



The technical association  
of the European lubricants  
industry



The technical committee  
of petroleum additive  
manufacturers in Europe

ATIEL/ATC  
Generic Exposure  
Scenarios

# Document 5a: GES Use Group A (industrial)

**This spreadsheet provides different ATIEL-ATC Generic Exposure Scenarios (GESs) for use Group A, covering the formulation of additive packages, lubricants and greases.**

**Version 1.0  
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## GES Use Group A (ind)

### **Purpose**

The purpose of this spreadsheet is to provide you with the different ATIEL-ATC Generic Exposure Scenarios (GESs) for use Group A, covering the formulation of additive packages, lubricants and greases.

### **What is in this spreadsheet**

In this spreadsheet you will find three tabs to assist you with completing your GESs. These are:

- a. GES A(i) AddPack Exposure Scenario with Nil or Low Sensitiser Concentration (*for formulated AddPacks*)
- b. GES A(i) AddPack Exposure Scenario with High Sensitiser Concentration (*for formulated AddPacks*)
- c. GES A(i) Lube Exposure Scenario with Nil or Low Sensitiser Concentration (*for formulated Lubricants*)

### **Other spreadsheets**

In a separate spreadsheet you will find the values to be inserted in the environmental section of the GES depending on the RDS and uses.

A number of other spreadsheets and documents are available on the ATIEL website to assist you with your task.

## ATIEL/ATC Use Group A (ind) - AddPack Generic Exposure Scenario based on boundary conditions including Nil or Low Sensitiser Concentration

Section 1	Exposure Scenario Title
Title	<b>Formulation &amp; (re)packing of substances and mixtures [GEST2_] - Industrial [G26]</b>
Use Descriptor	Industrial (SU3, SU10) Process Categories: PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC15 Environmental Release Categories: ERC2 Specific Environmental Release Categories: ATIEL-ATC SPERC 2.Ai-a.v1
Processes, tasks, activities covered	Industrial formulation of lubricant additives, lubricants and greases. Includes material transfers, mixing, large and small scale packing, sampling, maintenance [ATU11]
Section 2	Operational conditions and risk management measures
Section 2.1	Control of worker exposure
Product characteristics	
Physical form of product	Liquid, vapour pressure < 0.5 kPa [OC3].
Concentration of substance in product	Covers percentage substance/product up to 100 % (unless stated differently) [G13a].
Amounts used	<i>Not applicable</i>
Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated differently) [G2]
Human factors not influenced by risk management	<i>Not applicable</i>
Other Operational Conditions affecting worker exposure	Covers percentage substance in the product up to 100 % (unless stated differently) [G13].
Contributing Scenarios	Risk Management Measures
General measures applicable to all activities [CS135]	Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop [E3]
	Use suitable eye protection. [PPE26] Avoid direct eye contact with product also via contamination on hands. [E73]
General exposures [CS1]. ; Use in contained systems [CS38]. Elevated Temperature [CS111] <b>PROC2</b>	No other specific measures identified. [E120]
Mixing operations (closed systems) [CS29]. ; Batch processes at elevated temperatures [CS136]. <b>PROC3</b>	Provide extract ventilation to points where emissions occur. [E54]
Mixing operations (open systems) [CS30]. ; Batch processes at elevated temperatures [CS136].; <b>PROC4 PROC5</b>	Provide extract ventilation to points where emissions occur. [E54] Avoid carrying out activities involving exposure for more than 4 hours. [OC28]
Mixing operations (open systems) [CS30]. ; <b>PROC4 PROC5</b>	Provide extract ventilation to points where emissions occur. [E54]
Process sampling [CS2]. <b>PROC4, PROC8b</b>	Avoid carrying out activities involving exposure for more than 1 hour. [OC27] Wear chemically resistant gloves (tested to EN374) in combination with specific activity training. [PPE17]
Bulk transfers [CS14]. ; Dedicated facility [CS81] <b>PROC8b</b>	Avoid carrying out activities involving exposure for more than 4 hours [OC28]Wear chemically resistant gloves (tested to EN374) in combination with intensive management supervision controls. [PPE18]
Drum/batch transfers [CS8]. Dedicated facility [CS81] <b>PROC8b</b>	Provide extract ventilation to points where emissions occur. [E54]
Drum/batch transfers [CS8]. Non-dedicated facility [CS82] <b>PROC8a</b>	Provide a good standard of general or controlled ventilation (10 to 15 air changes per hour). [E40] Avoid carrying out activities involving exposure for more than 1 hour. [OC27] Wear chemically resistant gloves (tested to EN374) in combination with intensive management supervision controls. [PPE18]
Equipment cleaning and maintenance [CS39]. <b>PROC8a PROC8b</b>	Drain down and flush system prior to equipment break-in or maintenance. [E55] Wear chemically resistant gloves (tested to EN374) in combination with intensive management supervision controls. [PPE18] Retain drain downs in sealed storage pending disposal or for subsequent recycle. [ENVT4] Clear spills immediately. [C&H13]
Drum and small package filling [CS6]. <b>PROC9</b>	Provide a good standard of general or controlled ventilation (10 to 15 air changes per hour). [E40] Wear chemically resistant gloves (tested to EN374) in combination with specific activity training. [PPE17]
Laboratory activities [CS36]. <b>PROC15</b>	Avoid carrying out activities involving exposure for more than 4 hours. [OC28]
Storage [CS67] <b>PROC1, PROC2</b>	Store substance within a closed system. [E84]
Section 2.2	Control of environmental exposure
Amounts used	
EU tonnage (tonnes per year) [ATE09]	<i>insert value from Environmental GES values table</i>
Fraction of EU tonnage used in region [A1]	1
Fraction of Regional tonnage used locally [A3]	1
Frequency and duration of use	

