-11	5.00E-04	5.00E-04	1.40E-11	5.00E-04	5.00E-04		1.40E-11	1.40E-11	1.00E-03
2.4	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
2.5	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	2.00E-11	2.00E-11	1.00E-03	
3.1	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	see note 1 above	2.00E-11	2.00E-11	1.00E-03
3.2	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
3.3	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
3.4	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
3.5	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
4.1	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	see note 1 above	2.00E-11	2.00E-11	1.00E-03
4.2	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
4.3	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
4.4	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
4.5	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
5.1	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	see note 1 above	2.00E-11	2.00E-11	1.00E-03
5.2	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
5.3	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
5.4	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
5.5	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
6.1	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	see note 1 above	2.00E-11	2.00E-11	1.00E-03
6.2	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
6.3	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
6.4	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
6.5	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
7.1	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	see note 1 above	2.00E-11	2.00E-11	1.00E-03
7.2	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
7.3	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
7.4	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
7.5	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
8.1	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04	see note 1 above	2.00E-11	2.00E-11	1.00E-03
8.2	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
8.3	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
8.4	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03
8.5	2.00E-10	2.00E-11	2.00E-11	5.00E-04	5.00E-04	2.00E-11	5.00E-04	5.00E-04		2.00E-11	2.00E-11	1.00E-03

Estimated substance removal from wastewater via domestic sewage treatment (%) - FSTP

Notes

Note 1: Analysis of products assigned to use group Di has determined that typically they do not contain environmentally classified components.
 Note 2: the values are the same within each main code e.g. 1.x are the same, 2.x are the same, etc. Please be advised that this does not apply to the clearly defined substances indicated with codes 1.3.1 and 2.3.1 respectively.

RDS Code	ATIEL ATC Use group Estimated substance removal from wastewater via domestic sewage treatment (%) - FSTP											
	Ai-add pack	Ai-lubes	Bi	Bp	Bc	Ci	Cp	Cc	Di	Ei	Fi	Fp
1.1	87	87	87	87	87	87	87	87	see note 1 above	87	87	87
1.2	87	87	87	87	87	87	87	87		87	87	
1.3	87	87	87	87	87	87	87	87		87	87	
1.3.1	90	90	90	90	90	90	90	90		90	90	
1.4	87	87	87	87	87	87	87	87		87	87	
1.5	87	87	87	87	87	87	87	87		87	87	
2.1	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	see note 1 above	0.09	0.09	0.09
2.2	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		0.09	0.09	
2.3	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		0.09	0.09	
2.3.1	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31		0.31	0.31	
2.4	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		0.09	0.09	
2.5	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		0.09	0.09	
3.1	87	87	87	87	87	87	87	87	see note 1 above	87	87	87
3.2	87	87	87	87	87	87	87	87		87	87	
3.3	87	87	87	87	87	87	87	87		87	87	
3.4	87	87	87	87	87	87	87	87		87	87	
3.5	87	87	87	87	87	87	87	87		87	87	
4.1	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	see note 1 above	0.10	0.10	0.10
4.2	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		0.10	0.10	
4.3	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		0.10	0.10	
4.4	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		0.10	0.10	
4.5	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		0.10	0.10	
5.1	93	93	93	93	93	93	93	93	see note 1 above	93	93	93
5.2	93	93	93	93	93	93	93	93		93	93	
5.3	93	93	93	93	93	93	93	93		93	93	
5.4	93	93	93	93	93	93	93	93		93	93	
5.5	93	93	93	93	93	93	93	93		93	93	
6.1	69	69	69	69	69	69	69	69	see note 1 above	69	69	69
6.2	69	69	69	69	69	69	69	69		69	69	
6.3	69	69	69	69	69	69	69	69		69	69	
6.4	69	69	69	69	69	69	69	69		69	69	
6.5	69	69	69	69	69	69	69	69		69	69	
7.1	94	94	94	94	94	94	94	94	see note 1 above	94	94	94
7.2	94	94	94	94	94	94	94	94		94	94	
7.3	94	94	94	94	94	94	94	94		94	94	
7.4	94	94	94	94	94	94	94	94		94	94	
7.5	94	94	94	94	94	94	94	94		94	94	
8.1	79	79	79	79	79	79	79	79	see note 1 above	79	79	79
8.2	79	79	79	79	79	79	79	79		79	79	
8.3	79	79	79	79	79	79	79	79		79	79	
8.4	79	79	79	79	79	79	79	79		79	79	
8.5	79	79	79	79	79	79	79	79		79	79	

Maximum allowable site quantity (Msafe values) for different use groups at the substance RDS level

Notes

Note 1: Analysis of products assigned to use group Di has determined that typically they do not contain environmentally classified components.

