



Exodime CPO

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Date of issue: 12/12/2014 Revision date: 20/03/2024 Version: 2.12

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

1.1. Product identifier

Product form : Mixture
Product name : Exodime CPO
UFI : NQGF-6TUP-550S-KGJC
EC-No. : 939-581-9
CAS-No. : 68155-09-9, 1471314-81-4 (related CAS numbers)
Type of product : Aqueous solution.

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Consumer use, Professional use, Industrial use
Industrial/Professional use spec : Wide dispersive use
Use of the substance/mixture : non-ionic surfactants

Title	Use descriptors
Manufacture of substances (ES Ref.: 1.0)	SU3, PROC4, PROC8a, PROC8b, PROC9, PROC15, ERC1
Formulation of preparations (mixtures). Washing and cleaning products (ES Ref.: 2.0)	SU3, PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, ERC2
Formulation of preparations (mixtures). Cosmetics (ES Ref.: 3.0)	SU3, PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, ERC2
Professional use, indoor (ES Ref.: 4.0)	SU22, PROC8a, PROC10, PROC13, ERC8a
Professional use, outdoor (ES Ref.: 5.0)	SU22, PROC8a, PROC10, ERC8d
Cosmetics (ES Ref.: 6.0)	SU21, ERC8a
Washing and cleaning products (ES Ref.: 7.0)	SU21, PC35, ERC8a

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

EOC Surfactants
Durmakker 35
BE- 9940 Evergem – Oost Vlaanderen
Belgium
T +3255235858 - F +3255235859
reach@eocgroup.com - www.eocgroup.com

1.4. Emergency telephone number

Emergency number : +32479110190

Country	Organisation/Company	Address	Emergency number	Comment
Austria	Vergiftungsinformationszentrale	Stubenring 6 1010	+43 1 406 43 43	

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Country	Organisation/Company	Address	Emergency number	Comment
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120	+32 70 245 245	Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)
Bulgaria	Национален токсикологичен информационен център Многопрофилна болница за активно лечение и спешна медицина "Н.И.Пирогов"	бул. Ген. Едуард И. Тотлебен 21 1606	+359 2 9154 233	
Croatia	Centar za kontrolu otrovanja Institut za medicinska istraživanja i medicinu rada	Ksaverska Cesta 2 p.p. 291 10000	+385 1 234 8342	Information available 24/7 in Croatian and English
Cyprus	Κέντρου Δηλητηριάσεων		1401	Operating hours 24 hours / 24 hours, 7 days a week
Czech Republic	Toxikologické informační středisko Klinika pracovního lékařství VFN a 1. LF UK	Na Bojišti 1 120 00	+420 224 919 293 +420 224 915 402	
Denmark	Gifflinjen Bispebjerg Hospital	Bispebjerg Bakke 23E Opgang 20 C 2400	+45 82 12 12 12	
Estonia	Mürgistusteabekeskus Terviseamet	Paldiski mnt 81 10614	16662 +372 7943 794	Calling the hotline is anonymous and at the cost of a local call.
Finland	Myrkytystietokeskus	Stenbäckinkatu 9 PO BOX 100 00029	+358 800 147 111 +358 9 471 977	Open 24 hours a day 0800 147 111 (free of charge) 09 471 977 (normal rate call)
France	Centre Antipoison et de Toxicovigilance de Nancy Hôpital Central	29 avenue du Maréchal de Lattre-de-Tassigny 54035	+33 3 83 22 50 50	
Germany	Giftnotruf der Charité - Universitätsmedizin Berlin CBF, Haus VIII (Wirtschaftsgebäude), UG	Hindenburgdamm 30 12203	+49 (0) 30 19240	
Greece	Poisons Information Centre Children's Hospital P&A Kyriakou	11762	+30 21 07 79 37 77	
Iceland	Eitrunarmiðstöð Landspítali	101	+354 543 22 22 +354 543 10 00	Around the clock, every day
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Italy	Centro Antiveneni di Roma CAV Policlinico "Umberto I", Università di Roma	Viale del Policlinico, 155 00161	+39 06 4997 8000	

