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SECTION 1: Identification of the substance/mixture and of the company/undertaking

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1.1	1 Product identifier		
		automatic transmission fluid (ATF) Article number: ADG05531	
1.2	Relevant identified uses of the se	ubstance or mixture and uses advised against	
1.2.	1 Relevant uses		
		Lubricant	
1.2.2	2 Uses advised against		
		None known.	
1.3	Details of the supplier of the safe	ety data sheet	
	Company	Ferdinand Bilstein GmbH + Co. KG Wilhelmstr. 47 58256 Ennepetal / GERMANY Phone +49 2333 911-0 Fax +49 2333 911-144 Homepage www.febi.com E-mail info@febi.com	
	Address enquiries to		
	Technical information	info@febi.com	
	Safety Data Sheet	info@febi.com	
1.4	Emergency telephone number		
	Advisory body	+49 (0)89-19240 (24h) (English)	
SEC	CTION 2: Hazards identification		
2.1	Classification of the substance of	or mixture [REGULATION (GB) CLP]	
		Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.	
2.2	Label elements		
		The product is required to be labelled in accordance with regulation CLP.	
	Hazard pictograms		
	Hazard statements	H412 Harmful to aquatic life with long lasting effects.	
	Precautionary statements	P273 Avoid release to the environment. P501 Dispose of contents/container to approved disposal company or municipal collection point.	
2.3	Other hazards		
	Physico-chemical hazards	No particular hazards known.	
	Human health dangers	Frequent persistent contact with the skin can cause skin irritation.	
	Environmental hazards	Does not contain any PBT or vPvB substances. Contains no ingredients with endocrine-disrupting properties.	
	Other hazards	No particular hazards known.	
SEC	CTION 3: Composition / Information	n on ingredients	

3.1 Substances

not applicable

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#### 3.2 Mixtures

#### The product is a mixture.

Range [%]	Substance
25 - 50	Distillates (petroleum), hydrotreated light paraffinic
	CAS: 64742-55-8, EINECS/ELINCS: 265-158-7, EU-INDEX: 649-468-00-3, Reg-No.: 01-2119487077-29-XXXX
	GHS/CLP: Asp. Tox. 1: H304
1 - < 2.5	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich
	CAS: 398141-87-2, EINECS/ELINCS: 800-172-4, Reg-No.: 01-2119969520-35-XXXX
	GHS/CLP: Aquatic Chronic 2: H411
1 - < 2.5	Methacrylate copolymer
	EINECS/ELINCS: Polymer
	GHS/CLP: Eye Irrit. 2: H319
	SCL [%]: >= 75: Eye Irrit. 2: H319
0.1 - < 0.25	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol
	CAS: 1218787-32-6, EINECS/ELINCS: 620-540-6, Reg-No.: 01-2119510877-33-XXXX
	GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1C: H314 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M-Factor (acute): 10
0.1 - < 0.25	N,N-Dimethyl-n-octadecylamine
	CAS: 124-28-7, EINECS/ELINCS: 204-694-8, Reg-No.: 01-2119486676-20
	GHS/CLP: Skin Corr. 1B: H314 - Acute Tox. 4: H302 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410
0.001 - < 0.1	3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine
	EINECS/ELINCS: 939-485-7, Reg-No.: 01-2119974116-35
	GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1B: H314 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M-Factor (acute): 100, M-Factor (chronic): 1
0.01 - < 0.1	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol
	CAS: 95-38-5, EINECS/ELINCS: 202-414-9, Reg-No.: 01-2119777867-13-XXXX
	GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1B: H314 - STOT RE 2: H373 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410,
	M-Factor (acute): 10, M-Factor (chronic): 1

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Comment on component parts
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Contains less than 3% w/w DMSO-extract (only for mineral oils) Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%. For full text of H-statements: see SECTION 16.

# **SECTION 4: First aid measures**

4.1	Description of first aid measures	
	General information	Take off contaminated clothing and wash before reuse.
	Inhalation	Ensure supply of fresh air. In the event of symptoms seek medical treatment.
	Skin contact	When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
	Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
	Ingestion	Do not induce vomiting. Seek medical advice immediately. Rinse out mouth and give plenty of water to drink.

#### 4.2 Most important symptoms and effects, both acute and delayed

Irritant effects

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Forward this sheet to your doctor.