Section 2.2		Control of environmental exposure
Emission days (days/year) [FD4]		300
Environmental factors not influenced by risk management		
Local freshwater dilution factor [EF1]		10
Local marine water dilution factor [EF2]		100
Other given operational conditions affecting environmental exposure		
Negligible wastewater emissions as process operates without water contact. [OOC20]		
Release fraction to air from process (after typical onsite RMMs) [ATE11]		5.0 E-07
Release fraction to wastewater from process (after typical onsite RMMs and before (municipal) sewage treatment plant): [ATE12]		<i>insert value from Environmental GES values table</i>
Release fraction to soil from process (after typical onsite RMMs): [ATE13]		0
Technical conditions and measures at process level (source) to prevent release		
Common practices vary across sites thus conservative process release estimates used [TCS1]		
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil		
Treat air emission to provide a typical removal efficiency of (%): [TCR7]		70
Prevent discharge of undissolved substance to or recover from onsite wastewater. [TCR14]		
User sites are assumed to be provided with oil/water separators or equivalent and for waste water to be discharged via public sewer system. [ATE14]		
Organisational measures to prevent/limit release from site		
Do not apply industrial sludge to natural soils [OMS2].		
Sludge should be incinerated, contained or reclaimed [OMS3].		
Conditions and measures related to municipal sewage treatment plant		
Estimated substance removal from wastewater via domestic sewage treatment (%) - $F_{STP}$ [STP3]		<i>insert value from Environmental GES values table</i>
Assumed domestic sewage treatment plant flow ( $m^3/d$ ) [STP5]		2.00E+03
Maximum allowable site quantity (MSafe) based on OCs and RMMs as above (kg/day): [ATE15]		<i>insert value from Environmental GES values table</i>
Conditions and measures related to external treatment of waste for disposal		
External treatment and disposal of waste should comply with applicable local and/or national regulations. [ETW3].		
Conditions and measures related to external recovery of waste		
External recovery and recycling of waste should comply with applicable local and/or national regulations. [ERW1]		
Other environmental control measures additional to above		
None [ATE16]		
Section 3		Exposure Estimation
<b>3.1. Health</b>		
The Risk Management Measures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product. [ATH01]		
<b>3.2. Environment</b>		
Used ECETOC TRA model. [EE1]		
Section 4		Guidance to check compliance with the Exposure Scenario
<b>4.1. Health</b>		
Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. [G23]		
<b>4.2. Environment</b>		
Guidance is based on assumed operating conditions which may not be applicable to all sites: thus scaling may be necessary to define appropriate site-specific risk management measures. [DSU1]		
Further details on scaling and control technologies are provided in SpERC factsheet ( <a href="http://cefic.org/en/reach-for-industries-libraries.html">http://cefic.org/en/reach-for-industries-libraries.html</a> ). [DSU4]		
If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. [DSU8]		
For further information see <a href="http://www.ATIEL.org/REACH_GES">www.ATIEL.org/REACH_GES</a> . [ATG02]		