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Country	Organisation/Company	Address	Emergency number	Comment
Latvia	Valsts ugunsdzēsības un glābšanas dienests Toksikoloģijas un sepses klīnikas Saindēšanās un zāļu informācijas centrs	Hipokrāta 2 1038	112 +371 67 04 24 73	works 24 hours a day
Lithuania	Apsinuodijimų informacijos biuras	Šiltnamių g. 29 04130	+370 5 236 20 52 +370 687 53378	
Luxembourg	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn 1 1120	+352 8002 5500	Free telephone number with a 24/7 access. Experts answer all urgency questions on dangerous products in French, Dutch and English
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD 2090	+356 2545 6508	
Netherlands	Nationaal Vergiftigingen Informatie Centrum	Huispostnummer B.00.118 Postbus 85500 3508 GA	+31 88 755 80 00	Only for the purpose of informing medical personnel in cases of acute intoxications (24 hours a day, 7 days a week)
Norway	Giftinformasjonen Helsedirektoratet	P.O. Box 7000 St. Olavs Plass 130	+47 22 59 13 00	Operating hours 24 hours / 24 hours, 7 days a week
Poland	Pomorskie Centrum Toksykologii Szpital MSWiA	Ul. Kartuska 4/6 80-104	+48 58 682 04 04 +48 58 309 83 83	
Portugal	Centro de Informação Antivenenos Instituto Nacional de Emergência Médica	Rua Almirante Barroso, 36 1000-013	+351 800 250 250	
Romania	Department of Clinical Toxicology Spitalul de Urgenta Floreasca	Calea Floreasca	+40 21 230 8000	
Slovakia	Národné toxikologické informačné centrum Univerzitná nemocnica Bratislava, pracovisko Kramáre, Klinika pracovného lekárstva a toxikológie	Limbová 5 833 05	+421 2 54 77 41 66	
Slovenia	Center za klinično toksikologijo in farmakologijo Univerzitetni klinični, Center Ljubljana	Zaloška 7 1000	112 +386 522 52 83	
Spain	Servicio de Información Toxicológica Instituto Nacional de Toxicología y Ciencias Forenses, Departamento de Madrid	C/José Echegaray nº4 28232	+34 91 562 04 20	(Toxicological emergencies only). Information in Spanish (24/7)
Sweden	Giftinformationscentralen	Solna Strandväg 21 171 54	112 – begär Giftinformation	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 1 H318

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Hazardous to the aquatic environment – Acute Hazard, Category 1 H400
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

GHS09

CLP Signal word

: Danger

Contains

: 3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide

Hazard statements (CLP)

: H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER.
P391 - Collect spillage.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide	EC-No.: 939-581-9 REACH-no: 01-2119978229-22	37	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

Full text of H- and EUH-statements: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Check the vital functions. If unconscious place in recovery position and seek medical advice. In case of respiratory arrest, administer artificial respiration. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Take victim to a doctor if irritation persists.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	: Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists. Wash with plenty of water.
First-aid measures after eye contact	: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Do not apply (chemical) neutralizing agents. In case of eye irritation consult an ophthalmologist.
First-aid measures after ingestion	: Rinse mouth thoroughly with water. In case of ingestion. Take to hospital.

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

Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Eye damage / irritation.

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

If exposed or concerned, get medical advice and attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water. Carbon dioxide (CO ₂). sand. All extinguishing media can be used.
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5.2. Special hazards arising from the substance or mixture

Fire hazard	: Low.
Explosion hazard	: None known.

5.3. Advice for firefighters

Precautionary measures fire	: Keep upwind. Do not inhale explosion and combustion gases.
Firefighting instructions	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Protection during firefighting	: Wear a self-contained breathing apparatus and chemical protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Gloves. face shield. protective clothing. Contact with walking surface may result in formation of slippery film/falling hazard.
Emergency procedures	: Wash contaminated clothing immediately. Keep public away from danger area.

6.1.2. For emergency responders

Protective equipment	: Wear protective gloves/protective clothing and eye/face protection.
Emergency procedures	: Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

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6.3. Methods and material for containment and cleaning up

- For containment : Contain leaking substance, pump over in suitable containers. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.
- Methods for cleaning up : Contain leaking substance, pump over in suitable containers. Clean up any spills as soon as possible, using an absorbent material to collect it. Collect in closed and suitable containers for disposal. To clean the floor and all objects contaminated by this material, use plenty of water. Take off contaminated clothing.
- Other information : Comply with local regulations for disposal.

6.4. Reference to other sections

Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Comply with applicable regulations. Remove contaminated clothing immediately. Clean contaminated objects and areas thoroughly observing environmental regulations. Keep away from sources of ignition - No smoking. Handle in accordance with good industrial hygiene and safety procedures. Discharge into the environment must be avoided. Keep container tightly closed. Either local exhaust or general room ventilation is usually required.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Use good personal hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Clean bulk tanks periodically to prevent accumulation of bacteria.
- Storage conditions : Protect against: frost. Protect against direct sunlight.
- Maximum storage period : 24 months
- Storage temperature : see technical datasheet
- Storage area : Store in a dry area. Comply with applicable regulations. Collect spillage.
- Packaging materials : Plastic.