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SEC	SECTION 5: Fire-fighting measures		
5.1	Extinguishing media Suitable extinguishing media Extinguishing media that must not be used	Foam, dry powder, water spray jet, carbon dioxide. Full water jet.	
5.2	Special hazards arising from the	substance or mixture	
		Risk of formation of toxic pyrolysis products. Carbon monoxide (CO) Sulphur oxides (SOx).	
5.3	Advice for firefighters		
		Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus.	
		Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.	
SEC	TION 6: Accidental release measur	res	
6.1	Personal precautions, protective	equipment and emergency procedures	
		Some risk of slipping due to spillage of product. Forms slippery surfaces with water. Use personal protective equipment.	
6.2	Environmental precautions		
		Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater.	
6.3	Methods and material for contain	ment and cleaning up	
		Take up with absorbent material (e.g. oil binder). Dispose of absorbed material in accordance within the regulations.	
6.4	Reference to other sections		
		See SECTION 8+13	
SEC	TION 7: Handling and storage		
7.1	Precautions for safe handling		
7.1		No special measures necessary if used correctly. Use only in well-ventilated areas. Use solvent-resistant equipment.	
		The product is combustible.	
		Do not eat, drink or smoke when using this product. After worktime and before work breaks the affected skin areas must be thoroughly cleaned. Use barrier skin cream. Cloths contaminated with product should not be kept in trouser pockets. Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash before reuse.	
7.2	Conditions for safe storage, inclu	ding any incompatibilities	
		Keep only in original container. Prevent penetration into the ground.	
		Do not store together with oxidizing agents.	
		Keep container in a well-ventilated place. Keep container tightly closed.	

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# 7.3 Specific end use(s)

See product use, SECTION 1.2

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# SECTION 8: Exposure controls / personal protection

# 8.1 Control parameters

# Ingredients with occupational exposure limits to be monitored (GB)

Substance	
Distillates (petroleum), hydrotreated light paraffinic	
CAS: 64742-55-8, EINECS/ELINCS: 265-158-7, EU-INDEX: 649-468-00-3, Reg-No.: 01-2119487077-29-XXXX	
Long-term exposure: 5 mg/m <sup>3</sup> , ACGIH TLV (OIL MIST)	