RDS Code	ATIEL ATC Use group Msafe (kg day-1)											
	Ai-add pack	Ai-lubes	Bi	Bp	Bc	Ci	Cp	Cc	Di	Ei	Fi	Fp
1.1	13376	134	39	0.4	0.2	6	0.1	0.007	see note 1 above	5	3	0.05
1.2	133758	1339	393	4	2	59	0.6	0.07		47	32	0.5
1.3	1337583	13388	3925	38	16	589	6	0.7		468	318	5
1.3.1	48529412	12012295	672097	147	98	97295	49	7		61777	52466	38
1.4	13375833	133884	39254	382	159	5888	57	7		4679	3184	52
1.5	133758330	1338839	392539	3821	1587	58878	567	65		46789	31839	516
2.1	6679	67	24	0.3	0.1	3	0.03	0.004	see note 1 above	3	2	0.03
2.2	66785	669	237	3	0.8	35	0.3	0.04		28	19	0.3
2.3	667851	6685	2371	27	8	347	3	0.4		276	187	3
2.3.1	2397819	24011	9626	108	31	1422	13	2		1129	767	11
2.4	6678508	66850	23709	268	77	3475	31	4		2758	1874	27
2.5	66785084	668501	237089	2675	773	34747	310	38		27578	18737	267
3.1	22314	223	68	0.4	0.3	10	0.1	0.01	see note 1 above	8	6	0.09
3.2	223137	2235	677	4	3	103	1	0.1		82	56	0.9
3.3	2231366	22348	6766	38	27	1027	10	1		816	556	9
3.4	22313660	223477	67662	385	272	10267	98	11		8162	5557	89
3.5	223136599	2234774	676615	3847	2720	102669	984	114		81624	55573	890
4.1	10437	105	28	0.3	0.1	4	0.04	0.004		see note 1 above	3	2
4.2	104367	1055	277	3	1	40	0.4	0.04	32		22	0.3
4.3	1043674	10547	2775	28	9	402	4	0.4	319		217	3
4.4	10436736	105467	27750	280	87	4017	35	4	3188		2166	30
4.5	104367360	1054670	277495	2801	867	40169	354	44	31881		21661	302
5.1	321779	4672	1230	0.4	0.4	178	0.3	0.1	see note 1 above		141	96
5.2	3217789	46720	12297	4	4	1780	3	1		1413	960	2
5.3	32177893	467202	122966	41	38	17802	33	13		14129	9600	18
5.4	321778932	4672020	1229661	409	381	178018	333	133		141290	95996	183
5.5	3217789316	46720196	12296609	4090	3810	1780184	3331	1328		1412897	959959	1826
6.1	54670	577	152	0.4	0.2	22	0.1	0.02		see note 1 above	17	12
6.2	546705	5772	1519	4	2	220	1	0.2	174		119	1
6.3	5467047	57723	15188	38	25	2199	14	2	1745		1186	10
6.4	54670469	577231	151881	382	246	21986	140	23	17450		11856	100
6.5	546704686	5772309	1518810	3822	2456	219859	1403	228	174497		118557	1003
7.1	585205	13487	3552	0.4	0.4	514	0.4	0.2	see note 1 above		408	277
7.2	5852054	134865	35518	4	4	5143	4	2		4082	2773	2
7.3	58520537	1348654	355185	41	40	51430	38	24		40819	27734	20
7.4	585205367	13486538	3551849	412	401	514301	381	239		408194	277339	198
7.5	5852053671	134865377	35518491	4117	4014	5143011	3814	2387		4081936	2773395	1976
8.1	166059	1978	521	0.4	0.3	75	0.3	0.1		see note 1 above	60	41
8.2	1660587	19784	5206	4	3	754	3	0.7	598		406	2
8.3	16605869	197838	52060	40	34	7536	26	7	5981		4064	16
8.4	166058691	1978378	520603	404	345	75363	264	69	59814		40639	158
8.5	1660586910	19783781	5206028	4036	3446	753634	2636	690	598143		406393	1578

Msafe values for generic products for different use groups at the product level using a treat rate of 2% except for Ai-add pack 20%; for specific substances see tab "Treat rate"

Important:

If your treat rate is significantly different from that assumed above, then you can scale Msafe (and Release fraction to water) accordingly. For more details see tab Treat rate.