7.3. Specific end use(s)

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3.52 mg/m ³

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3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide	
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.87 mg/m ³
Long-term - systemic effects, dermal	2.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0303 mg/l
PNEC aqua (marine water)	0.00303 mg/l
PNEC aqua (intermittent, freshwater)	0.0068 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.214 mg/kg dwt
PNEC sediment (marine water)	0.0214 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.000025 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	0.0000005 kg/kg food
PNEC (STP)	
PNEC sewage treatment plant	9.7 mg/l

Safe handling

: see section 7

Additional information

: To date, no national critical limit values exist.

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses (EN 166)

8.2.2.2. Skin protection

Skin and body protection:

Avoid contact with skin.

Hand protection:

Nitrile rubber gloves (thickness: 0.38mm)

8.2.2.3. Respiratory protection

Respiratory protection:

Not applicable

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8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless to light yellow.
Appearance	: as liquid.
Odour	: characteristic.
Odour threshold	: Inconclusive
Melting point	: Not available
Freezing point	: Not available
Boiling point	: like water
Flammability	: Not available
Explosive properties	: None.
Oxidising properties	: None.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 150 °C
pH	: 6 – 8
Viscosity, kinematic	: ca 100 mm ² /s
Viscosity, dynamic	: 100 mPa·s @ 20°C (BROOKFIELD RVF 1/20)
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: No available data
Vapour pressure	: like water
Vapour pressure at 50°C	: Not available
Density	: ca 1 kg/l @ 20°C
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Other properties : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with : Strong acids.

10.2. Chemical stability

SECTION 7: Handling and storage.

10.3. Possibility of hazardous reactions

Not established.

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10.4. Conditions to avoid

SECTION 7: Handling and storage.

10.5. Incompatible materials

Strong acids. Materials that react violently or explosively with water.

10.6. Hazardous decomposition products

On burning: release of (highly) toxic gases/vapours. Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide

LD50 oral rat	1000 mg/kg
Skin corrosion/irritation	: Causes skin irritation. pH: 6 – 8
Serious eye damage/irritation	: Causes serious eye damage. pH: 6 – 8
Additional information	: Test result: Isolated Chicken Eye (ICE) 13.5% aqueous solution of Euroxide CPO not corrosive
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

Exodime CPO (68155-09-9, 1471314-81-4 (related CAS numbers))

Viscosity, kinematic	ca 100 mm ² /s
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11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : This product contains hazardous components for the aquatic environment.
Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

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Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide	
LC50 - Fish [1]	0.68 mg/l
EC50 - Crustacea [1]	19.9 mg/l
ErC50 algae	0.71 mg/l
NOEC chronic algae	0.303 mg/l

12.2. Persistence and degradability

3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide	
Persistence and degradability	This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Degradable in water in anaerobic conditions.
Biodegradation	68 % OECD 301 B

12.3. Bioaccumulative potential

Exodime CPO (68155-09-9, 1471314-81-4 (related CAS numbers))	
Partition coefficient n-octanol/water (Log Pow)	No available data
Bioaccumulative potential	No indication of bioaccumulation potential.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Exodime CPO (68155-09-9, 1471314-81-4 (related CAS numbers))	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

Additional information : No other effects known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Waste disposal according to EC directives 75/442/EC, 91/689/EC and 2008/98/EC in the corresponding versions, covering waste and dangerous waste.

Waste treatment methods : Do not allow to enter into surface water or drains. Product should not be released into water without pre-treatment (biological sewage plant).

Sewage disposal recommendations : If discharging to municipal sewage treatment plant, no onsite wastewater treatment required.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. This material should not be landfilled or deep well injected as a method of disposal. Recycled/recovered. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.

Ecology - waste materials : Avoid release to the environment.

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SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	: UN 3082
UN-No. (IMDG)	: UN 3082
UN-No. (IATA)	: UN 3082
UN-No. (ADN)	: UN 3082
UN-No. (RID)	: UN 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (RID)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide), 9, III, (-)
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide), 9, III, MARINE POLLUTANT
Transport document description (IATA)	: UN 3082 Environmentally hazardous substance, liquid, n.o.s. (3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide), 9, III
Transport document description (ADN)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide), 9, III
Transport document description (RID)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-C12-18-(even numbered)-alkylamido-N,N dimethylpropan-1-amino oxide), 9, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 9
Danger labels (ADR)	: 9



IMDG

Transport hazard class(es) (IMDG)	: 9
Danger labels (IMDG)	: 9



IATA

Transport hazard class(es) (IATA)	: 9
Danger labels (IATA)	: 9



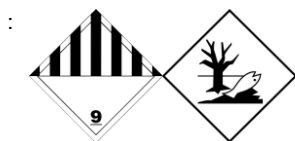
ADN

Transport hazard class(es) (ADN)	: 9
Danger labels (ADN)	: 9

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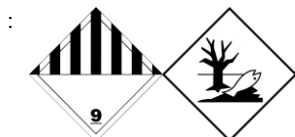
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RID

