

Safety Data Sheet dated 4/9/2023, version 6

SECTION 1: Identit	fication of the sub	stance/mixture and of the company/undertaking
1.1. Product ide		
Mixture id	dentification:	
Trade na	me:	SVITOL BIKE CHAIN LUBRICANT
Trade co	de:	4476
1.2. Relevant id	lentified uses of the su	ubstance or mixture and uses advised against
Recommended	use:	
Lubricant for ch	ains	
Uses advised a		
Strictly adhere t	to the recommended u	USES.
	he supplier of the safe	ety data sheet
Supplier:		
Arexons		
	a di Cassano, 23, 200	
	o sul Naviglio (MI), Ital	ly
Arexons		
	(0)2/924361 - Fax +39	
	son responsible for the	e safety data sheet:
	@arexons.it	
	/ telephone number	
Arexons		
	(0)2/924361 - Fax +39	
	nd and Wales: NHS 1	
	nd: NHS 24 - dial 111	
	: emergency number	
		ation Helpline 0861 555 777
In Malta:	emergency number 1	12
SECTION 2. Hazar	de identification	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements





Danger

Hazard statements:

H222, H229 Extremely flammable aerosol. Pressurized container: may burst if heated. H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

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smoking.

P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. P501 Dispose of contents/container in accordance with applicable regulations. Special Provisions: None Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1% Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

- 3.1. Substances
- N.A.
- 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

stta	Name	Ident. Numb	er	Classification
>= 60% - < 70%	Hydrocarbons, C3-4; Petroleum gas	Index number: CAS: EC: REACH No.:	649-199-00-1 68476-40-4 270-681-9 01- 2119486557 -22	
>= 10% - < 12,5%	Hydrocarbons, C9- C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	CAS: EC: REACH No.:	64742-48-9 919-857-5 01- 2119463258 -33	 ♦ 2.6/3 Flam. Liq. 3 H226 ♦ 3.10/1 Asp. Tox. 1 H304 ♦ 3.8/3 STOT SE 3 H336 EUH066 DECLP (CLP)*
	Phenol, isopropylated, phosphate (3:1)	CAS: EC: REACH No.:	68937-41-7 273-066-3 01- 2119535109 -41	 ♦ 3.7/2 Repr. 2 H361fd ♦ 3.9/2 STOT RE 2 H373 ♦ 4.1/C1 Aquatic Chronic 1 H410 M=10.
	Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated; Baseoil - unspecified; [A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation	Index number:	649-530-00-X	Substance with a Union workplace exposure limit.

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	residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C24 through C50 and produces a finished oil with a viscosity in the order of 16cSt to 75cSt at 40 oC (104 oF).]	CAS: EC: REACH No.:	101316-72-7 309-877-7 01- 2119489969 -06	
>= 0,001% - < 0, 005%	Carbonato di calcio	CAS: EC:	471-34-1 207-439-9	Substance with a Union workplace exposure limit.
3 ppm	Calcium dihydroxide	CAS: EC: REACH No.:	1305-62-0 215-137-3 01- 2119475151 -45	 ⁽√) 3.2/2 Skin Irrit. 2 H315 ⁽√) 3.3/1 Eye Dam. 1 H318 ⁽√) 3.8/3 STOT SE 3 H335
320 ppb	diphenylamine	Index number: CAS: EC:	612-026-00-5 122-39-4 204-539-4	 ♦ 3.9/2 STOT RE 2 H373 ♦ 4.1/A1 Aquatic Acute 1 H400 ♦ 4.1/C1 Aquatic Chronic 1 H410 ♦ 3.1/3/Oral Acute Tox. 3 H301 ♦ 3.1/3/Dermal Acute Tox. 3 H311 ♦ 3.1/3/Inhal Acute Tox. 3 H331

*DECLK (CLP): Substance classified in accordance with Note K, Annex VI of EC Regulation (EC) 1272/2008. The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w 1,3- butadiene (Einecs No 203-450-8), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 shall apply.

*DECLP (CLP): Substance classified in accordance with Note P, Annex VI of EC Regulation (EC) 1272/2008. The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 shall apply.