DNEL

N.N-Dimethyl-n-octadecylamine, CAS: 124-28-7           Industrial, inhalative, Long-term - local effects, 1 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 1 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 0.5 mg/kg bw/d (AF=100)           Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8           Industrial, inhalative, Long-term - systemic effects, 0.57 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 0.77 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 0.73 mg/m <sup>3</sup> general population, oral, Long-term - systemic effects, 0.74 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 0.74 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m <sup>3</sup> general population, oral, Long-term - systemic effects, 2.75 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 2.75 mg/kg bw/day           general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day           general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day           general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day           general population, oral, Long-term - systemic effects, 4.35 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 5.52 mg/kg bw/day           general population, oral, Long-term - systemic effects, 0.46 mg/m <sup>3</sup> Industrial, inhalati	Substance
Industrial, inhalative, Long-term - systemic effects, 1 mg/m³         Industrial, inhalative, Acute - local effects, 1 mg/m³         general population, oral, Long-term - systemic effects, 0.5 mg/kg bw/d (AF=100)         Distillates (petroleum), hydrotreated light parafinic, CAS: 64742-55-8         Industrial, inhalative, Long-term - local effects, 0.5 mg/kg bw/day         Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.74 mg/kg bw/day         Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2         Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m³         general population, oral, Long-term - systemic effects, 24.7 mg/m³         general population, dermal, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, dermal, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, dermal, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, dermal, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, nal, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, nal, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, nal, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, nal, Long-term - systemic effects, 2.5 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 2.6 mg/m³         Industrial, inh	N,N-Dimethyl-n-octadecylamine, CAS: 124-28-7
Industrial, inhalative, Acute - local effects, 1 mg/m³         general population, oral, Long-term - systemic effects, 0.5 mg/kg bw/d (AF=100)         Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8         Industrial, inhalative, Long-term - local effects, 0.57 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.77 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.73 mg/m³         general population, oral, Long-term - systemic effects, 0.74 mg/kg bw/day         Thiophene, tetrahydro-, 1.1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2         Industrial, inhalative, Long-term - systemic effects, 2.7 mg/m³         general population, dermal, Long-term - systemic effects, 2.5 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 125 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 1.25 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 1.25 mg/kg bw/day         Industrial, inhalative, Acute - systemic effects, 2.7 mg/m³         Industrial, inhalative, Long-term - systemic effects, 1.25 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, inhalative, Long-term - systemic effects, 1.25 mg/kg bw/day	Industrial, inhalative, Long-term - local effects, 1 mg/m <sup>3</sup>
general population, oral, Long-term - systemic effects, 0.5 mg/kg bw/d (AF=100)           Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8           Industrial, inhalative, Long-term - local effects, 0.57 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 0.77 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 0.74 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 0.74 mg/kg bw/day           Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2           Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m <sup>3</sup> general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day           general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day           general population, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day           general population, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day           general population, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day           Industrial, inhalative, Acute - systemic effects, 2 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 0.45 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 0.06 mg/kg bw/day           Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m <sup>3</sup> 2-(C16-18 (evennumbered, C18 unsaturated) alkyl imi	Industrial, inhalative, Long-term - systemic effects, 1 mg/m <sup>3</sup>
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 Industrial, inhalative, Long-term - local effects, 5.58 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 0.97 mg/kg bw/day Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m <sup>3</sup> general population, oral, Long-term - systemic effects, 2.73 mg/m <sup>3</sup> general population, oral, Long-term - systemic effects, 2.73 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m <sup>3</sup> general population, oral, Long-term - systemic effects, 2.47 mg/kg bw/day Industrial, inhalative, Long-term - systemic effects, 2.47. mg/m <sup>3</sup> general population, dermal, Long-term - systemic effects, 2.52 mg/kg bw/day general population, and, Long-term - systemic effects, 2.52 mg/kg bw/day general population, oral, Long-term - systemic effects, 2.55 mg/kg bw/day general population, inhalative, Long-term - systemic effects, 4.35 mg/m <sup>3</sup> 2:(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5 Industrial, dermal, Acute - systemic effects, 1.4 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 0.06 mg/kg bw/day 2.2'-(2-fe18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6 Industrial, inhalative, Long-term - systemic effects, 4.20 µg/kg bw/day 2.2'-(2-fe18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6 Industrial, inhalative, Long-term - systemic effects, 522 µg/m <sup>3</sup> general population, inhalative, Long-term - systemic effects, 522 µg/m <sup>3</sup> general population, oral, Long-term - systemic effects, 520 µg/kg bw/day 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine Industrial, inhalative, Long-term - systemic effects, 150 µg/kg bw/day 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine Industrial, inhalative, Long-term - systemic effects, 0.7 mg/kg bw/day general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day general population, oral, Long-term - systemic effects, 0.7 mg/kg	Industrial, inhalative, Acute - local effects, 1 mg/m <sup>3</sup>
Industrial, inhalative, Long-term - local effects, 5.58 mg/m³         Industrial, dermal, Long-term - systemic effects, 0.97 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m³         general population, oral, Long-term - systemic effects, 2.73 mg/m³         general population, oral, Long-term - systemic effects, 2.73 mg/m³         Industrial, inhalative, Long-term - systemic effects, 2.77 mg/kg bw/day         Industrial, dermal, Long-term - systemic effects, 24.7 mg/m³         general population, dermal, Long-term - systemic effects, 2.55 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.55 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.55 mg/kg bw/day         general population, noral, Long-term - systemic effects, 2.57 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 2.57 mg/kg bw/day         2c/2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day         2 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.06 mg/kg bw/day         2.2'-Che18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, inhalative, Long-term - systemic effects, 522 µg/m³         general population, oral, Long-term - systemic effects, 520 µg/kg bw/day <t< td=""><td>general population, oral, Long-term - systemic effects, 0.5 mg/kg bw/d (AF=100)</td></t<>	general population, oral, Long-term - systemic effects, 0.5 mg/kg bw/d (AF=100)