Transport hazard class(es) (RID) : 9
Danger labels (RID) : 9



14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

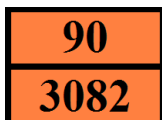
14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M6
Special provisions (ADR) : 274, 335, 375, 601
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1, TP29
Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
Hazard identification number (Kemler No.) : 90
Orange plates :



Tunnel restriction code (ADR) : -
EAC code : •3Z

Transport by sea

Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4

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Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197, A215
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Other information, restriction and prohibition regulations	: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010. Labelling according to Regulation (EC) No. 1272/2008 [CLP]. Other regulations (EU). Not applicable.
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REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	Exodime CPO
3(c)	Exodime CPO

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List $\geq 0,1$ % / SCL

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Seveso Directive (Disaster Risk Reduction)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100	200

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

To date, no national critical limit values exist.

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

Exodime CPO

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
2.2		Modified	
14		Modified	

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2

Full text of use descriptors	
ERC1	Manufacture of the substance
ERC2	Formulation into mixture
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC8d	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
PC35	Washing and cleaning products
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC10	Roller application or brushing
PROC13	Treatment of articles by dipping and pouring
PROC15	Use as laboratory reagent
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
SU21	Consumer uses: Private households (= general public = consumers)
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites

Exodime CPO

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 3	H412	Calculation method

Safety Data Sheet (SDS), EU

All recommendations for the use of our products, whether given by us, orally, or to be implied from data or test results obtained by us, are based on the current state of our knowledge at the time such recommendations are made. When additional information is obtained, these recommendations may be updated. They may also be influenced by circumstances outside our control. Notwithstanding such recommendations the user is responsible that the product as supplied by us, is suitable for the process or purpose he intends to use it. The user of the product is solely responsible for compliance with all laws and regulation applying to the use of the product. Since we cannot control the application, use or processing of the products, we do not accept responsibility therefore. The user shall ensure that the intended use of the products will not infringe in any party's intellectual property rights

Exodime CPO

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Annex to the safety data sheet

Product exposure scenario(s)	
ES Type	ES title
Worker	Manufacture of substances
Worker	Formulation of preparations (mixtures). Washing and cleaning products
Worker	Formulation of preparations (mixtures). Cosmetics
Worker	Professional use, indoor
Worker	Professional use, outdoor
Consumer	Cosmetics
Consumer	Washing and cleaning products

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

1. Exposure scenario 1.0

Manufacture of substances	
ES Ref.: 1.0 ES Type: Worker	
Use descriptors	SU3 PROC4, PROC8a, PROC8b, PROC9, PROC15 ERC1
Processes, tasks, activities covered	Use at industrial sites (IS)

2. Operational conditions and risk management measures

2.1.1. Contributing scenario controlling worker exposure (PROC4)

PROC4	Chemical production where opportunity for exposure arises
-------	---

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.2. Contributing scenario controlling worker exposure (PROC8a)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
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Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	1- 4 h
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.3. Contributing scenario controlling worker exposure (PROC8b)

PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	1- 4 h
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	95

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Risk Management Measures		
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Respiratory protection	Not required

2.1.4. Contributing scenario controlling worker exposure (PROC9)

PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
-------	---

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	1- 4 h
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
	Wear suitable gloves tested to EN374 (APF 5 80%)	
Conditions and measures related to personal protection, hygiene and health evaluation	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.5. Contributing scenario controlling worker exposure (PROC15)

PROC15	Use as laboratory reagent
--------	---------------------------

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	> 25 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	240 cm ²

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Operational conditions		
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.2. Contributing scenario controlling environmental exposure (ERC1)

ERC1	Manufacture of the substance
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Product characteristics
No additional information

Operational conditions		
Amounts used	Fraction used at main source:	100
Frequency and duration of use	Release times per year	60 Day/Year
Environmental factors not influenced by risk management	Local freshwater dilution factor:	10
	Local marine water dilution factor:	100
	Receiving surface water flow is 18000 m ³ /d	
Other given operational conditions affecting environmental exposure	Release fraction to air from process (initial release prior to RMM):	0 %
	Release fraction to wastewater from process (initial release prior to RMM):	0.01 %
	Release fraction to soil from process (initial release prior to RMM):	0 %

Risk Management Measures		
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil	Soil emission controls are not applicable as there is no direct release to soil	
Conditions and measures related to sewage treatment plant	Assumed domestic sewage treatment plant flow	2000