Notes

Note 1: Analysis of products assigned to use group Di has determined that typically they do not contain environmentally classified components.

RDS Code	ATIEL ATC Use group Msafe (kg day ⁻¹)											
	Ai-add pack	Ai-lubes	Bi	Bp	Bc	Ci	Cp	Cc	Di	Ei	Fi	Fp
1.1	66879	6694	1963	19	8	294.4	3	0.3		234	159	3
1.2	668792	66942	19627	191	79	2944	28	3		2339	1592	26
1.3	6687917	669420	196269	1911	793	29439	283	33	see note 1	23395	15920	258
1.3.1	485294116	1201229490	67209667	29351	9835	9729484	4873	3453	above	3088840	5246574	3768
1.4	66879165	6694195	1962694	19107	7934	294390	2835	325		233946	159197	2578
1.5	668791651	66941950	19626944	191071	79341	2943899	28348	3253		2339463	1591968	25781
2.1	33393	3343	1185	13	4	174	2	0.2		138	94	1
2.2	333925	33425	11854	134	39	1737	15	2		1379	937	13
2.3	3339254	334250	118544	1338	386	17374	155	19	see note 1	13789	9369	133
2.3.1	17127276	1715038	687548	7703	2249	101602	904	111	above	80639	54788	778
2.4	33392542	3342503	1185444	13377	3863	173737	1549	189		137891	93687	1335
2.5	333925418	33425031	11854444	133772	38625	1737373	15494	1892		1378914	936866	13345
3.1	111568	11174	3383	19	14	513	5	1		408	278	4
3.2	1115683	111739	33831	192	136	5133	49	6		4081	2779	44
3.3	11156830	1117387	338308	1923	1360	51335	492	57	see note 1	40812	27786	445
3.4	111568299	11173869	3383076	19234	13598	513347	4919	568	above	408120	277864	4448
3.5	1115682994	111738691	33830760	192339	135975	5133469	49191	5680		4081196	2778640	44483
4.1	52184	5273	1387	14	4	201	2	0		159	108	2
4.2	521837	52733	13875	140	43	2008	18	2		1594	1083	15
4.3	5218368	527335	138748	1400	433	20085	177	22	see note 1	15941	10830	151
4.4	52183680	5273349	1387477	14003	4335	200845	1770	218	above	159407	108304	1511
4.5	521836801	52733489	13874770	140030	43346	2008455	17697	2184		1594066	1083045	15113
5.1	1608895	233601	61483	20	19	8901	17	7		7064	4800	9
5.2	16088947	2336010	614830	205	191	89009	167	66		70645	47998	91
5.3	160889466	23360098	6148305	2045	1905	890092	1666	664	see note 1	706449	479979	913
5.4	1608894658	233600979	61483046	20451	19051	8900918	16657	6641	above	7064486	4799793	9132
5.5	16088946580	2336009793	614830460	204509	190505	89009184	166566	66407		70644862	47997927	91322
6.1	273352	28862	7594	19	12	1099	7	1		872	593	5
6.2	2733523	288615	75940	191	123	10993	70	11		8725	5928	50
6.3	27335234	2886155	759405	1911	1228	109929	702	114	see note 1	87249	59279	501
6.4	273352343	28861546	7594049	19111	12281	1099295	7017	1142	above	872486	592787	5014
6.5	2733523431	288615463	75940491	191107	122805	10992946	70167	11419		8724860	5927871	50138
7.1	2926027	674327	177592	21	20	25715	19	12		20410	13867	10
7.2	29260268	6743269	1775925	206	201	257151	191	119		204097	138670	99
7.3	292602684	67432689	17759246	2058	2007	2571506	1907	1194	see note 1	2040968	1386697	988
7.4	2926026835	674326886	177592456	20584	20070	25715057	19070	11936	above	20409679	13866973	9880
7.5	29260268353	6743268861	1775924559	205839	200699	257150570	190705	119361		204096787	138669729	98799
8.1	830293	98919	26030	20	17	3768	13	3		2991	2032	8
8.2	8302935	989189	260301	202	172	37682	132	35		29907	20320	79
8.3	83029346	9891890	2603014	2018	1723	376817	1318	345	see note 1	299072	203196	789
8.4	830293455	98918904	26030141	20179	17228	3768170	13181	3451	above	2990717	2031965	7888
8.5	8302934552	989189038	260301410	201793	172277	37681698	131809	34511		29907171	20319646	78885