Industrial, dermal, Long-term - systemic effects, 0.97 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.74 mg/kg bw/day         Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2         Industrial, dermal, Long-term - systemic effects, 350 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 24.7 mg/m <sup>3</sup> general population, dermal, Long-term - systemic effects, 125 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day         general der boundation, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day         Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day         Industrial, inhalative, Acute - systemic effects, 14 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 0.06 mg/kg bw/day         2/2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, inhalative, Long-term - systemic effects, 150 µg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 522 µg/m <sup>3</sup> general population, inhalative, Long-term - systemic effects, 150 µg/kg bw/	Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m³         general population, oral, Long-term - systemic effects, 0.74 mg/kg bw/day         Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2         Industrial, dermal, Long-term - systemic effects, 350 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 24.7 mg/m³         general population, dermal, Long-term - systemic effects, 125 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, and, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 4.35 mg/m³         2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.06 mg/kg bw/day         2/2'C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 522 µg/m³         general population, inhalative, Long-term - systemic effects, 150 µg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 520 µg/kg bw/day	Industrial, inhalative, Long-term - local effects, 5.58 mg/m <sup>3</sup>
general population, oral, Long-term - systemic effects, 0.74 mg/kg bw/day         Thiophene, tetrahydro, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2         Industrial, dermal, Long-term - systemic effects, 350 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 24.7 mg/m³         general population, dermal, Long-term - systemic effects, 125 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 4.35 mg/m³         2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, inhalative, Acute - systemic effects, 2 mg/kg bw/day         2 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.06 mg/kg bw/day         2.2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 522 µg/m³         general population, orral, Long-term - systemic effects, 150 µg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-armine         Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, inhalative, Long-term - systemic effects, 0.7 mg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-armine <t< td=""><td>Industrial, dermal, Long-term - systemic effects, 0.97 mg/kg bw/day</td></t<>	Industrial, dermal, Long-term - systemic effects, 0.97 mg/kg bw/day
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2         Industrial, dermal, Long-term - systemic effects, 350 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 24.7 mg/m³         general population, dermal, Long-term - systemic effects, 125 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 4.35 mg/m³         2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, inhalative, Acute - systemic effects, 14 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, dermal, Long-term - systemic effects, 0.46 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, dermal, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 2.96 mg/m³         general population, dermal, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, noral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day         general population, oral, Long-term - syste	Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 350 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 24.7 mg/m³         general population, dermal, Long-term - systemic effects, 125 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 4.35 mg/m³         2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day         2 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day         2.2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, dermal, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 150 µg/kg bw/day         general population, nemal, Long-term - systemic effects, 150 µg/kg bw/day         general population, dermal, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Indus	general population, oral, Long-term - systemic effects, 0.74 mg/kg bw/day
Industrial, inhalative, Long-term - systemic effects, 24.7 mg/m³         general population, dermal, Long-term - systemic effects, 125 mg/kg bw/day         general population, oral, Long-term - systemic effects, 125 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 4.35 mg/m³         2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day         2 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 2 mg/kg bw/day         2 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day         2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 522 µg/m³         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 0.9 mg/m³         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day         general population, oral, Long-term - sy	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2
general population, dermal, Long-term - systemic effects, 125 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 4.35 mg/m <sup>3</sup> 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day         2 mg/kg bw/day         Industrial, inhalative, Acute - systemic effects, 14 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m <sup>3</sup> Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day         2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, dermal, Long-term - systemic effects, 420 µg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 522 µg/m <sup>3</sup> general population, inhalative, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 4.9 mg/m <sup>3</sup> (AF= 25)         Industrial, inhalative, Long-term - systemic effects, 250 µg/kg bw/day         general population, oral, Long-term - systemic effects, 250 µg/kg bw/day         general population, oral, Long-term - systemic effects, 0.74 mg/m <sup>3</sup> (AF= 50)	Industrial, dermal, Long-term - systemic effects, 350 mg/kg bw/day
general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 4.35 mg/m³         2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day         2 mg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 14 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day         2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, inhalative, Long-term - systemic effects, 420 µg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 522 µg/m³         general population, inhalative, Long-term - systemic effects, 150 µg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, inhalative, Long-term - systemic effects, 0.7 mg/kg bw/day         general population, oral, Long-term - systemic effects, 250 µg/kg bw/day         general population, oral, Long-term - systemic effects, 0.74 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	Industrial, inhalative, Long-term - systemic effects, 24.7 mg/m <sup>3</sup>
general population, inhalative, Long-term - systemic effects, 4.35 mg/m³         2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day         2 mg/kg bw/day         Industrial, inhalative, Acute - systemic effects, 14 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day         2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, dermal, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 5.22 µg/m³         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, inhalative, Long-term - systemic effects, 0.7 mg/kg bw/day         general population, oral, Long-term - systemic effects, 250 µg/kg bw/day         general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day         general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day         general population, oral, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	general population, dermal, Long-term - systemic effects, 125 mg/kg bw/day
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5         Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day         2 mg/kg bw/day         Industrial, inhalative, Acute - systemic effects, 14 mg/m³         Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day         2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, dermal, Long-term - systemic effects, 420 µg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 522 µg/m³         general population, inhalative, Long-term - systemic effects, 522 µg/m³         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, inhalative, Long-term - systemic effects, 0.77 mg/kg bw/daY         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/daY         general population, oral, Long-term - systemic effects, 0.74 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	general population, oral, Long-term - systemic effects, 2.5 mg/kg bw/day