*DECLL (CLP): Substance classified in accordance with Note L, Annex VI of EC Regulation (EC) 1272/2008. The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

SECTION 4: First aid measures

4.1. Description of first aid measures In case of skin contact: Wash with plenty of water and soap. In case of eyes contact:

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In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

- 4.2. Most important symptoms and effects, both acute and delayed None
- 4.3. Indication of any immediate medical attention and special treatment needed Treatment:
 - None

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Appropriate Extinguishing Media: To carbon dioxide. To dust. Foam Water spray. Not Recommended Extinguishing Media:
 - Do not use direct water jets.
- 5.2. Special hazards arising from the substance or mixture Do not inhale explosion and combustion gases. Burning produces heavy smoke.
- 5.3. Advice for firefighters
 - Use suitable breathing apparatus . Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures Wear personal protection equipment. Remove all sources of ignition. Remove persons to safety. See protective measures under point 7 and 8.
 6.2. Environmental precautions Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.
 - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
 - Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
 - Wash with plenty of water.
- 6.4. Reference to other sections See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:



Contamined clothing should be changed before entering eating areas. Do not eat or drink while working. 7.2. Conditions for safe storage, including any incompatibilities Store at below 50 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight. Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight. Keep away from food, drink and feed. None in particular. Instructions as regards storage premises: Cool and adequately ventilated. 7.3. Specific end use(s) None in particular **SECTION 8: Exposure controls/personal protection** 8.1. Control parameters Hydrocarbons, C3-4; Petroleum gas - CAS: 68476-40-4 MAK - TWA: 2400 mg/m3, 1000 ppm TLV TWA - 1900 mg/m3, 800 ppm Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9 ACGIH - TWA: 1200 mg/m3, 197 ppm Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated; Baseoil unspecified; [A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C24 through C50 and produces a finished oil with a viscosity in the order of 16cSt to 75cSt at 40 oC (104 oF).] - CAS: 101316-72-7 ACGIH - TWA: 5 mg/m3 - STEL: 10 mg/m3 NIOSH - TWA: 5 mg/m3 - STEL: 10 mg/m3 OSHA - TWA: 5 mg/m3 Carbonato di calcio - CAS: 471-34-1 EU - TWA: 10 mg/m3 OSHA - TWA: 5 mg/m3 Calcium dihydroxide - CAS: 1305-62-0 EU - TWA(8h): 1 mg/m3 - STEL: 4 mg/m3 - Notes: Respirable fraction OSHA - TWA: 15 mg/m3 ACGIH - TWA(8h): 5 mg/m3 - Notes: Eye, URT and skin irr diphenylamine - CAS: 122-39-4 ACGIH - TWA(8h): 10 mg/m3 - Notes: A4 - Liver and kidney dam, hematologic eff DNEL Exposure Limit Values Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9 Worker Professional: 208 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Professional: 871 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 125 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects Consumer: 185 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 125 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7 Consumer: 0.04 mg/kg - Exposure: Human Oral - Frequency: Long Term, local effects Worker Professional: 0.145 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects Worker Professional: 0.417 mg/kg - Consumer: 0.208 mg/kg - Exposure: Human Dermal - Frequency: Long Term, local effects **PNEC Exposure Limit Values** Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7 Target: Fresh Water - Value: 0.00031 mg/l

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Target: Marine water - Value: 0.000031 mg/l Target: Freshwater sediments - Value: 0.185 mg/kg Target: 09 - Value: 100 mg/l 8.2. Exposure controls Eye protection: Safety goggles. Compliant with EN 166 Protection for skin: protective clothing Protection for hands: Nitrile or Viton gloves. Compliant with EN 374. Respiratory protection:

Not needed for normal use. Thermal Hazards: None Environmental exposure controls: None Appropriate engineering controls: None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid		
Colour:	Yellow		
Odour:	N.A.		
Melting point/freezing point:	N.A.		
Boiling point or initial boiling point and boiling range:	N.A.		
Flammability:	Flammable		
Lower and upper explosion limit:	N.A.		
Flash point:	45°C		
Auto-ignition temperature:	N.A.		
Decomposition temperature:	N.A.		
pH:	N.A.		
Kinematic viscosity:	N.A.		
Solubility in water:	N.A.		
Solubility in oil:	N.A.		

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Partition coefficient n- octanol/water (log value):	N.A.		
Vapour pressure:	N.A.		
Density and/or relative density:	0,971 g/cm3		
Relative vapour density:	N.A.		
Particle characteristics:			
Particle size:	N.A.		