Treat rate

Warning

If your treat rate is significantly different from that assumed below, then you can scale Msafe (and Release fraction to water) accordingly, providing you stay within the validity limit. For information on validity limits of assumed treat rate, see tab "Validity Limit"

Scaling Msafe at Product Level

For use Ai-add pack (where 20% is the default assumption): Scaled Msafe product = Msafe Product * (20%/actual concentration (%))
 For uses Ai-lubes through to Fp (where 2% is the default assumption): Scaled Msafe product = Msafe Product * (2%/actual concentration (%))
 For use Ai-add pack (where 20% is the default assumption): Scaled Release fraction water = Release Fraction * (actual concentration (%) / 20%)
 For uses Ai-lubes through to Fp (where 2% is the default assumption): Scaled Release fraction water = Release Fraction * (actual concentration (%) / 2%)

Notes

Note 1: Analysis of products assigned to use group Di has determined that typically they do not contain environmentally classified components.

RDS Code	ATIEL ATC Use group assumed Treat rate											
	Ai-add pack	Ai-lubes	Bi	Bp	Bc	Ci	Cp	Cc	Di	Ei	Fi	Fp
1.1	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	see note 1 above	2.00%	2.00%	2.00%
1.2	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
1.3	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
1.3.1	10.00%	1.00%	1.00%	0.50%	1.00%	1.00%	1.00%	0.20%		2.00%	2.00%	2.00%
1.4	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	2.00%
1.5	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
2.1	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	see note 1 above	2.00%	2.00%	2.00%
2.2	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
2.3	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
2.3.1	14.00%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%		1.40%	1.40%	1.40%
2.4	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	2.00%
2.5	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
3.1	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	see note 1 above	2.00%	2.00%	2.00%
3.2	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
3.3	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
3.4	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
3.5	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
4.1	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	see note 1 above	2.00%	2.00%	2.00%
4.2	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
4.3	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
4.4	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
4.5	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
5.1	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	see note 1 above	2.00%	2.00%	2.00%
5.2	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
5.3	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
5.4	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
5.5	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
6.1	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	see note 1 above	2.00%	2.00%	2.00%
6.2	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
6.3	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
6.4	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
6.5	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
7.1	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	see note 1 above	2.00%	2.00%	2.00%
7.2	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
7.3	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
7.4	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
7.5	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
8.1	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	see note 1 above	2.00%	2.00%	2.00%
8.2	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
8.3	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
8.4	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	
8.5	20.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		2.00%	2.00%	

Validity Limit

In the application of the GES the treat rate may not be the same as the default ones which have been used for the risk assessment. However the GES can still be applied to higher treat rates providing they do not exceed the upper limit. The upper limits are:-

- * 70% of the RDS in the additive package
- * 20% of the RDS in the finished lubricant.

Amounts used (tonnes year⁻¹) at EU level for different use groups at the substance level

Notes

Note 1: Analysis of products assigned to use group Di has determined that typically they do not contain environmentally classified components.