Industrial, dermal, Acute - systemic effects, 2 mg/kg bw/day 2 mg/kg bw/day Industrial, inhalative, Acute - systemic effects, 14 mg/m <sup>3</sup> Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m <sup>3</sup> Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6 Industrial, dermal, Long-term - systemic effects, 420 µg/kg bw/day Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m <sup>3</sup> general population, inhalative, Long-term - systemic effects, 522 µg/m <sup>3</sup> general population, dermal, Long-term - systemic effects, 150 µg/kg bw/day 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m <sup>3</sup> (AF= 25) Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/day general population, oral, Long-term - systemic effects, 250 µg/kg bw/day 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine Industrial, inhalative, Long-term - systemic effects, 0.7 mg/kg bw/day general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine Industrial, inhalative, Long-term - systemic effects, 0.7 mg/kg bw/day general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day	general population, inhalative, Long-term - systemic effects, 4.35 mg/m <sup>3</sup>
2 mg/kg bw/dayIndustrial, inhalative, Acute - systemic effects, 14 mg/m³Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6Industrial, dermal, Long-term - systemic effects, 420 µg/kg bw/dayIndustrial, inhalative, Long-term - systemic effects, 2.96 mg/m³general population, inhalative, Long-term - systemic effects, 522 µg/m³general population, dermal, Long-term - systemic effects, 150 µg/kg bw/daygeneral population, oral, Long-term - systemic effects, 150 µg/kg bw/day3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amineIndustrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)Industrial, dermal, Long-term - systemic effects, 250 µg/kg bw/daygeneral population, oral, Long-term - systemic effects, 250 µg/kg bw/day	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5
Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m³         Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day         2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6         Industrial, dermal, Long-term - systemic effects, 420 µg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 522 µg/m³         general population, dermal, Long-term - systemic effects, 150 µg/kg bw/day         general population, oral, Long-term - systemic effects, 150 µg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 250 µg/kg bw/day         general population, oral, Long-term - systemic effects, 250 µg/kg bw/day         general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day	
Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6 Industrial, dermal, Long-term - systemic effects, 420 μg/kg bw/day Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m <sup>3</sup> general population, inhalative, Long-term - systemic effects, 522 μg/m <sup>3</sup> general population, dermal, Long-term - systemic effects, 150 μg/kg bw/day general population, oral, Long-term - systemic effects, 150 μg/kg bw/day 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m <sup>3</sup> (AF= 25) Industrial, dermal, Long-term - systemic effects, 250 μg/kg bw/day general population, oral, Long-term - systemic effects, 250 μg/kg bw/day	Industrial, inhalative, Acute - systemic effects, 14 mg/m <sup>3</sup>
<ul> <li>2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6</li> <li>Industrial, dermal, Long-term - systemic effects, 420 µg/kg bw/day</li> <li>Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m<sup>3</sup></li> <li>general population, inhalative, Long-term - systemic effects, 522 µg/m<sup>3</sup></li> <li>general population, dermal, Long-term - systemic effects, 150 µg/kg bw/day</li> <li>general population, oral, Long-term - systemic effects, 150 µg/kg bw/day</li> <li>3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine</li> <li>Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m<sup>3</sup> (AF= 25)</li> <li>Industrial, dermal, Long-term - systemic effects, 250 µg/kg bw/day</li> <li>general population, oral, Long-term - systemic effects, 250 µg/kg bw/day</li> </ul>	Industrial, inhalative, Long-term - systemic effects, 0.46 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 420 μg/kg bw/day         Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 522 μg/m³         general population, dermal, Long-term - systemic effects, 150 μg/kg bw/day         general population, oral, Long-term - systemic effects, 150 μg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/day         general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day	Industrial, dermal, Long-term - systemic effects, 0.06 mg/kg bw/day
Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m³         general population, inhalative, Long-term - systemic effects, 522 μg/m³         general population, dermal, Long-term - systemic effects, 150 μg/kg bw/day         general population, oral, Long-term - systemic effects, 150 μg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/day         general population, oral, Long-term - systemic effects, 250 μg/kg bw/day         general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6
general population, inhalative, Long-term - systemic effects, 522 μg/m³         general population, dermal, Long-term - systemic effects, 150 μg/kg bw/day         general population, oral, Long-term - systemic effects, 150 μg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/d (AF= 100)         general population, oral, Long-term - systemic effects, 250 μg/kg bw/day         general population, oral, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	Industrial, dermal, Long-term - systemic effects, 420 µg/kg bw/day
general population, dermal, Long-term - systemic effects, 150 μg/kg bw/day         general population, oral, Long-term - systemic effects, 150 μg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/d (AF= 100)         general population, oral, Long-term - systemic effects, 250 μg/kg bw/day         general population, oral, Long-term - systemic effects, 0.7 mg/kg bw/day         general population, inhalative, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m <sup>3</sup>
general population, oral, Long-term - systemic effects, 150 μg/kg bw/day         3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/d (AF= 100)         general population, oral, Long-term - systemic effects, 250 μg/kg bw/day         general population, oral, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	general population, inhalative, Long-term - systemic effects, 522 µg/m <sup>3</sup>
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine         Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/d (AF= 100)         general population, oral, Long-term - systemic effects, 250 µg/kg bw/day         general population, inhalative, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	general population, dermal, Long-term - systemic effects, 150 µg/kg bw/day
Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m³ (AF= 25)         Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/d (AF= 100)         general population, oral, Long-term - systemic effects, 250 μg/kg bw/day         general population, inhalative, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	general population, oral, Long-term - systemic effects, 150 µg/kg bw/day
Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/d (AF= 100)         general population, oral, Long-term - systemic effects, 250 μg/kg bw/day         general population, inhalative, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine
general population, oral, Long-term - systemic effects, 250 μg/kg bw/day         general population, inhalative, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)	Industrial, inhalative, Long-term - systemic effects, 4.9 mg/m <sup>3</sup> (AF= 25)
general population, inhalative, Long-term - systemic effects, 0.74 mg/m <sup>3</sup> (AF= 50)	Industrial, dermal, Long-term - systemic effects, 0.7 mg/kg bw/d (AF= 100)
	general population, oral, Long-term - systemic effects, 250 µg/kg bw/day
general population, dermal, Long-term - systemic effects, 250 µg/kg bw/day	general population, inhalative, Long-term - systemic effects, 0.74 mg/m³ (AF= 50)
	general population, dermal, Long-term - systemic effects, 250 µg/kg bw/day

Substance



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sediment (seawater), 0.125 mg/kg dw (AF=500)	
soil, 1 mg/kg dw (AF=10)	
sewage treatment plants (STP), 130 µg/L (AF= 100)	
sediment (freshwater), 1.25 mg/kg dw (AF=50)	
seawater, 0.03 µg/L (AF= 100)	
freshwater, 0.26 µg/L (AF= 10)	
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8	
oral (food), 9.33 mg/kg food	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2	
soil, 85.3 μg/kg soil dw	
sediment (seawater), 59.6 μg/kg sediment dw	
sediment (freshwater), 433 μg/kg sediment dw	
sewage treatment plants (STP), 100 mg/L	
seawater, 330 ng/L	
freshwater, 2.4 µg/L	
oral (food), 111.11 mg/kg food	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5	
sewage treatment plants (STP), 270 μg/L	
seawater, 3 ng/L	
sediment (freshwater), 376 µg/kg sediment dw	
sediment (seawater), 37.6 µg/kg sediment dw	
soil, 75 μg/kg soil dw	
freshwater, 30 ng/L	
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6	
oral (food), 2 mg/kg food	
soil, 5 mg/kg soil dw	
sediment (freshwater), 1.692 mg/kg sediment dw	
sewage treatment plants (STP), 1500 μg/L	
sediment (seawater), 0.169 mg/kg sediment dw	
freshwater, 0.214 µg/L	
seawater, 0.021 µg/L	
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine	
sediment (freshwater), 3.19 mg/kg dw (AF= 1)	
freshwater, 0.84 µg/L (AF= 50)	
sewage treatment plants (STP), 1.3 mg/L (AF= 10)	
sediment (seawater), 0.32 mg/kg dw (AF= 10)	
soil, 1.59 mg/kg dw (AF= 1)	

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#### 8.2 Exposure controls Additional advice on system design Ensure adequate ventilation on workstation. General exposure limit for oil mist should be noted. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances. Eve protection Safety glasses. (EN 166:2001) The details concerned are recommendations. Please contact the glove supplier for further Hand protection information. > 0.4 mm: Nitrile rubber, >480 min (EN 374-1/-2/-3). > 0.4 mm: Neoprene, >480 min (EN 374-1/-2/-3). Skin protection Light protective clothing. Other Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin. **Respiratory protection** not applicable Thermal hazards No information available. Delimitation and monitoring of the Comply with applicable environmental regulations limiting discharge to air, water and soil. environmental exposition

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

information on pasic physical and	i chemical properties
Physical state	liquid
Form	liquid
Color	red
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	No information available.
Flash point [°C]	205 (EN ISO 2592)
Flammability (solid, gas) [°C]	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm³]	0.86 (DIN 51757) (15 °C / 59,0 °F)
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	immiscible
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	No information available.
Kinematic viscosity	30.6 mm²/s 40°C (DIN 51562)
Relative vapour density	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature [°C]	not applicable
Decomposition temperature [°C]	No information available.
Particle characteristics	No information available.

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# 9.2 Other information

No information available.

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No dangerous reactions known if used as directed.

#### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

#### 10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

#### 10.4 Conditions to avoid

No special measures necessary.

#### 10.5 Incompatible materials

Strong oxidizing agent. Strong basic compounds Strong acids.

# 10.6 Hazardous decomposition products

No hazardous decomposition products known.