9.2. Other information No other relevant information

SECTION 10: Stability and reactivity

- 10.1. Reactivity
- Stable under normal conditions
- 10.2. Chemical stability Stable under normal conditions
- 10.3. Possibility of hazardous reactions
- None 10.4. Conditions to avoid Stable under normal conditions.
- 10.5. Incompatible materials
 - Avoid contact with combustible materials. The product could catch fire.
- 10.6. Hazardous decomposition products None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008	
Toxicological information of the product:	
SVITOL BIKE CHAIN LUBRICANT	
a) acute toxicity	
Not classified	
Based on available data, the classification criteria are not met	
b) skin corrosion/irritation	
, Not classified	
Based on available data, the classification criteria are not met	
c) serious eye damage/irritation	

- Not classified
- Based on available data, the classification criteria are not met d) respiratory or skin sensitisation
- Not classified

Based on available data, the classification criteria are not met e) germ cell mutagenicity

- Not classified
- Based on available data, the classification criteria are not met f) carcinogenicity
 - Not classified
- Based on available data, the classification criteria are not met g) reproductive toxicity
 - Not classified

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Based on available data, the classification criteria are not met h) STOT-single exposure Not classified Based on available data, the classification criteria are not met i) STOT-repeated exposure Not classified Based on available data, the classification criteria are not met j) aspiration hazard Not classified Based on available data, the classification criteria are not met Toxicological information of the main substances found in the product: Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9 a) acute toxicity: Test: LC50 - Route: Inhalation - Species: Rat > 5000 mg/m3 - Duration: 4h - Source: **ECHA BP - SUPPLIER SDS** Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg - Source: ECHA BP - SUPPLIER SDS Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg - Source: ECHA BP -SUPPLIER SDS h) STOT-single exposure: Test: May cause drowsiness and dizziness. Positive - Source: SUPPLIER SDS - No data available for the product i) STOT-repeated exposure: Test: OECD 422 Negative - Source: SUPPLIER SDS Test: NOAEL - Route: Oral - Species: Rat > 1000 mg/kg - Source: ECHA BP Test: NOAEL - Route: Inhalation - Species: Rat 200 Ppm - Source: ECHA BP Test: NOAEC - Route: Inhalation - Species: Rat > 275 mg/m3 - Source: ECHA BP i) aspiration hazard: Test: May be fatal if swallowed and enters airways (physical-chemical properties) - Route: **Oral - Source: SUPPLIER SDS** Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg Test: LD50 - Route: Skin - Species: Rabbit > 10000 mg/kg Test: LD50 - Route: Inhalation - Species: Rat > 200 mg/l Carbonato di calcio - CAS: 471-34-1 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat 2000 mg/kg Test: LD50 - Route: Skin - Species: Rat 2000 mg/kg Test: LC50 - Route: Inhalation - Species: Rat 3 mg/l - Duration: 4h 11.2. Information on other hazards Endocrine disrupting properties: No endocrine disruptor substances present in concentration >= 0.1% **SECTION 12: Ecological information** 12.1. Toxicity Adopt good working practices, so that the product is not released into the environment. Hydrocarbons, C3-4; Petroleum gas - CAS: 68476-40-4 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Daphnia = 14.22 mg/l - Duration h: 48 Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9 a) Aquatic acute toxicity:

Endpoint: EL0 - Species: Daphnia 1000 mg/l - Duration h: 48 Endpoint: EL50 - Species: Algae > 1000 mg/l - Duration h: 72 Endpoint: LL50 - Species: Fish > 1000 mg/l - Duration h: 96 Endpoint: NOELR - Species: Algae 100 mg/l - Duration h: 72



Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish 10.8 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia 2.44 mg/l - Duration h: 48 b) Aquatic chronic toxicity: Endpoint: NOEC - Species: Fish 0.0031 mg/l - Duration h: 792 - Notes: 33 d Endpoint: NOEC - Species: Daphnia 0.041 mg/l - Duration h: 504 - Notes: 21 d 12.2. Persistence and degradability None Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7 Biodegradability: Non-readily biodegradable - Duration: 28gg - %: 17.9 12.3. Bioaccumulative potential N.A. 12.4. Mobility in soil N.A. 12.5. Results of PBT and vPvB assessment vPvB Substances: None - PBT Substances: None 12.6. Endocrine disrupting properties No endocrine disruptor substances present in concentration >= 0.1% 12.7. Other adverse effects None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. Additional disposal information:

Reuse if possible. Act in accordance with the local and national laws in force. Do not discharge into drains, ground water or water courses. Observe the laws in force. Contaminated packaging must be emptied as far as possible. After cleaning, send to an authorised centre for recycling or disposal.

