

**ATIEL/ATC Use Group B (ind) - Generic Exposure Scenario based on Bound**

<b>Section 1</b>		<b>Exposure Scenario Title</b>	
Title	<b>General use of lubricants and greases in vehicles or machinery [ATU01] - Industrial [G26]</b>		
Use Descriptor	Sector of Use: Industrial (SU3)		
	Process Categories: PROC1, PROC2, PROC8b, PROC9		
	Environmental Release Categories: ERC4, ERC7 Specific Environmental Release Categories: ATIEL-ATC SPERC 4.Bi.v1		
Processes, tasks, activities covered	Covers general use of lubricants and greases in vehicles or machinery in closed systems. Includes filling and draining of containers and operation of enclosed machinery (including engines) and associated maintenance and storage activities. [ATU01]		
<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 use of substance/product up to 100% (unless stated differently) [ATG01]		
Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated differently) [G2]		
Other Operational Conditions affecting worker exposure	Assumes use at not > 20°C above ambient, unless stated differently [G15] Assumes a good basic standard of occupational hygiene is implemented [G1].		
<b>Contributing Scenarios</b>		<b>Risk Management Measures</b>	
		<i>Note: list RMM standard phrases according to the control hierarchy indicated in the ECHA template: 1. Technical measures to prevent release, 2. Technical measures to prevent dispersion, 3. Organisational measures, 4. Personal protection.</i>	
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 <b>report any skin problems that may develop</b> [E3] Use suitable eye protection. [PPE26] Avoid direct eye contact with product also via <b>contamination on hands</b> . [E73]		
General exposures (closed systems) [CS15]. <b>PROC1</b>	No other specific measures identified. [E120]		
Initial factory fill of equipment [CS75]; Use in contained systems [CS38]. <b>PROC2, PROC9</b>	No other specific measures identified. [E120]		
Initial factory fill of equipment [CS75]; (open systems) [CS108] <b>PROC8b</b>	Provide a good standard of general or controlled ventilation (10 to 15 air changes per hour) [E40]. Avoid carrying out operation involving exposure for more than 4 hours [OC28]		
Operation of equipment containing engine oils and similar [CS26]; Use in contained systems [CS38]. <b>PROC1</b>	No other specific measures identified. [E120]		
Equipment cleaning and maintenance [CS39]. <b>PROC8b</b>	Drain down system prior to equipment break-in or maintenance [E65]. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour) [E11] Wear chemically resistant gloves (tested to EN374) in combination with specific activity training [PPE17]. Retain drain downs in sealed storage pending disposal or <b>for subsequent recycle</b> [ENVT4].		
Equipment cleaning and maintenance [CS39]. ; Operation is carried out at elevated temperature (> 20°C above ambient temperature) [OC7] <b>PROC8b</b>	Drain down system prior to equipment break-in or maintenance [E65].; Provide extract ventilation to emission points when contact with warm (>50 deg C) lubricant is likely [E67]. 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].		
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]	2630		
Fraction of EU tonnage used in region [A1]	0.1		
Fraction of Regional tonnage used locally [A2]	0.1		
<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]	
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):	1.0 E-11
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>	
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 plan</b>	
Estimated substance removal from wastewater via domestic sewage treatment (%) - $F_{STP}$ [STP3]	9.00E-02
Assumed domestic sewage treatment plant flow (m <sup>3</sup> /d) [STP5]	2.00E+03
Maximum allowable site quantity (MSafe) based on OCs and RMMs as above (kg/day): [ATE15]	2.37E+04
<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]	