3. Exposure estimation and reference to its source

3.1. Health

Information for contributing exposure scenario	
2.1.1	- EASY TRA v3.5

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Information for contributing exposure scenario	
2.1.2	- EasyTRA 3.5
2.1.3	- EasyTRA 3.5
2.1.4	- EasyTRA 3.5
2.1.5	- EasyTRA 3.5

3.2. Environment

Information for contributing exposure scenario	
2.2	spERC, manufacturing plant

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

Guidance - Health	Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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4.2. Environment

Guidance - Environment	Predicted exposures are not expected to exceed the PNECs when the Risk Management Measures/Operational Conditions outlined in section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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Additional good practice advice beyond the REACH CSA

No available data

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

1. Exposure scenario 2.0

Formulation of preparations (mixtures). Washing and cleaning products

ES Ref.: 2.0
ES Type: Worker

Use descriptors	SU3 PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9 ERC2
Processes, tasks, activities covered	Use at industrial sites (IS)

2. Operational conditions and risk management measures

2.1.1. Contributing scenario controlling worker exposure (PROC1)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
-------	--

Product characteristics

Physical form of product	Liquid
Concentration of substance in product	> 25 %
Volatility	Low

Operational conditions

Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	240 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Industrial use	

Risk Management Measures

Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation	Not required
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Respiratory protection	Not required

2.1.2. Contributing scenario controlling worker exposure (PROC2)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
-------	--

Product characteristics

Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Respiratory protection	Not required

2.1.3. Contributing scenario controlling worker exposure (PROC3)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition	
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	240 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

2.1.4. Contributing scenario controlling worker exposure (PROC4)

PROC4	Chemical production where opportunity for exposure arises
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.5. Contributing scenario controlling worker exposure (PROC5)

PROC5	Mixing or blending in batch processes
-------	---------------------------------------

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.6. Contributing scenario controlling worker exposure (PROC8a)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
--------	---

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	1- 4 h
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.7. Contributing scenario controlling worker exposure (PROC8b)

PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
--------	---

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	1- 4 h
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	95
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Respiratory protection	Not required

2.1.8. Contributing scenario controlling worker exposure (PROC9)

PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
-------	---

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	1- 4 h
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.2. Contributing scenario controlling environmental exposure (ERC2)

ERC2	Formulation into mixture
------	--------------------------

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Product characteristics

No additional information

Operational conditions

Amounts used	Fraction used at main source:	22.5 %
Frequency and duration of use	Release times per year	250 Day/Year
Environmental factors not influenced by risk management	Local freshwater dilution factor:	10
	Local marine water dilution factor:	100
	Receiving surface water flow is 18000 m ³ /d	
Other given operational conditions affecting environmental exposure	Release fraction to air from process (initial release prior to RMM):	0 %
	Release fraction to wastewater from process (initial release prior to RMM):	0.01 %
	Release fraction to soil from process (initial release prior to RMM):	0 %

Risk Management Measures

Conditions and measures related to sewage treatment plant	Assumed domestic sewage treatment plant flow	2000
Conditions and measures related to external recovery of waste	Reduction of sludge to soil:	100 % Incineration.

3. Exposure estimation and reference to its source

3.1. Health

Information for contributing exposure scenario

2.1.1	- EASY TRA v3.5
2.1.2	- EASY TRA v3.5
2.1.3	- EASY TRA v3.5
2.1.4	- EASY TRA v3.5
2.1.5	- EASY TRA v3.5
2.1.6	- EASY TRA v3.5
2.1.7	- EASY TRA v3.5
2.1.8	- EASY TRA v3.5

3.2. Environment

Information for contributing exposure scenario

2.2	AISE SPERC 2.1.i.v1,AISE-Formulation of Detergents/Maintenance Products - Low Viscosity (small scale)
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Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

Guidance - Health	Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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4.2. Environment

Guidance - Environment	Predicted exposures are not expected to exceed the PNECs when the Risk Management Measures/Operational Conditions outlined in section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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Additional good practice advice beyond the REACH CSA

No available data

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

1. Exposure scenario 3.0

Formulation of preparations (mixtures). Cosmetics

ES Ref.: 3.0
ES Type: Worker

Use descriptors	SU3 PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9 ERC2
Processes, tasks, activities covered	Use at industrial sites (IS)

2. Operational conditions and risk management measures

2.1.1. Contributing scenario controlling worker exposure (PROC1)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
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Product characteristics

Physical form of product	Liquid
Concentration of substance in product	> 25 %
Volatility	Low

Operational conditions

Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	240 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Industrial use	

Risk Management Measures

Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Respiratory protection	Not required

2.1.2. Contributing scenario controlling worker exposure (PROC2)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
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Product characteristics

Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Respiratory protection	Not required

2.1.3. Contributing scenario controlling worker exposure (PROC3)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition	
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	240 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

2.1.4. Contributing scenario controlling worker exposure (PROC4)

PROC4	Chemical production where opportunity for exposure arises
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.5. Contributing scenario controlling worker exposure (PROC5)

PROC5	Mixing or blending in batch processes
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.6. Contributing scenario controlling worker exposure (PROC8a)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
--------	---

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	1- 4 h
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.7. Contributing scenario controlling worker exposure (PROC8b)

PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	1- 4 h
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	95
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Respiratory protection	Not required

2.1.8. Contributing scenario controlling worker exposure (PROC9)

PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 35 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	1- 4 h
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Provide enhanced general ventilation by mechanical means	
	Industrial use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	90
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.2. Contributing scenario controlling environmental exposure (ERC2)

ERC2	Formulation into mixture
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Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Product characteristics

No additional information

Operational conditions

Amounts used	Fraction used at main source:	5.5 %
Frequency and duration of use	Release times per year	220 Day/Year
Environmental factors not influenced by risk management	Local freshwater dilution factor:	10
	Local marine water dilution factor:	100
	Receiving surface water flow is 18000 m ³ /d	
Other given operational conditions affecting environmental exposure	Release fraction to air from process (initial release prior to RMM):	0 %
	Release fraction to wastewater from process (initial release prior to RMM):	0.4 %
	Release fraction to soil from process (initial release prior to RMM):	0 %

Risk Management Measures

Conditions and measures related to sewage treatment plant	Assumed domestic sewage treatment plant flow	2000
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3. Exposure estimation and reference to its source

3.1. Health

Information for contributing exposure scenario

2.1.1	- EASY TRA v3.5
2.1.2	- EASY TRA v3.5
2.1.3	- EASY TRA v3.5
2.1.4	- EASY TRA v3.5
2.1.5	- EASY TRA v3.5
2.1.6	- EASY TRA v3.5
2.1.7	- EASY TRA v3.5
2.1.8	- EASY TRA v3.5

3.2. Environment

Information for contributing exposure scenario

2.2	COLIPA SPERC 2.1.c.v1,COLIPA - Formulation of low viscosity liquids (shampoo, hair conditioner, shower gel, foam, bath) (small scale)
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Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

Guidance - Health	Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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4.2. Environment

Guidance - Environment	Predicted exposures are not expected to exceed the PNECs when the Risk Management Measures/Operational Conditions outlined in section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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Additional good practice advice beyond the REACH CSA

No available data

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

1. Exposure scenario 4.0

Professional use, indoor

ES Ref.: 4.0
ES Type: Worker

Use descriptors	SU22 PROC8a, PROC10, PROC13 ERC8a
Processes, tasks, activities covered	Widespread use by professional workers (PW)

2. Operational conditions and risk management measures

2.1.1. Contributing scenario controlling worker exposure (PROC8a)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 10 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	15- 60 minutes
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Good standard of general ventilation	
	Professional use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation - efficiency of at least	80
Conditions and measures related to personal protection, hygiene and health evaluation	Wear suitable gloves tested to EN374 (APF 5 80%)	
	Wear a respirator providing a minimum efficiency of	90 %
	Wear a respirator conforming to EN140 with Type A filter or better	
	Wear a respirator conforming to EN140 with Type A/P2 filter or better	

2.1.2. Contributing scenario controlling worker exposure (PROC10)

PROC10	Roller application or brushing
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 0.005 %

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Product characteristics	
	Maximum concentration of active ingredient in the concentrated product is considered to be : 10%, Concentration after dilution for use : 0,005%
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Professional use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation	Not required
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Respiratory protection	Not required

2.1.3. Contributing scenario controlling worker exposure (PROC13)

PROC13	Treatment of articles by dipping and pouring
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 0.005 %
	Maximum concentration of active ingredient in the concentrated product is considered to be : 10, Concentration after dilution for use : 0,005 %
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h Default value
Human factors not influenced by risk management	Area of skin contact	480 cm ²
Other given operational conditions affecting workers exposure	Indoor use	
	Professional use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation	Not required
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Respiratory protection	Not required

2.2. Contributing scenario controlling environmental exposure (ERC8a)

ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
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Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Product characteristics

No additional information

Operational conditions

Amounts used	Fraction used at main source:	0.075 %
Frequency and duration of use	Release times per year	365 Day/Year
Environmental factors not influenced by risk management	Local freshwater dilution factor:	10
	Local marine water dilution factor:	100
	Receiving surface water flow is 18000 m ³ /d	
Other given operational conditions affecting environmental exposure	Release fraction to air from process (initial release prior to RMM):	0 %
	Release fraction to wastewater from process (initial release prior to RMM):	100 %
	Release fraction to soil from process (initial release prior to RMM):	0 %

Risk Management Measures

Conditions and measures related to sewage treatment plant	Assumed domestic sewage treatment plant flow	2000
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3. Exposure estimation and reference to its source

3.1. Health

Information for contributing exposure scenario

2.1.1	- EASY TRA v3.5
2.1.2	- EASY TRA v3.5
2.1.3	- EASY TRA v3.5

3.2. Environment

Information for contributing exposure scenario

2.2	AISE SPERC 8a.1.b.v1,AISE- Wide Dispersive Use in Aerosol products for cleaning and maintenance products (Non-Propellants),Fraction of EU tonnage used in region: 0,04,(Default value : 0,1)
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4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

Guidance - Health	Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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4.2. Environment

Guidance - Environment	Predicted exposures are not expected to exceed the PNECs when the Risk Management Measures/Operational Conditions outlined in section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Additional good practice advice beyond the REACH CSA

No available data

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

1. Exposure scenario 5.0

Professional use, outdoor

ES Ref.: 5.0
ES Type: Worker

Use descriptors	SU22 PROC8a, PROC10 ERC8d
Processes, tasks, activities covered	Widespread use by professional workers (PW)

2. Operational conditions and risk management measures

2.1.1. Contributing scenario controlling worker exposure (PROC8a)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 0.005 % Maximum concentration of active ingredient in the concentrated product is considered to be : 10%, Concentration after dilution for use : 0.005%
Volatility	Low

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Outdoor use	
	Professional use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation	Not required
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Respiratory protection	Not required

2.1.2. Contributing scenario controlling worker exposure (PROC10)

PROC10	Roller application or brushing
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Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 0.005 % Maximum concentration of active ingredient in the concentrated product is considered to be : 10%, Concentration after dilution for use : 0,005%
Volatility	Low

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Operational conditions		
Frequency and duration of use	Exposure frequency	5 days/week
	Exposure duration	> 4 h
Human factors not influenced by risk management	Area of skin contact	960 cm ²
Other given operational conditions affecting workers exposure	Outdoor use	
	Professional use	

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Local exhaust ventilation	Not required
Conditions and measures related to personal protection, hygiene and health evaluation	protective gloves	Not required
	Respiratory protection	Not required

2.2. Contributing scenario controlling environmental exposure (ERC8d)

ERC8d	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)	
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Product characteristics	
No additional information	

Operational conditions		
Amounts used	Fraction used at main source:	0.075 %
Frequency and duration of use	Release times per year	365 Day/Year
Environmental factors not influenced by risk management	Local freshwater dilution factor:	10
	Local marine water dilution factor:	100
	Receiving surface water flow is 18000 m ³ /d	
Other given operational conditions affecting environmental exposure	Release fraction to air from process (initial release prior to RMM):	0 %
	Release fraction to wastewater from process (initial release prior to RMM):	100 %
	Release fraction to soil from process (initial release prior to RMM):	0 %

Risk Management Measures		
Conditions and measures related to sewage treatment plant	Assumed domestic sewage treatment plant flow	2000

3. Exposure estimation and reference to its source

3.1. Health

Information for contributing exposure scenario	
2.1.1	- EASY TRA v3.5
2.1.2	- EASY TRA v3.5

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

3.2. Environment

Information for contributing exposure scenario

2.2	AISE SPERC 8a.1.a.v1,Wide Dispersive Use in 'Down the Drain' cleaning and maintenance products (Consumers and Professionals),Fraction of EU tonnage used in region: 0,04,(Default value = 0,1)
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4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

Guidance - Health	Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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4.2. Environment

Guidance - Environment	Predicted exposures are not expected to exceed the PNECs when the Risk Management Measures/Operational Conditions outlined in section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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Additional good practice advice beyond the REACH CSA

No available data

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

1. Exposure scenario 6.0

Cosmetics	
ES Ref.: 6.0 ES Type: Consumer	
Use descriptors	SU21 ERC8a
Processes, tasks, activities covered	Consumer use (C)

2. Operational conditions and risk management measures

2.2. Contributing scenario controlling environmental exposure (ERC8a)

ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
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Product characteristics

No additional information

Operational conditions

Frequency and duration of use	Release times per year	365 Day/Year
Environmental factors not influenced by risk management	Local freshwater dilution factor:	10
	Local marine water dilution factor:	100
	Receiving surface water flow is 18000 m ³ /d	
Other given operational conditions affecting environmental exposure	Release fraction to air from process (initial release prior to RMM):	0 %
	Release fraction to wastewater from process (initial release prior to RMM):	100 %
	Release fraction to soil from process (initial release prior to RMM):	0 %