<b>ATIEL/ATC Use Group A (ind) - AddPack Generic Exposure Scenario based on boundary conditions including High Sensitiser Concentration</b>	
<b>Section 1</b>	
<b>Exposure Scenario Title</b>	
Title	<b>Formulation of additive packages, lubricants &amp; greases [GEST2_I] - Industrial [G26]</b>
Use Descriptor	Industrial (SU3, SU10) Process Categories: PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC15 Environmental Release Categories: ERC2 Specific Environmental Release Categories: ATIEL-ATC SPERC 2.Ai-a.v1
Processes, tasks, activities covered	Industrial formulation of lubricant additives, lubricants and greases. Includes material transfers, mixing, large and small scale packing, sampling, maintenance. [ATU11]
<b>Section 2</b>	
<b>Operational conditions and risk management measures</b>	
<b>Section 2.1</b>	
<b>Control of worker exposure</b>	
<b>Product characteristics</b>	
Physical form of product	Liquid, vapour pressure < 0.5 kPa [OC3].
Concentration of substance in product	Covers percentage substance/product up to 100 % (unless stated differently) [G13a].
Amounts used	<i>Not applicable</i>
Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated differently) [G2]
Human factors not influenced by risk management	<i>Not applicable</i>
Other Operational Conditions affecting worker exposure	Assumes use at not > 20°C above ambient [G15]; (unless stated differently) [G13] Assumes a good basic standard of occupational hygiene is implemented [G1].
<b>Contributing Scenarios</b>	
<b>Risk Management Measures</b>	
General measures applicable to all activities [CS135]	Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general / local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean / flush equipment, where possible, prior to maintenance. [ATG5a] Where there is potential for exposure: Restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; clear up spills immediately and dispose of wastes safely. [ATG5b] Ensure safe systems of work or equivalent arrangements are in place to manage risks. Regularly inspect, test and maintain all control measures. Consider the need for risk based health surveillance. [ATG5c] Use suitable eye protection. [PPE26] Avoid direct eye contact with product also via contamination on hands. [E73]
General exposures [CS1]. ; Use in contained systems [CS38]. Elevated Temperature [CS111] <b>PROC2</b>	Handle substance within a predominantly closed system provided with extract ventilation. [E49]
Mixing operations (closed systems) [CS29]. ; Batch processes at elevated temperatures [CS136]. <b>PROC3</b>	Handle substance within a predominantly closed system provided with extract ventilation. [E49]
Process sampling [CS2]. <b>PROC8b</b>	Use a sampling system designed to control exposure. [E89]
Bulk transfers [CS14]. ; Dedicated facility [CS81] <b>PROC8b</b>	Ensure material transfers are under containment or extract ventilation. [E66]
Drum/batch transfers [CS8]. Dedicated facility [CS81] <b>PROC8b</b>	Provide extract ventilation to points where emissions occur. [E54]
Equipment cleaning and maintenance [CS39]. <b>PROC8a PROC8b</b>	Drain down and flush system prior to equipment break-in or maintenance. [E55] Retain drain downs in sealed storage pending disposal or for subsequent recycle. [ENV4] Clear spills immediately. [C&H13]
Drum and small package filling [CS6]. <b>PROC9</b>	Ensure material transfers are under containment or extract ventilation. [E66]
Laboratory activities [CS36]. <b>PROC15</b>	Handle in a fume cupboard or implement suitable methods to minimise exposure. [E12]
Storage [CS67] <b>PROC1, PROC2</b>	Store substance within a closed system. [E84]
<b>Section 2.2</b>	
<b>Control of environmental exposure</b>	
<b>Amounts used</b>	
EU tonnage (tonnes per year) [ATE09]	<i>insert value from Environmental GES values table</i>
Fraction of EU tonnage used in region [A1]	1
Fraction of Regional tonnage used locally [A3]	1
<b>Frequency and duration of use</b>	
Emission days (days/year) [FD4]	300
<b>Environmental factors not influenced by risk management</b>	
Local freshwater dilution factor [EF1]	10
Local marine water dilution factor [EF2]	100
<b>Other given operational conditions affecting environmental exposure</b>	
Negligible wastewater emissions as process operates without water contact. [OOC20]	

Section 2.2		Control of environmental exposure
Release fraction to air from process (after typical onsite RMMs) [ATE11]		5.0 E-07
Release fraction to wastewater from process (after typical onsite RMMs and before (municipal) sewage treatment plant): [ATE12]	<i>insert value from Environmental GES values table</i>	
Release fraction to soil from process (after typical onsite RMMs): [ATE13]		0
<b>Technical conditions and measures at process level (source) to prevent release</b>		
Common practices vary across sites thus conservative process release estimates used [TCS1]		
<b>Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>		
Treat air emission to provide a typical removal efficiency of (%): [TCR7]		70
Prevent discharge of undissolved substance to or recover from onsite wastewater. [TCR14]		
User sites are assumed to be provided with oil/water separators or equivalent and for waste water to be discharged via public sewer system. [ATE14]		
<b>Organisational measures to prevent/limit release from site</b>		
Do not apply industrial sludge to natural soils [OMS2].		
Sludge should be incinerated, contained or reclaimed [OMS3].		
<b>Conditions and measures related to municipal sewage treatment plant</b>		
Estimated substance removal from wastewater via domestic sewage treatment (%) - $F_{STP}$ [STP3]	<i>insert value from Environmental GES values table</i>	
Assumed domestic sewage treatment plant flow ( $m^3/d$ ) [STP5]		2.00E+03
Maximum allowable site quantity (MSafe) based on OCs and RMMs as above (kg/day): [ATE15]	<i>insert value from Environmental GES values table</i>	
<b>Conditions and measures related to external treatment of waste for disposal</b>		
External treatment and disposal of waste should comply with applicable local and/or national regulations. [ETW3].		
<b>Conditions and measures related to external recovery of waste</b>		
External recovery and recycling of waste should comply with applicable local and/or national regulations. [ERW1]		
<b>Other environmental control measures additional to above</b>		
None [ATE16]		
<b>Section 3</b>		<b>Exposure Estimation</b>
<b>3.1. Health</b>		
The Risk Management Measures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product. [ATH01]		
<b>3.2. Environment</b>		
Used ECETOC TRA model. [EE1]		
<b>Section 4</b>		<b>Guidance to check compliance with the Exposure Scenario</b>
<b>4.1. Health</b>		
Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. [G23]		
<b>4.2. Environment</b>		
Guidance is based on assumed operating conditions which may not be applicable to all sites: thus scaling may be necessary to define appropriate site-specific risk management measures. [DSU1]		
Further details on scaling and control technologies are provided in SpERC factsheet ( <a href="http://cefic.org/en/reach-for-industries-libraries.html">http://cefic.org/en/reach-for-industries-libraries.html</a> ). [DSU4]		
If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. [DSU8]		
For further information see <a href="http://www.ATIEL.org/REACH_GES">www.ATIEL.org/REACH_GES</a> . [ATG02]		

## ATIEL/ATC Use Group A (ind) - Lube Generic Exposure Scenario based on boundary conditions including Nil or Low Sensitiser Concentration

Section 1	Exposure Scenario Title
Title	<b>Formulation of additive packages, lubricants &amp; greases [GEST2_I] - Industrial [G26]</b>
Use Descriptor	Industrial (SU3, SU10) Process Categories: PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC15 Environmental Release Categories: ERC2 Specific Environmental Release Categories: ATIEL-ATC SPERC 2.Ai-l.v1
Processes, tasks, activities covered	Industrial formulation of lubricant additives, lubricants and greases. Includes material transfers, mixing, large and small scale packing, sampling, maintenance. [ATU11]
Section 2	Operational conditions and risk management measures
Section 2.1	Control of worker exposure
Product characteristics	
Physical form of product	Liquid, vapour pressure < 0.5 kPa [OC3].
Concentration of substance in product	Covers percentage substance/product up to 100 % (unless stated differently). [G13a]
Amounts used	<i>Not applicable</i>
Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated differently). [G2]
Human factors not influenced by risk management	<i>Not applicable</i>
Other Operational Conditions affecting worker exposure	Covers percentage substance in the product up to 100 % (unless stated differently). [G13]
Contributing Scenarios	Risk Management Measures
General measures applicable to all activities [CS135]	Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop. [E3]
	Use suitable eye protection. [PPE26] Avoid direct eye contact with product also via contamination on hands. [E73]
General exposures. [CS1] Use in contained systems. [CS38] Elevated Temperature. [CS111] <b>PROC2</b>	No other specific measures identified. [E120]
Mixing operations (closed systems). [CS29] Batch processes at elevated temperatures. [CS136] <b>PROC3</b>	Provide extract ventilation to points where emissions occur. [E54]
Mixing operations (open systems). [CS30] Batch processes at elevated temperatures. [CS136] <b>PROC4 PROC5</b>	Provide extract ventilation to points where emissions occur. [E54] Avoid carrying out activities involving exposure for more than 4 hours. [OC28]
Mixing operations (open systems). [CS30] <b>PROC4 PROC5</b>	Provide extract ventilation to points where emissions occur [E54].
Process sampling [CS2]. <b>PROC4, PROC8b</b>	Avoid carrying out activities involving exposure for more than 1 hour. [OC27] Wear chemically resistant gloves (tested to EN374) in combination with specific activity training. [PPE17]
Bulk transfers. [CS14] Dedicated facility [CS81] <b>PROC8b</b>	Avoid carrying out activities involving exposure for more than 4 hours. [OC28] Wear chemically resistant gloves (tested to EN374) in combination with intensive management supervision controls. [PPE18]
Drum/batch transfers [CS8] Dedicated facility [CS81] <b>PROC8b</b>	Provide extract ventilation to points where emissions occur. [E54]
Drum/batch transfers. [CS8]. Non-dedicated facility. [CS82] <b>PROC8a</b>	Provide a good standard of general or controlled ventilation (10 to 15 air changes per hour). [E40] Avoid carrying out activities involving exposure for more than 1 hour. [OC27] Wear chemically resistant gloves (tested to EN374) in combination with intensive management supervision controls. [PPE18]
Equipment cleaning and maintenance [CS39]. <b>PROC8a PROC8b</b>	Drain down and flush system prior to equipment break-in or maintenance. [E55] Wear chemically resistant gloves (tested to EN374) in combination with intensive management supervision controls. [PPE18] Retain drain downs in sealed storage pending disposal or for subsequent recycle. [ENVT4] Clear spills immediately. [C&H13]
Drum and small package filling. [CS6] <b>PROC9</b>	Provide a good standard of general or controlled ventilation (10 to 15 air changes per hour). [E40] Wear chemically resistant gloves (tested to EN374) in combination with specific activity training. [PPE17]
Laboratory activities. [CS36] <b>PROC15</b>	Avoid carrying out activities involving exposure for more than 4 hours. [OC28]
Storage. [CS67] <b>PROC1, PROC2</b>	Store substance within a closed system. [E84]
Section 2.2	Control of environmental exposure
Amounts used	
EU tonnage (tonnes per year) [ATE09]	<i>insert value from Environmental GES values table</i>
Fraction of EU tonnage used in region [A1]	0.1
Fraction of Regional tonnage used locally [A3]	0.1
Frequency and duration of use	
Emission days (days/year) [FD4]	300

Section 2.2		Control of environmental exposure
Environmental factors not influenced by risk management		
Local freshwater dilution factor [EF1]		10
Local marine water dilution factor [EF2]		100
Other given operational conditions affecting environmental exposure		
Negligible wastewater emissions as process operates without water contact. [OOC20]		
Release fraction to air from process (after typical onsite RMMs) [ATE11]		5.0 E-05
Release fraction to wastewater from process (after typical onsite RMMs and before (municipal) sewage treatment plant): [ATE12]		<i>insert value from Environmental GES values table</i>
Release fraction to soil from process (after typical onsite RMMs): [ATE13]		0
Technical conditions and measures at process level (source) to prevent release		
Common practices vary across sites thus conservative process release estimates used. [TCS1]		
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil		
Treat air emission to provide a typical removal efficiency of (%): [TCR7]		70
Prevent discharge of undissolved substance to or recover from onsite wastewater. [TCR14]		
User sites are assumed to be provided with oil/water separators or equivalent and for waste water to be discharged via public sewer system. [ATE14]		
Organisational measures to prevent/limit release from site		
Do not apply industrial sludge to natural soils [OMS2].		
Sludge should be incinerated, contained or reclaimed [OMS3].		
Conditions and measures related to municipal sewage treatment plant		
Estimated substance removal from wastewater via domestic sewage treatment (%) - $F_{STP}$ [STP3]		<i>insert value from Environmental GES values table</i>
Assumed domestic sewage treatment plant flow ( $m^3/d$ ) [STP5]		2.00E+03
Maximum allowable site quantity (MSafe) based on OCs and RMMs as above (kg/day): [ATE15]		<i>insert value from Environmental GES values table</i>
Conditions and measures related to external treatment of waste for disposal		
External treatment and disposal of waste should comply with applicable local and/or national regulations. [ETW3].		
Conditions and measures related to external recovery of waste		
External recovery and recycling of waste should comply with applicable local and/or national regulations. [ERW1]		
Other environmental control measures additional to above		
None [ATE16]		
Section 3		Exposure Estimation
<b>3.1. Health</b>		
The Risk Management Measures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product. [ATH01]		
<b>3.2. Environment</b>		
Used ECETOC TRA model. [EE1]		
Section 4		Guidance to check compliance with the Exposure Scenario
<b>4.1. Health</b>		
Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. [G23]		
<b>4.2. Environment</b>		
Guidance is based on assumed operating conditions which may not be applicable to all sites: thus scaling may be necessary to define appropriate site-specific risk management measures. [DSU1].		
Further details on scaling and control technologies are provided in SpERC factsheet ( <a href="http://cefic.org/en/reach-for-industries-libraries.html">http://cefic.org/en/reach-for-industries-libraries.html</a> ). [DSU4]		
If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. [DSU8]		
For further information see <a href="http://www.ATIEL.org/REACH_GES">www.ATIEL.org/REACH_GES</a> . [ATG02]		