SECTION 14: Transport information



14.1. UN number or ID number	
ADR-UN Number:	1950
IATA-UN Number:	1950
IMDG-UN Number:	1950
14.2. UN proper shipping name	
ADR-Shipping Name:	AEROSOLS, asphyxiant
IATA-Shipping Name:	AEROSOLS, asphyxiant
IMDG-Shipping Name:	AEROSOLS, asphyxiant
14.3. Transport hazard class(es)	
ADR-Class:	2
ADR - Hazard identification nu	ımber: -
IATA-Class:	2
IATA-Label:	2.1
IMDG-Class:	2
14.4. Packing group	
ADR-Packing Group:	-
IATA-Packing group:	-
IMDG-Packing group:	-

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14.5. Environmental hazards ADR-Enviromental Pollutant:	No
IMDG-Marine pollutant:	No
IMDG-EmS:	F-D,
	S-U
14.6. Special precautions for user	
ADR-Subsidiary hazards:	See SP63
ADR-S.P.:	190 327 344 625
ADR-Transport category (Tunr	nel restriction code): 2 (D)
IATA-Passenger Aircraft:	203
IATA-Subsidiary hazards:	See SP63
IATA-Cargo Aircraft:	203
IATA-S.P.	A145 A167 A802
IATA-ERG:	10L
IMDG-Subsidiary hazards:	See SP63
IMDG-Stowage and handling:	SW1 SW22
IMDG-Segregation:	SG69
14.7. Maritime transport in bulk accor N.A.	ding to IMO instruments

SECTION 15: Regulatory information

Limited Quantity: 1 L Exempted Quantity: E0

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) n. 2020/878 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP) Regulation (EU) n. 2021/849 (ATP 17 CLP) Regulation (EU) n. 2022/692 (ATP 18 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: **Restriction 3 Restriction 40** Restrictions related to the substances contained: **Restriction 75** Volatile Organic compounds - VOCs = 100.00 %

Volatile Organic compounds - VOCs = 1000.00 g/Kg

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Volatile Organic compounds - VOCs = 656.00 g/l Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 Product belongs to category: P3a

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture. Substances for which a Chemical Safety Assessment has been carried out: None

SECTION 16: Other information

Text of phrases referred to under heading 3:

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

Hazard class and hazard category	Code	Description
Flam. Gas 1A	2.2/1A	Flammable gas, Category 1A
Aerosols 1	2.3/1	Aerosol, Category 1
Press Gas (Liq.)	2.5/L	Gases under pressure (Liquefied gas)
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Repr. 2	3.7/2	Reproductive toxicity, Category 2



STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 3: Composition/information on ingredients SECTION 15: Regulatory information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aerosols 1, H222, H229	On basis of test data
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of
	Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Áviation Organization.

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ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NA:	Not applicable
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods
	by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

Exposure Scenario, 17/07/2019

Substance identity	
Chemical name	IDROCARBURI C3-C4, Miscela (propano,butano,isobutano< 0,1% 1,3-
	Butadiene)
CAS No.	68476-40-4
EINECS No.	270-681-9

Table of contents

1. ES 1 Use at industrial site

1. ES 1 Use a	t industrial site	
1.1 TITLE SECTION		
Exposure Scenario name	Use as a propellant	
Date - Version	17/07/2019 - 1.0	
Life Cycle Stage	Use at industrial site	
Main user group	Industrial uses	
Sector(s) of use	Industrial uses (SU3)	
Environment Contributing Sce	nario	
CS1 Covered by		ERC4
Worker Contributing Scenario		
CS2 Propellant		PROC1 - PROC2 - PROC3 - PROC8b - PROC9 - PROC12
1.2 Conditions of use	affecting exposure	
1.2. CS1: Environment Contrib	uting Scenario: Covered by (ERC4)	
Environmental release categories	Use of non-reactive processing aid at industrial site (n	o inclusion into or onto article) (ERC4)
1.2. CS2: Worker Contributing	Scenario: Propellant (PROC1, PROC2, PROC3, PR	OC8b, PROC9, PROC12)
Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Use of blowing agents in manufacture of foam (PROC1, PROC2, PROC3, PROC8b, PROC9, PROC12)	
Product (article) characteri	stics	
Physical form of product: Liquid Vapour pressure:		
> 10 kPa		
Concentration of substance in Covers percentage substance in t	•	
Amount used, frequency and duration of use/exposure		
Duration: Covers daily exposures up to 8 ho	burs	
Technical and organisational conditions and measures		
Use in contained systems Ensure operatives are trained to n Ensure that direct skin contact is a Clear transfer lines prior to de-cou Provide a good standard of contro Drain down and flush system prior	ers while awaiting dismantling or subsequent recycling ninimise exposures. voided. upling. Iled ventilation (10 to 15 air changes per hour). r to equipment break-in or maintenance.	Ith oughustion
conditions and measures re	lated to personal protection, hygiene and hea	