Risk Management Measures

Conditions and measures related to sewage treatment plant	Assumed domestic sewage treatment plant flow	2000
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3. Exposure estimation and reference to its source

3.1. Health

No available data

3.2. Environment

Information for contributing exposure scenario

2.2	COLIPA SPERC 8a.1.a.v1, COLIPA - Wide Dispersive Use in 'Down the Drain' products - hair and skin care products (Consumers and Professionals) Fraction of EU tonnage to region : 0,053 - End use of cosmetic products, (Default value = 0,1)
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Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

Guidance - Health	Predicted exposures are not expected to exceed the applicable consumer reference values when the operational conditions/risk management measures given in section 2 are implemented
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4.2. Environment

Guidance - Environment	Predicted exposures are not expected to exceed the PNECs when the Risk Management Measures/Operational Conditions outlined in section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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Additional good practice advice beyond the REACH CSA

No available data

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

1. Exposure scenario 7.0

Washing and cleaning products

ES Ref.: 7.0
ES Type: Consumer

Use descriptors	SU21 PC35 ERC8a
Processes, tasks, activities covered	Consumer use (C)

2. Operational conditions and risk management measures

2.1. Contributing scenario consumer end-use (PC35) (Hand dishwashing (liquid regular, liquid concentrate) for consumer use)

PC35	Washing and cleaning products
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Product characteristics

Concentration of substance in product	≤ 10 %
	Concentration after dilution for use : 0.01% (AISE Habits-Practices-Total Consumers products 031109)

Operational conditions

Amounts used	Product ingredient fraction by weight :	0.1
Frequency and duration of use	Exposure frequency	1 t/day
Human factors not influenced by risk management	Area of skin contact	2082.5 cm ² Hands and forearms. <Default>
Other given operational conditions affecting consumers exposure	Wipes - floor,Cleaning	Dermal. Covers skin contact area up to 857,5 cm ² . Exposure duration 0,167h. uses per day : 0,3. (Worst case assumption). Product ingredient fraction by weight : 0,020
	Surface cleaning,Liquid	Dermal. Covers skin contact area up to 857,5 cm ² . Exposure duration 0,333h. uses per day :1. (Worst case assumption). Product ingredient fraction by weight : 0,05
	Surface cleaning,gel	Dermal. Covers skin contact area up to 857,5 cm ² . Exposure duration 0,333h. uses per day : 1. (Worst case assumption). Product ingredient fraction by weight : 0,0015
	Wipes,Bathroom cleaning	Dermal. Covers skin contact area up to 857,5 cm ² . Exposure duration 0,167h. uses per day : 1. (Worst case assumption. Product ingredient fraction by weight : 0,015

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

Operational conditions		
	Wipes,kitchen,Cleaning	Dermal. Covers skin contact area up to 857,5 cm2. Exposure duration 0,167h. uses per day : 0,5. (Worst case assumption). Product ingredient fraction by weight : 0,020

Risk Management Measures
No additional information

2.2. Contributing scenario controlling environmental exposure (ERC8a)

ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
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Product characteristics
No additional information

Operational conditions		
Frequency and duration of use	Release times per year	365 Day/Year
Environmental factors not influenced by risk management	Local freshwater dilution factor:	10
	Local marine water dilution factor:	100
	Receiving surface water flow is 18000 m ³ /d	
Other given operational conditions affecting environmental exposure	Release fraction to air from process (initial release prior to RMM):	0 %
	Release fraction to wastewater from process (initial release prior to RMM):	100 %
	Release fraction to soil from process (initial release prior to RMM):	0 %

Risk Management Measures		
Conditions and measures related to sewage treatment plant	Assumed domestic sewage treatment plant flow	2000

3. Exposure estimation and reference to its source

3.1. Health

Information for contributing exposure scenario	
2.1	- EASY TRA v3.5

3.2. Environment

Information for contributing exposure scenario	
2.2	Wide Dispersive Use in 'Down the Drain' cleaning and maintenance products (Consumers and Professionals),Fraction of EU tonnage used in region: 0,04,(Default value = 0,1),AISE SPERC 8a.1.a.v1

Exodime CPO

Annex to the safety data sheet: Exposure scenario

CAS-No.: 68155-09-9, 1471314-81-4 (related CAS numbers) Product form: Mixture Physical state: Liquid

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

Guidance - Health	Predicted exposures are not expected to exceed the applicable consumer reference values when the operational conditions/risk management measures given in section 2 are implemented
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4.2. Environment

Guidance - Environment	Predicted exposures are not expected to exceed the PNECs when the Risk Management Measures/Operational Conditions outlined in section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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Additional good practice advice beyond the REACH CSA

No available data