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# **SECTION 11: Toxicological information**

# 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

# Acute oral toxicity

Product
oral, Based on the available information, the classification criteria are not fulfilled.
Substance
N,N-Dimethyl-n-octadecylamine, CAS: 124-28-7
LD50, oral, Rat, >2000 mg/kg bw (OECD 401)
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
LD50, oral, Rat, 5000 mg/kg bw
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2
LD50, oral, Rat, 10 mL/kg bw
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5
LD50, oral, Rat, 1265 mg/kg
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6
LD50, oral, Rat, 1200 - 2000 mg/kg bw
NOEL, oral, Rat, 5 mg/kg bw/day
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine
LD50, oral, Rat, 200 - 2000 mg/kg bw
NOAEL, oral, Rat, 50 mg/kg bw/day

#### Acute dermal toxicity

Product

dermal, Based on the available information, the classification criteria are not fulfilled.

Substance	
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8	
LD50, dermal, Rabbit, 2000 - 5000 mg/kg bw	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2	
LD10, dermal, Rabbit, 4000 - 8000 mg/kg bw	
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6	
No information available.	

#### Acute inhalational toxicity

Product
inhalative, Based on the available information, the classification criteria are not fulfilled.

Substance

Gubblance
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
LC50, inhalative, Rat, 2.18 - 5.53 mg/L air, 4h
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6
No information available.

# Serious eye damage/irritation

Based on the available information, the classification criteria are not fulfilled.

Substance

Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8

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Eye, non-irritating

Skin corrosion/irritation

Based on the available information, the classification criteria are not fulfilled.

Substance
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
dermal, non-irritating

Respiratory or skin sensitisation

Based on the available information, the classification criteria are not fulfilled.

	Substance		
	Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8		
	dermal, non-sensitizing		
Specific target organ toxicity — Based on the available information, the classification criteria are not fulfilled. single exposure			
<b>Specific target organ toxicity</b> — Based on the available information, the classification criteria are not fulfilled. <b>repeated exposure</b>			
	Substance		
	Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8		
	NOAEC, inhalative, Rat, 980 mg/m <sup>3</sup> (subacute), no adverse effect observed		
	LOAEL, dermal, mouse, 100 mg/kg bw/day (chronic), The effects observed are not sufficient for classification.		
	LOAEL, oral, Rat, 125 mg/kg bw/day, The effects observed are not sufficient for classification.		
	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2		
	NOAEC, oral, Rat, 100 - 500 mg/kg bw/day		

NOAEC, oral, Rat, 100 - 500 mg/kg bw/day

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5

NOAEL, oral, Rat, 20 mg/kg bw/day

2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6

NOAEL, oral, Dog, 13 mg/kg bw/day

#### Mutagenicity

Based on the available information, the classification criteria are not fulfilled.

Substance
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
in vitro, negativ

#### **Reproduction toxicity**

Based on the available information, the classification criteria are not fulfilled.

- Fertility

Substance	
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8	
NOAEL, oral, Rat, 1000 mg/kg bw/d, no adverse effect observed	

- Development	No information available.
Carcinogenicity	Based on the available information, the classification criteria are not fulfilled.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
General remarks	
	Toxicological data of complete product are not available.

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists.



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# 11.2 Information on other hazards

Endocrine disrupting properties Other information Contains no ingredients with endocrine-disrupting properties.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Product
Based on the available information, the classification criteria are not fulfilled.
Substance
N,N-Dimethyl-n-octadecylamine, CAS: 124-28-7
LC50, (96h), Oncorhynchus mykiss, 0.18 mg/l (OECD 203)
EC10, (72h), Desmodesmus subspicatus, 4.31 µg/l (OECD 201)
EC10, (48h), Daphnia magna, 0.593 mg/l (OECD 202)
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8
NOELR, (14d), fish, 1 g/L
LL50, (96h), fish, 100 mg/L
LL50, (96h), Invertebrates, 10 g/L
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, CAS: 398141-87-2
EC50, (48h), Daphnia magna, 4.6 mg/l (OECD 202)
NOELR, (72h), Algae, 313 µg/L
LL50, (96h), Oncorhynchus mykiss, 2.4 mg/l (OECD 203)
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol, CAS: 95-38-5
EC50, (72h), Algae, 16.9 - 30 μg/L
EC50, (48h), Invertebrates, 163 µg/L
LC0, (96h), fish, 180 μg/L
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6
LC50, (24h), Danio rerio, >0.29 mg/L (OECD 203)
EC50, (24h), Daphnia magna, 0.21 mg/L (OECD 202)
EC10, (72h), Daphnia magna, 34.1 μg/L (OECD 201)
EC10, (21d), Daphnia magna, 10.7 μg/L (OECD 211)
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine
LC50, (96h), fish, 2.14 mg/L
EC50, (72h), Algae, 82.7 - 86.8 μg/L
EC10, (21d), Invertebrates, 1.22 - 1.28 mg/L

# 12.2 Persistence and degradability

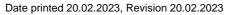
Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

#### 12.3 Bioaccumulative potential

No information available.

# 12.4 Mobility in soil

No information available.





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#### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

# 12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

#### 12.7 Other adverse effects

Ecological data of complete product are not available. Do not discharge product unmonitored into the environment or into the drainage.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

#### Product

	In according to RoHS! Disposal in an incineration plant in accordance with the regulations of the local authorities.
Waste no. (recommended)	130205* mineral-based non-chlorinated engine, gear and lubricating oils
Contaminated packaging	
	Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed of as for product.
Waste no. (recommended)	150110* packaging containing residues of or contaminated by hazardous substances 150102 150104

# **SECTION 14: Transport information**

14.1	UN number or ID number Transport by land according to ADR/RID	not applicable
	Inland navigation (ADN)	not applicable
	Marine transport in accordance with IMDG	not applicable
	Air transport in accordance with IATA	not applicable
14.2	UN proper shipping name	
	Transport by land according to ADR/RID	NO DANGEROUS GOODS
	Inland navigation (ADN)	NO DANGEROUS GOODS
	Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
	Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

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14.3	Transport hazard class(es) Transport by land according to ADR/RID	not applicable
	Inland navigation (ADN)	not applicable
	Marine transport in accordance with IMDG	not applicable
	Air transport in accordance with IATA	not applicable
14.4	Packing group Transport by land according to ADR/RID	not applicable
	Inland navigation (ADN)	not applicable
	Marine transport in accordance with IMDG	not applicable
	Air transport in accordance with IATA	not applicable
14.5	Environmental hazards Transport by land according to ADR/RID	no
	Inland navigation (ADN)	no
	Marine transport in accordance with IMDG	no
	Air transport in accordance with IATA	no
14.6	Special precautions for user	
	Relevant information under SECTION 6 t	io 8.
14.7	Maritime transport in bulk accordi	ng to IMO instruments
	not applicable	

# SECTION 15: Regulatory information

not applicable

# 15.1Safety, health and environmental =gulations/legislation specific for the substance or mixtureEEC-REGULATIONS2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006<br/>(REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131;<br/>(EU) 517/2014TRANSPORT-REGULATIONSADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)NATIONAL REGULATIONS (GB):EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK<br/>REACH; GB CLP.- Observe employment restrictions<br/>for peopleno- VOC (2010/75/CE)not relevant

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#### 15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

#### **SECTION 16: Other information**

# 16.1 Hazard statements (SECTION 3)

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

H410 Very toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H411 Toxic to aquatic life with long lasting effects.

H319 Causes serious eye irritation.

H304 May be fatal if swallowed and enters airways.

#### 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

ATE = acute toxicity estimate CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging

DMEL = Derived Minimum Effect Level

DNEL = Derived No Effect Level

EC50 = Median effective concentration

ECB = European Chemicals Bureau

EEC = European Economic Community

EINECS = European Inventory of Existing Commercial Chemical Substances

EL50 = Median effective loading

ELINCS = European List of Notified Chemical Substances

EmS = Emergency Schedules

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IC50 = Inhibition concentration, 50%

IMDG = International Maritime Code for Dangerous Goods

IUCLID = International Uniform ChemicaL Information Database

IVIS = In vitro irritation score

- LC50 = Lethal concentration, 50%
- LD50 = Median lethal dose
- LC0 = lethal concentration, 0%
- LOAEL = lowest-observed-adverse-effect level
- LL50 = Median lethal loading
- LQ = Limited Quantities

MARPOL = International Convention for the Prevention of Marine Pollution from Ships NOAEL = No Observed Adverse Effect Level

NOEC = No Observed Effect Concentration

PBT = Persistent, Bioaccumulative and Toxic substance PNEC = Predicted No-Effect Concentration

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals

STP = Sewage Treatment Plant

TLV®/TWA = Threshold limit value – time-weighted average

TLV®STEL = Threshold limit value - short-time exposure limit

VOC = Volatile Organic Compounds

vPvB = very Persistent and very Bioaccumulative

# 16.3 Other information

Classification procedure	Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. ()
Modified position	SECTION 11 been added: Contains no ingredients with endocrine-disrupting properties.
	SECTION 12 been added: Contains no ingredients with endocrine-disrupting properties.

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