Personal protection

Wear suitable respiratory protection.

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.3 Exposure estimation and reference to its source

N/A

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Exposure Scenario, 08/07/2019

Substance identity	
Chemical name	Hydrocarbons C9-C11 cyclics-iso-alkanes <2% aromatics, declass. ex Notes "P"
CAS No.	64742-48-9
EINECS No.	919-857-5

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1.	ES 1	Formulation or re-packing; Solvent-based process
2.	ES 2	Use at industrial site

- 3. **ES 3** Use at industrial site
- 4. **ES 4** Widespread use by professional workers
- 5. **ES 5** Widespread use by professional workers
- 6. **ES 6** Consumer use; Various products (PC1, PC24, PC31)
- 7. **ES 7** Consumer use; Various products (PC1, PC24, PC31)
- 8. **ES 8** Consumer use; Adhesives, sealants (PC1)
- 9. **ES 9** Consumer use; Various products (PC39, PC28)

1. ES 1 Formu	ulation or re-packing; Solvent-base	d process
1.1 TITLE SECTION		
Exposure Scenario name	Formulation and (re) packaging of substances and mix	ktures
Date - Version	28/06/2019 - 1.0	
Life Cycle Stage	Formulation or re-packing	
Main user group	Industrial uses	
Sector(s) of use	Industrial uses (SU3) - Formulation [mixing] of prepara	ations and/or re-packaging (SU10)
Environment Contributing Sce	nario	
CS1 Wet formulation		ERC2
Worker Contributing Scenario		
CS2 General exposures		PROC5 - PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC9 - PROC14 - PROC15
1.2 Conditions of use	affecting exposure	
1.2. CS1: Environment Contrib	uting Scenario: Wet formulation (ERC2)	
Environmental release categories	Formulation into mixture (ERC2)	
Product (article) characteri	stics	
Physical form of product: Liquid		
1.2. CS2: Worker Contributing PROC8b, PROC9, PROC14, PRC	Scenario: General exposures (PROC5, PROC1, PRO	OC2, PROC3, PROC4, PROC8a,
Process CategoriesMixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non- dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Tabletting, compression, extrusion, pelletisation, granulation - Use as laboratory reagent (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC14, PROC15)		
Product (article) characteri	stics	
Physical form of product: Liquid		
Amount used, frequency and	l duration of use/exposure	
Duration: Covers daily exposures up to 8 ho	urs	
Other conditions affecting w	vorker exposure	
Temperature: Assumes use at not more than 20 °C above ambient temperature. 20°C		
1.3 Exposure estimat	ion and reference to its source	

N/A

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

2. ES 2 Use a	t industrial site	
2.1 TITLE SECTION		
Exposure Scenario name	Lubricating agent	
Date - Version	28/06/2019 - 1.0	
Life Cycle Stage	Use at industrial site	
Main user group	Industrial uses	
Sector(s) of use	Industrial uses (SU3)	
Environment Contributing Sce	nario	
CS1 Solvent-based process		ERC4 - ERC7
Worker Contributing Scenario		
CS2 General measures applicable to all activities PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13 - PROC17 - PROC18		
2.2 Conditions of use	affecting exposure	
2.2. CS1: Environment Contrib	uting Scenario: Solvent-based process (ERC4, ERC	7)
Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) - Use of functional fluid at industrial site (ERC4, ERC7)	
2.2. CS2: Worker Contributing	Scenario: General measures applicable to all actives, PROC9, PROC10, PROC13, PROC17, PROC18)	vities (PROC1, PROC2, PROC3,
Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non- dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18)		
Product (article) characteri	stics	
Physical form of product: Liquid		
Amount used, frequency and	l duration of use/exposure	

Duration:

Covers daily exposures up to 8 hours

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

2.3 Exposure estimation and reference to its source

2.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

3. ES 3 Use	at industrial site	
3.1 TITLE SECTION		
Exposure Scenario name	Lubricants - Industrial use	
Date - Version	28/06/2019 - 1.0	
Life Cycle Stage	Use at industrial site	
Main user group	Industrial uses	
Sector(s) of use	Industrial uses (SU3)	
Environment Contributing Se	cenario	
CS1 Solvent-based process		ERC4 - ERC7
Worker Contributing Scenar	o	
CS2 Lubricants		PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13 - PROC17 - PROC18
3.2 Conditions of us	e affecting exposure	
3.2. CS1: Environment Contr	ibuting Scenario: Solvent-based process (ERC4, ERC	27)
Environmental release categories	Use of non-reactive processing aid at industrial site (r functional fluid at industrial site (ERC4, ERC7)	o inclusion into or onto article) - Use of
Product (article) characte	ristics	
Physical form of product: Liquid		
3.2. CS2: Worker Contributin PROC9, PROC10, PROC13, PR	g Scenario: Lubricants (PROC1, PROC2, PROC3, PRO	OC4, PROC7, PROC8a, PROC8b,
Process Categories	Chemical production or refinery in closed process with processes with equivalent containment conditions - C closed continuous process with occasional controlled containment conditions - Manufacture or formulation batch processes with occasional controlled exposure containment condition - Chemical production where Industrial spraying - Transfer of substance or mixture dedicated facilities - Transfer of substance or mixture facilities - Transfer of substance or mixture facilities - Transfer of substance or mixture including weighing) - Roller application or brushing - T pouring - Lubrication at high energy conditions in met greasing/lubrication at high kinetic energy conditions PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, I	chemical production or refinery in exposure or processes with equivalent in the chemical industry in closed or processes with equivalent opportunity for exposure arises - (charging and discharging) at non- (charging and discharging) at dedicated containers (dedicated filling line, Freatment of articles by dipping and tal working operations - General (PROC1, PROC2, PROC3, PROC4,
Product (article) characte		
Physical form of product: Liquid		
Concentration of substance Covers percentage substance in		
Amount used, frequency a	nd duration of use/exposure	
Duration: Covers daily exposures up to 8	hours	
Technical and organization	nal conditions and moasures	

Technical and organisational conditions and measures

Technical and organisational measures

Use in contained systems

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

3.3 Exposure estimation and reference to its source

N/A

3.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

4. ES 4 Widespread use by professional workers

4.1 TITLE SECTION

4.1 IIILE SECTION			
Exposure Scenario name	Lubricants - Industrial use		
Date - Version	28/06/2019 - 1.0		
Life Cycle Stage	Widespread use by professional workers	Widespread use by professional workers	
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Environment Contributing Scenario			
CS1 Solvent-based process		ERC9a - ERC9b	
Worker Contributing Scenario			
		PROC20 - PROC1 - PROC2 - PROC3 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC17 - PROC18	
4.2 Conditions of use affecting exposure			
4.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC9a, ERC9b)			
Environmental release categories	······································		
4.2. CS2: Worker Contributing Scenario: Lubricants (PROC20, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)			
Use of functional fluids in small devices - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions -			

 without likelihood of exposure or processes with equivalent containment conditions -Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC20, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

4.3 Exposure estimation and reference to its source

N/A

4.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Widespread use by professional workers 5. ES 5 **5.1 TITLE SECTION Exposure Scenario name** Lubricants (high power) **Date - Version** 28/06/2019 - 1.0 Life Cycle Stage Widespread use by professional workers Professional uses Main user group Sector(s) of use Professional uses (SU22) **Environment Contributing Scenario** ERC8a - ERC8d **CS1 Solvent-based process Worker Contributing Scenario** PROC20 - PROC1 - PROC2 - PROC3 -PROC4 - PROC8a - PROC8b - PROC9 -**CS2** Lubricants PROC10 - PROC11 - PROC13 - PROC17 - PROC18 5.2 Conditions of use affecting exposure 5.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a, ERC8d) Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) -**Environmental release** Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) categories (ERC8a, ERC8d) **Product (article) characteristics Physical form of product:** Liquid 5.2. CS2: Worker Contributing Scenario: Lubricants (PROC20, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18) Use of functional fluids in small devices - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions -Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-**Process Categories** dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC20, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18) **Product (article) characteristics**

Physical form of product:

. Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

5.3 Exposure estimation and reference to its source

N/A

5.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

6. ES 6 Consumer use; Various products (PC1, PC24, PC31)

6.1 TITLE SECTION

6.1 TITLE SECTION		
Exposure Scenario name	Lubricants (low release)	
Date - Version	28/06/2019 - 1.0	
Life Cycle Stage	Consumer use	
Main user group	Consumer uses	
Sector(s) of use	Consumer uses (SU21)	
Product Categories	roduct Categories Adhesives, sealants (PC1) - Lubricants, greases, release products (PC24) - Polishes and wax blends (PC31)	
Environment Contributing Sce	nario	
CS1 Solvent-based process		ERC9a - ERC9b
Consumer Contributing Scena	rio	
CS2 Lubricants		
6.2 Conditions of use	affecting exposure	
6.2. CS1: Environment Contrib	uting Scenario: Solvent-based process (ERC9a, ER	C9b)
Environmental release categories	Widespread use of functional fluid (indoor) - Widespreid (ERC9a, ERC9b)	ead use of functional fluid (outdoor)
Product (article) characteristics		
Physical form of product: Liquid, vapour pressure < 0,5 kPa at STP		
6.2. CS2: Consumer Contributing Scenario: Lubricants		
Product (article) characteri	stics	
Physical form of product: Liquid		
Concentration of substance in Covers percentage substance in t		
Amount used, frequency and	l duration of use/exposure	
Frequency: Covers exposure up to 1 events per day		
Other conditions affecting consumers exposure		
Temperature: Covers use at ambient temperatures.		
6.3 Exposure estimation and reference to its source		
N/A		
6.4 Guidance to DU to evaluate whether he works inside the boundaries set by		

the ES

Guidance to check compliance with the exposure scenario:

7. ES 7 Consumer use; Various products (PC1, PC24, PC31)

7.1 TITLE SECTION

7.1 TITLE SECTION		
Exposure Scenario name	xposure Scenario name Lubricants (low release)	
Date - Version	01/07/2019 - 1.0	
Life Cycle Stage	Consumer use	
Main user group	Consumer uses	
Sector(s) of use	Consumer uses (SU21)	
Product Categories	Adhesives, sealants (PC1) - Lubricants, greases, releas blends (PC31)	e products (PC24) - Polishes and wax
Environment Contributing Sce	nario	
CS1 Solvent-based process		ERC9a - ERC9b
Consumer Contributing Scena	rio	
CS2 Lubricants		PC24
CS3 Lubricants		PC1
CS4 Lubricants		PC31 - PC23_1, PC31_1 - PC23_2, PC31_2
7.2 Conditions of use	affecting exposure	
7.2. CS1: Environment Contrib	outing Scenario: Solvent-based process (ERC9a, ER	C9b)
Environmental release categories	Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC9a, ERC9b)	
categories		
	ing Scenario: Lubricants (PC24)	
	· · · ·	
7.2. CS2: Consumer Contribute Product Categories Product (article) charactere	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24)	
7.2. CS2: Consumer Contribut	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24)	
7.2. CS2: Consumer Contribut Product Categories Product (article) character Physical form of product:	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24) istics at STP product:	
7.2. CS2: Consumer Contribution Product Categories Product (article) characteries Physical form of product: Liquid, vapour pressure < 0,5 kPa Concentration of substance in	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24) istics at STP product: the product up to 100 %.	
7.2. CS2: Consumer Contribution Product Categories Product (article) characteria Physical form of product: Liquid, vapour pressure < 0,5 kPa Concentration of substance in Covers percentage substance in the	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24) istics at STP product: the product up to 100 %. d duration of use/exposure	
 7.2. CS2: Consumer Contribution Product Categories Product (article) characteria Physical form of product: Liquid, vapour pressure < 0,5 kPa Concentration of substance in the Covers percentage substance in the Amount used, frequency and Frequency: 	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24) istics at STP product: the product up to 100 %. d duration of use/exposure	
 7.2. CS2: Consumer Contribution Product Categories Product (article) characteria Physical form of product: Liquid, vapour pressure < 0,5 kPar Concentration of substance in the Covers percentage substance in the Cover	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24) istics at STP product: the product up to 100 %. d duration of use/exposure day	
 7.2. CS2: Consumer Contribution Product Categories Product (article) characteria Physical form of product: Liquid, vapour pressure < 0,5 kPar Concentration of substance in the Covers percentage substance in the Amount used, frequency and Frequency: Covers exposure up to 1 uses per Frequency: Covers exposure up to 4 days per Other conditions affecting content 	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24) istics at STP product: the product up to 100 %. d duration of use/exposure day year consumers exposure garage (>34 m ³) under typical ventilation. at temperatures.	
 7.2. CS2: Consumer Contribution Product Categories Product (article) characteries Physical form of product: Liquid, vapour pressure < 0,5 kPa Concentration of substance in the covers percentage substance substance substance substance substance substance substance s	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24) istics at STP product: the product up to 100 %. d duration of use/exposure day year onsumers exposure garage (>34 m ³) under typical ventilation. at temperatures. typical household ventilation.	
 7.2. CS2: Consumer Contribution Product Categories Product (article) characteria Physical form of product: Liquid, vapour pressure < 0,5 kPar Concentration of substance in the Covers percentage substance in the Covers percentage substance in the Covers percentage substance in the Covers exposure up to 1 uses per the Covers exposure up to 1 uses per the Covers exposure up to 4 days per the Covers exposure up to 4 days per the Covers use in a one car get the Covers use in a one car get the Covers use in a one car get the Covers use under the Covers use use under the Covers use use use use use use use use use us	ing Scenario: Lubricants (PC24) Lubricants, greases, release products (PC24) istics at STP product: the product up to 100 %. d duration of use/exposure day year onsumers exposure garage (>34 m ³) under typical ventilation. at temperatures. typical household ventilation.	