RDS Code	EU tonnage (tonnes per year) [ATE09]											
	ATIEL ATC Use group											Di
	Ai-add pac	Ai-lubes	Bi	Bp	Bc	Ci	Cp	Cc	Ei	Fi	Fp	
1.1	1.00E+03	1.00E+03	2.63E+02	5.39E+02	6.38E+01	3.81E+01	2.24E+01	2.55E+00	see note 1 above	3.02E+01	2.05E+01	2.05E+01
1.2	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
1.3	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
1.3.1	7.50E+02	7.50E+02	1.99E+02	4.06E+02	4.82E+01	2.87E+01	1.69E+01	1.92E+00		1.82E+01	1.55E+01	1.55E+01
1.4	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
1.5	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
2.1	1.00E+03	1.00E+03	2.63E+02	5.39E+02	6.38E+01	3.81E+01	2.24E+01	2.55E+00	see note 1 above	3.02E+01	2.05E+01	2.05E+01
2.2	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
2.3	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
2.3.1	8.59E+03	8.59E+03	2.26E+03	4.63E+03	5.49E+02	3.27E+02	1.92E+02	2.19E+01		2.60E+02	1.76E+02	1.76E+02
2.4	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
2.5	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
3.1	1.00E+03	1.00E+03	2.63E+02	5.39E+02	6.38E+01	3.81E+01	2.24E+01	2.55E+00	see note 1 above	3.02E+01	2.05E+01	2.05E+01
3.2	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
3.3	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
3.4	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
3.5	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
4.1	1.00E+03	1.00E+03	2.63E+02	5.39E+02	6.38E+01	3.81E+01	2.24E+01	2.55E+00		see note 1 above	3.02E+01	2.05E+01
4.2	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
4.3	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
4.4	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
4.5	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
5.1	1.00E+03	1.00E+03	2.63E+02	5.39E+02	6.38E+01	3.81E+01	2.24E+01	2.55E+00	see note 1 above		3.02E+01	2.05E+01
5.2	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
5.3	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
5.4	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
5.5	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
6.1	1.00E+03	1.00E+03	2.63E+02	5.39E+02	6.38E+01	3.81E+01	2.24E+01	2.55E+00		see note 1 above	3.02E+01	2.05E+01
6.2	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
6.3	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
6.4	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
6.5	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
7.1	1.00E+03	1.00E+03	2.63E+02	5.39E+02	6.38E+01	3.81E+01	2.24E+01	2.55E+00	see note 1 above		3.02E+01	2.05E+01
7.2	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
7.3	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
7.4	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
7.5	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01		3.02E+02	2.05E+02	2.05E+02
8.1	1.00E+03	1.00E+03	2.63E+02	5.39E+02	6.38E+01	3.81E+01	2.24E+01	2.55E+00		see note 1 above	3.02E+01	2.05E+01
8.2	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
8.3	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
8.4	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02
8.5	1.00E+04	1.00E+04	2.63E+03	5.39E+03	6.38E+02	3.81E+02	2.24E+02	2.55E+01	3.02E+02		2.05E+02	2.05E+02

Frequency and duration of use (days year⁻¹)

Notes

Note 1: Analysis of products assigned to use group Di has determined that typically they do not contain environmentally classified components.

RDS Code	Emission days (days/year) [FD4]											
	ATIEL ATC Use group											Di
	Ai-add pac	Ai-lubes	Bi	Bp	Bc	Ci	Cp	Cc	Ei	Fi	Fp	
1.1	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	see note 1 above	300.00	300.00	365.00
1.2	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
1.3	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
1.3.1	300.00	300.00	20.00	365.00	365.00	20.00	365.00	365.00		20.00	20.00	365.00
1.4	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
1.5	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
2.1	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	see note 1 above	300.00	300.00	365.00
2.2	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
2.3	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
2.3.1	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
2.4	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
2.5	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
3.1	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	see note 1 above	300.00	300.00	365.00
3.2	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
3.3	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
3.4	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
3.5	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
4.1	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		see note 1 above	300.00	300.00
4.2	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
4.3	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
4.4	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
4.5	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
5.1	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	see note 1 above		300.00	300.00
5.2	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
5.3	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
5.4	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
5.5	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
6.1	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		see note 1 above	300.00	300.00
6.2	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
6.3	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
6.4	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
6.5	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
7.1	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	see note 1 above		300.00	300.00
7.2	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
7.3	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
7.4	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
7.5	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		300.00	300.00	365.00
8.1	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00		see note 1 above	300.00	300.00
8.2	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
8.3	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
8.4	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00
8.5	300.00	300.00	300.00	365.00	365.00	300.00	365.00	365.00	300.00		300.00	365.00