Physical form of product:

Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:

Covers concentrations up to 30 %

Amount used, frequency and duration of use/exposure

Frequency:

Covers use up to 1 uses per day

Frequency:

Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Indoor use

Room size: Covers use in room size of 20 m³

Temperature: Covers use at ambient temperatures.

Ventilation rate: Covers use under typical household ventilation.

7.2. CS4: Consumer Contributing Scenario: Lubricants (PC31)

Product Categories	Polishes and wax blends (PC31)
Product (Sub-)Categories	Polishes, wax/cream (floor, furniture, shoes) - Polishes, spray (furniture, shoes) (PC23_1, PC31_1, PC23_2, PC31_2)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:

Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Frequency:

Covers exposure up to 1 uses per day

Frequency:

Covers exposure up to 29 days per year

Other conditions affecting consumers exposure

Indoor use

Room size: Covers use in room size of 20 m³

7.3 Exposure estimation and reference to its source

N/A

7.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Consumer use; Adhesives, sealants (PC1) 8. ES 8 **8.1 TITLE SECTION** Lubricants (high release) **Exposure Scenario name** 01/07/2019 - 1.0 **Date - Version** Life Cycle Stage Consumer use Main user group Consumer uses Sector(s) of use Consumer uses (SU21) **Product Categories** Adhesives, sealants (PC1) **Environment Contributing Scenario CS1** Waste management ERC8a **Consumer Contributing Scenario CS2** Lubricants PC1 8.2 Conditions of use affecting exposure 8.2. CS1: Environment Contributing Scenario: Waste management (ERC8a) **Environmental release** Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) categories (ERC8a) 8.2. CS2: Consumer Contributing Scenario: Lubricants (PC1) **Product Categories** Adhesives, sealants (PC1) **Product (article) characteristics Physical form of product:** Liquid 8.3 Exposure estimation and reference to its source N/A

8.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Consumer use; Various products (PC39, PC28) 9. ES 9 **9.1 TITLE SECTION Exposure Scenario name** Cosumer other uses 01/07/2019 - 1.0 **Date - Version** Life Cycle Stage Consumer use Main user group Consumer uses Sector(s) of use Consumer uses (SU21) Cosmetics, personal care products (PC39) - Perfumes, fragrances (PC28) **Product Categories Environment Contributing Scenario CS1** Processing of organic liquids ERC8a - ERC8d **Consumer Contributing Scenario** CS2 Consumer PC39 - PC28 9.2 Conditions of use affecting exposure 9.2. CS1: Environment Contributing Scenario: Processing of organic liquids (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)
9.2. CS2: Consumer Contributing Scenario: Consumer (PC39, PC28)	
Product Categories	Cosmetics, personal care products - Perfumes, fragrances (PC39, PC28)

Product (article) characteristics

Physical form of product:

Liquid

9.3 Exposure estimation and reference to its source

N/A

9.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario: