



SAFETY DATA SHEET

According to Safe Work Australia Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

Section 1. Identification

Product identifier : EXCELLIUM PRO CONCENTRATE PLUS

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

Identified uses

Additive for gasoil

Uses advised against

Not applicable.

Reason

Supplier's details :

TotalEnergies Additives and Fuels Solutions
Place du Bassin
69700 Givors
Tel: +33 (0) 4 72 49 27 00
rm.acs-fds@totalenergies.com

TotalEnergies Marketing Asia-Pacific Middle East Pte. Ltd.
182 Cecil Street
#27-01 Frasers Tower
Singapore 069547
Tel: +65 6879 2200
ms.ap-sds@totalenergies.com

Emergency telephone number (with hours of operation) :

Australia: +61 2 8014 4558
Asia-Pacific: +65 3158 1074

Section 2. Hazard(s) identification

Classification of the substance or mixture


FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 1
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 40.2%

GHS label elements

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

Hazard pictograms	:	
Signal word	:	DANGER
Hazard statements	:	H227 - Combustible liquid. H302 + H332 - Harmful if swallowed or if inhaled. H304 - May be fatal if swallowed and enters airways. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction.
<u>Precautionary statements</u>		
General	:	P medical advice is needed, have product container or label at hand. Keep out of reach of children. Read carefully and follow all instructions.
Prevention	:	P Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	:	P INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: 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 or attention. In case of fire: Use water spray, dry chemical powder or carbon dioxide to extinguish.
Storage	:	S Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	:	D Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	Not applicable.
Other hazards which do not result in classification	:	Risk of explosion if heated under confinement.

Section 3. Composition and ingredient information

Substance/mixture : Mixture

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

Ingredient name	% (w/w)	CAS number
2-ethylhexyl nitrate	≥30 - ≤46	27247-96-7
1-Hexanol, 2-ethyl-	≥10 - ≤30	104-76-7
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	≤10	64742-48-9
Hydrocarbons, C10, aromatics, <1% naphthalene	≤5	64742-94-5
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C16-18 (even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts	≤5	-
methyl-1H-benzotriazole	≤3	29385-43-1
Distillates (petroleum), hydrotreated heavy paraffinic	≤3	64742-54-7
2,6-di-tert-butyl-p-cresol	≤3	128-37-0
2-methylpentane-2,4-diol	≤3	107-41-5
N,N-bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amine	<3	91273-04-0
Amides, C18-unsatd., N-[3-(dimethylamine)propyl]	<1	1379524-06-7
Amines, polyethylenepoly-, tetraethylenepentamine fraction	≤0.3	90640-66-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled.
- Skin contact** : Causes severe burns. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical

: Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Due to the low auto inflammation temperature of the product (see section 9), priority must be given to cool down exposed containers/tanks with water spray

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Hazchem code

: •3Z

Remark

: Risk of explosion if heated under confinement.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store between the following temperatures: -25 to 40°C (-13 to 104°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
- Keep at a temperature not exceeding 40°C (bulk packaging storage) / 50°C (drums storage). Packaging materials Stainless steel. Aluminium Perfluoroelastomers

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2-ethylhexan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 5.4 mg/m ³ 8 hours. TWA: 1 ppm 8 hours.
Distillates (petroleum), hydrotreated heavy paraffinic	Safe Work Australia (Australia, 12/2019). [Oil mist, refined mineral] TWA: 5 mg/m ³ 8 hours. Form: mist
2,6-di-tert-butyl-p-cresol	Safe Work Australia (Australia, 12/2019). TWA: 10 mg/m ³ 8 hours.
2-methylpentane-2,4-diol	Safe Work Australia (Australia, 12/2019). PEAK: 25 ppm PEAK: 121 mg/m ³
N,N-bis(2-ethylhexyl)-((1,2,4-triazol-1-yl)methyl)amine	DFG MAK-values list (Germany, 10/2021). Skin sensitizer.

Advisory OEL : No known significant effects or critical hazards.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

- Hydrocarbon-proof gloves for aromatic hydrocarbons.
- Body protection** : IF exposed: Chemical-resistant protective suit.
- Other skin protection** : Antistatic non-skid safety shoes or boots.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- When using a mask or half mask :
 (vapor) Respirator with a vapor filter (EN 14387), Type A.
 (aerosol) Respirator with combination filter for vapor/particulate, Type A/P2.
 The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

Appearance

- Physical state** : Liquid.
- Color** : Yellow. to dark orange
- Odor** : Aromatic.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not applicable.
- Pour point** : <-30°C (<-22°F)
- Boiling point** : >180°C (>356°F) [ISO 3405]
- Flash point** : Closed cup: 67°C (152.6°F) [ASTM D 93]
- Evaporation rate** : >1 (ether (anhydrous) = 1)
- Flammability (solid, gas)** : The product may form flammable mixtures with air when heated above the flash point.
- Lower and upper explosion limit/flammability limit** : Lower: 0.5% [ASTM E 681]
Upper: 10% [ASTM E 681]
- Vapor pressure** : <110 kPa (<825.07 mm Hg) [50°C]
- Vapor pressure 37.8°C (100°F)** : <100 hPa
- Vapor density** : >1 [Air = 1]
- Relative density** : 0.92 to 0.95 [ISO 12185]
- Density** : 0.92 to 0.95 g/cm³ [15°C] [ISO 12185]
- Solubility(ies)** :

Media	Result
water	Not soluble

- Miscible with water** : No.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : 90°C (374°F) [ASTM E 659]
- Decomposition temperature** : 100°C (>212°F)

Viscosity	: Kinematic (40°C (104°F)): 9 mm ² /s (9 cSt) [ISO 3104]
Flow time (ISO 2431)	:
Particle characteristics	
Median particle size	: Not applicable.

Section 10. Stability and reactivity

Reactivity	: Thermal decomposition at .100 °C
Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	: Temperatures above 100°C may cause self-accelerating exothermic decomposition which causes a rapid rise in temperature and pressure. This could result in an explosion (bursting of the container), splashing of inert and active material, burning of the product, the emission of toxic gases and exhaust fumes)
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Strong oxidizing agents Reducing agent. Incompatible with strong acids and bases Amines combustible materials Natural Rubber Synthetic rubber Halogens
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/substance	Result	Species	Dose	Exposure	Test
2-ethylhexyl nitrate	LC50 Inhalation Dusts and mists	Rat	1.5 mg/l ATE value Category 4	4 hours	-
	LD50 Dermal	Rabbit	1100 mg/kg ATE value Category 4	-	-
	LD50 Oral	Rat	500 mg/kg ATE value Category 4	-	-
2-ethylhexan-1-ol	LC50 Inhalation Dusts and mists	Rat	1.5 mg/l ATE value Category 4	4 hours	OECD 403
	LD50 Dermal	Rat	>3000 mg/kg	-	OECD 402
Hydrocarbons, C10-C13, n-	LD50 Oral	Rat - Male	2047 mg/kg	-	OECD 401
	LC50 Inhalation Vapor	Rat	>5000 mg/	4 hours	OECD 403

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

alkanes, isoalkanes, cyclics, <2% aromatics	LD50 Dermal	Rabbit	m ³ Read across >5000 mg/kg	-		OECD 402
			Read across			Acute Dermal Toxicity
	LD50 Dermal	Rabbit	>2000 mg/kg	-		OECD 402
Hydrocarbons, C10, aromatics, <1% naphthalene	LD50 Oral	Rat	>5000 mg/kg	-		OECD 401
	LC50 Inhalation Vapor	Rat	>6193 mg/m ³ Read across	4 hours		OECD 403
			Maximum Concentration (%):			
	LD50 Dermal	Rabbit	>3160 mg/kg	-		OECD 402
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C16-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts	LD50 Oral	Rat - Female	>3492 mg/kg	-		OECD 401
	LD50 Dermal	Rabbit	>2000 mg/kg	-		OECD 402
	LD50 Oral	Rat	>2000 mg/kg	-		OECD 423
methyl-1H-benzotriazole Distillates (petroleum), hydrotreated heavy paraffinic	LD50 Oral	Rat	675 mg/kg	-		-
	LC50 Inhalation Dusts and mists	Rat - Male, Female	>5 mg/l	4 hours		OECD 403
	LD50 Dermal	Rabbit - Male, Female	>5000 mg/kg	-		Read across OECD 402
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-		Read across OECD 401
2,6-di-tert-butyl-p-cresol	LD50 Dermal	Rat	>2000 mg/kg	-		OECD 402
	LD50 Oral	Rat	>6000 mg/kg	-		OECD 401
2-methylpentane-2,4-diol	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-		OECD 402
	LD50 Oral	Rat - Male, Female	>2000 mg/kg	-		OECD 420
N,N-bis(2-ethylhexyl)-(1,2,4-triazol-1-yl)methyl amine	LD50 Dermal	Rat	>2000 mg/kg	-		OECD 402
	LD50 Oral	Rat	2500 mg/kg	-		OECD 401
Amides, C18-unsatd., N-[3-(dimethylamine)propyl] Amines, polyethylenepoly-, tetraethylenepentamine fraction	LD50 Oral	Rat	>2000 mg/kg	-		-
	LD50 Dermal	Rat	1260 mg/kg	-		-
	LD50 Oral	Rat	1716.2 mg/kg	-		401

Conclusion/Summary : Based on available data, the classification criteria are met.
Irritation/Corrosion

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

Product/substance	Result	Species	Score	Exposure	Test
2-ethylhexan-1-ol	Eyes - Cornea opacity	Rabbit	1.44	-	OECD 405
	Skin - Erythema/Eschar	Rabbit	3.33	4 hours	OECD 404
	Eyes - Irritant	Rabbit	-	-	OECD 405
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C16-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts					
	Skin - Irritant	Rabbit	-	4 hours	OECD 404
methyl-1H-benzotriazole	Eyes - Mild irritant	Rabbit	-	10 mg	-
2,6-di-tert-butyl-p-cresol	Eyes - Cornea opacity	Rabbit	0	-	OECD 405
					Read across
	Skin - Edema	Rabbit	0	4 hours	OECD 404
2-methylpentane-2,4-diol	Eyes - Cornea opacity	Rabbit	0.8	-	OECD 405
	Skin - Edema	Rabbit	0.5	-	OECD 404
N,N-bis(2-ethylhexyl)-(1,2,4-triazol-1-yl)methyl amine	Skin - Edema	Rabbit	3.33	-	OECD 404
	Skin - Erythema/Eschar	Rabbit	2.66	-	OECD 404

Skin : Based on available data, the classification criteria are met.

Eyes : Based on available data, the classification criteria are met.

Respiratory : Based on available data, the classification criteria are not met.

Sensitization

Product/substance	Route of exposure	Species	Result
2-methylpentane-2,4-diol	skin	Guinea pig	Not sensitizing
N,N-bis(2-ethylhexyl)-(1,2,4-triazol-1-yl)methyl amine	skin	Guinea pig	Sensitizing

Skin : Based on available data, the classification criteria are met.

Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Hydrocarbons, C10, aromatics, <1% naphthalene	Category 3	-	Narcotic effects

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Conclusion/Summary : Based on available data, the classification criteria are not met.

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

Aspiration hazard

Name	Result
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	ASPIRATION HAZARD - Category 1
Hydrocarbons, C10, aromatics, <1% naphthalene	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1

Conclusion/Summary : Based on available data, the classification criteria are met.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled.
- Skin contact** : Causes severe burns. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
EXCELLIUM PRO CONCENTRATE PLUS					

Other information

:

Not available.

Section 12. Ecological information

Toxicity

Product/substance	Result	Species	Exposure	Test
2-ethylhexyl nitrate	Acute EC50 12.6 mg/l	-	48 hours	-
	Acute LC50 1.9 mg/l	Fish	96 hours	-
	Acute NOEC 1.42 mg/l	Fish	96 hours	-
2-ethylhexan-1-ol	Acute EC50 16.6 mg/l	-	72 hours	OECD 201
	Acute EC50 39 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Acute LC50 17.1 mg/l	Fish - Leuciscus idus	96 hours	OECD 203
	Chronic EC10 5.3 mg/l	Algae - Desmodesmus subspicatus	72 hours	OECD 201
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	Acute EC50 >1000 mg/l	-	72 hours	OECD 201
	Acute EC50 >1000 mg/l	Daphnia - Daphnia Magna	48 hours	OECD 202
	Acute NOELR 1000 mg/l	Algae - Pseudokirchnerella subcapitata	72 hours	OECD 201
	Chronic NOELR 0.18 mg/l	Daphnia - Daphnia Magna	21 days	-
	Chronic NOELR 0.1 mg/l	Fish - Oncorhynchus mykiss	28 days	-
Hydrocarbons, C10, aromatics, <1% naphthalene	Acute EC50 1 to 3 mg/l	-	72 hours	OECD 201
	Acute EC50 3 mg/l	Daphnia - Daphnia Magna	48 hours	OECD 202
	Acute LC50 2 mg/l	Fish	96 hours	-
	Acute NOEL 1 mg/l	Algae - Pseudokirchnerella subcapitata	72 hours	OECD 201
	Chronic NOEL 0.77 mg/l	Daphnia - Daphnia Magna	21 days	-
	Chronic NOEL 0.44 mg/l	Fish - Oncorhynchus mykiss	28 days	-
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C16-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts	Acute EC50 85.4 mg/l	-	72 hours	OECD 201
	Acute EC50 33.6 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

methyl-1H-benzotriazole	Acute LC50 0.406 mg/l	Fish - Oncorhynchus mykiss	96 hours	OECD 203	
	Chronic NOEC 57.6 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201	
	Acute EC50 53 mg/l	-	72 hours	-	
	Acute EC50 8.58 mg/l	Daphnia	48 hours	-	
	Acute LC50 102 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours	-	
	Acute LC50 38 mg/l Fresh water	Fish - Pimephales promelas	96 hours	-	
Distillates (petroleum), hydrotreated heavy paraffinic	Acute NOEC 30 mg/l	Algae - Skeletonema costatum	72 hours	-	
	Acute EC50 >100 mg/l	-	72 hours	OECD 201	
	Acute EC50 >10000 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202	
	Chronic NOEL >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201	
	2,6-di-tert-butyl-p-cresol	Chronic NOEL >1000 mg/l	Crustaceans - Daphnia magna	21 days	-
		Acute EC50 0.48 mg/l	-	48 hours	OECD 202
Acute EC50 1440 µg/l Fresh water		Daphnia - Daphnia pulex - Neonate	48 hours	-	
Acute LC50 1.1 mg/l		Fish - Oryzias latipes	96 hours	OECD 203	
Chronic EC10 0.4 mg/l		Algae - Desmodesmus subspicatus	72 hours	OECD 201	
2-methylpentane-2,4-diol		Chronic NOEC 0.07 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
	Chronic NOEC 0.053 mg/l	Fish - Danio rerio	30 days	OECD 210	
	Acute EC50 430 mg/l	-	72 hours	OECD 201	
	Acute EC50 2800000 µg/l Fresh water	Crustaceans - Ceriodaphnia reticulata - Larvae	48 hours	-	
	Acute EC50 16500 mg/l	Daphnia	48 hours	-	
	Acute EC50 3200000 µg/l Fresh water	Daphnia - Daphnia magna - Larvae	48 hours	-	
	Acute EC50 3038 mg/l	Micro-organism	5 minutes	-	
	Acute LC50 8690 mg/l	Fish	96 hours	-	
	Acute LC50 8000000 µg/l Marine water	Fish - Alburnus alburnus	96 hours	-	
	Acute NOEC 429 mg/l	Algae - Pseudokirchnerella subcapitata	72 hours	OECD 201	
	N,N-bis(2-ethylhexyl)-(1,2,4-triazol-1-yl)methyl amine	Acute EC50 >1 mg/l	-	72 hours	OECD 201
		Acute EC50 2.2 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
Acute LC50 1.1 mg/l		Fish - Danio rerio	96 hours	OECD 203	
Chronic NOEC 0.33 mg/l		Algae - Desmodesmus subspicatus	72 hours	OECD 201	
Chronic NOEC 0.07 mg/l		Crustaceans - Daphnia magna	21 days	OECD 211	
Amides, C18-unsatd., N-[3-(dimethylamine)propyl]		Acute EC50 >0.96 mg/l	-	72 hours	OECD 201
	Acute EC50 0.24 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202	

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO1C

Amines, polyethylenepoly-, tetraethylenepentamine fraction	Acute EC50 192 mg/l Acute LC50 0.94 mg/l Chronic EC10 0.32 mg/l	Micro-organism Fish - Danio rerio Algae - Pseudokirchneriella subcapitata	3 hours 96 hours 72 hours	OECD 209 OECD 203 OECD 201
	Chronic NOEC 0.048 mg/l	Crustaceans - Daphnia magna	21 days	OECD 211
	Acute EC50 6.8 mg/l	-	72 hours	OECD 202
	Acute EC50 24.1 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Acute LC50 420 mg/l Chronic NOEC 0.5 mg/l	Fish - Poecilia reticulata Algae - Pseudokirchneriella subcapitata	96 hours 72 hours	OECD 203 OECD 201
	Chronic NOEC 1.9 mg/l	Crustaceans - Daphnia magna	21 days	OECD 202

Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
2-ethylhexan-1-ol Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics Hydrocarbons, C10, aromatics, <1% naphthalene 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C16-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts Distillates (petroleum), hydrotreated heavy paraffinic 2,6-di-tert-butyl-p-cresol N,N-bis(2-ethylhexyl)-(1,2,4-triazol-1-yl)methyl) amine Amides, C18-unsatd., N-[3-(dimethylamino)propyl] Amines, polyethylenepoly-, tetraethylenepentamine fraction	OECD 301C	100 % - Readily - 14 days	-	-
	OECD 301 F	80 % - Readily - 28 days	-	-
	OECD 301 F	49.6 % - Not readily - 28 days	-	-
	OECD 301B	77 % - Readily - 29 days	-	Activated sludge
	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
	OECD 301C	4.5 % - Not readily - 28 days	-	Activated sludge
	OECD 301B	9 % - Not readily - 28 days	-	Activated sludge
	OECD 301D	75 % - Readily - 28 days	-	Activated sludge
OECD 301D	0 % - Not readily - 28 days	-	Activated sludge	

Product/substance	Aquatic half-life	Photolysis	Biodegradability
2-ethylhexyl nitrate	-	-	Not readily
2-ethylhexan-1-ol	-	-	Readily
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	-	-	Readily
Hydrocarbons, C10, aromatics, <1% naphthalene	-	-	Not readily
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C16-18(even	-	-	Readily

EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts methyl-1H-benzotriazole Distillates (petroleum), hydrotreated heavy paraffinic 2,6-di-tert-butyl-p-cresol 2-methylpentane-2,4-diol N,N-bis(2-ethylhexyl)-(1,2,4-triazol-1-yl)methyl) amine Amides, C18-unsatd., N-[3-(dimethylamine)propyl] Amines, polyethylenepoly-, tetraethylenepentamine fraction	-	-	-	-	-	-	-	-	-	Not readily Not readily Not readily Readily Not readily Readily Readily
---	---	---	---	---	---	---	---	---	---	---

Bioaccumulative potential

Product/substance	LogK _{ow}	BCF	Potential
2-ethylhexyl nitrate	5.24	-	high
2-ethylhexan-1-ol	2.9	25.33	low
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C16-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts Distillates (petroleum), hydrotreated heavy paraffinic 2,6-di-tert-butyl-p-cresol 2-methylpentane-2,4-diol N,N-bis(2-ethylhexyl)-(1,2,4-triazol-1-yl)methyl) amine Amides, C18-unsatd., N-[3-(dimethylamine)propyl] Amines, polyethylenepoly-, tetraethylenepentamine fraction	0.8	-	low
	>4	-	high
	5.1	1277	high
	0.14	-	low
	5.3	5	low
	6.1	-	high
	-3.16	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

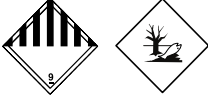
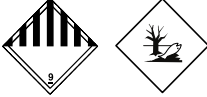
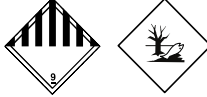
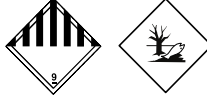
Mobility in soil : Given its physical and chemical characteristics, the product is generally mobile in the ground. It may contaminate ground water. The product is insoluble and floats on water.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

- Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADG	ADR/RID	IMDG	ICAO/IATA
UN/ID No	UN3082	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, Hydrocarbons, C10, aromatics, <1% naphthalene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, Hydrocarbons, C10, aromatics, <1% naphthalene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, Hydrocarbons, C10, aromatics, <1% naphthalene)	Environmentally hazardous substance, liquid, n.o.s. (2-ethylhexyl nitrate, Hydrocarbons, C10, aromatics, <1% naphthalene)
Transport hazard class(es)	9 	9 	9 	9 
Packing group	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes.

Additional information

- ADG** : The product is not regulated as a dangerous good when transported by road or rail in either an IBC, or in other container types if ≤500 kg. This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Hazchem code •3Z
Special provisions 274, 331, 335, 375, AU01

- ADR/RID** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Hazard identification number 90
Limited quantity 5 L
Special provisions 274, 335, 601, 375
Tunnel code (-)
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Emergency schedules F-A, S-F
Special provisions 274, 335, 969
- ICAO/IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
Quantity limitation Passenger and Cargo Aircraft: 450 L. Packaging instructions: 964. Cargo Aircraft Only: 450 L. Packaging instructions: 964. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y964.
Special provisions A97, A158, A197
- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia inventory (AIC) : All components are listed or exempted.

Canada inventory (DSL/NDSL) : All components are listed or exempted.

China inventory (IECSC)	: <input checked="" type="checkbox"/> All components are listed or exempted.
Europe inventory (EC)	: All components are listed or exempted.
Japan inventory	: Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
New Zealand Inventory of Chemicals (NZIoC)	: <input checked="" type="checkbox"/> All components are listed or exempted.
Philippines inventory (PICCS)	: <input checked="" type="checkbox"/> All components are listed or exempted.
Korea inventory (KECI)	: At least one component is not listed.
Taiwan Chemical Substances Inventory (TCSI)	: <input checked="" type="checkbox"/> All components are listed or exempted.
Thailand inventory	: Not determined.
Turkey inventory	: Not determined.
United States inventory (TSCA 8b)	: <input checked="" type="checkbox"/> All components are listed or exempted.
Vietnam inventory	: <input checked="" type="checkbox"/> All components are listed or exempted.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

Section 16. Any other relevant information

History

Date of revision	: 2023/01/04
Date of previous revision	: 2022/11/25
Version	: 1.01

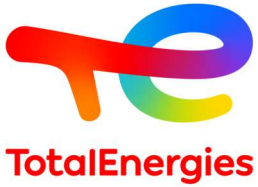
Key to abbreviations

: ADG = Australian Dangerous Goods
: ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
: ATE = Acute Toxicity Estimate
: BCF = Bioconcentration Factor
: GHS = Globally Harmonized System of Classification and Labelling of Chemicals
: IATA = International Air Transport Association
: IBC = Intermediate Bulk Container
: IMDG = International Maritime Dangerous Goods
: LogPow = logarithm of the octanol/water partition coefficient
: MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
: N/A = Not available
: SGG = Segregation Group
: SUSMP = Standard Uniform Schedule of Medicine and Poisons
: UN = United Nations

Procedure used to derive the classification

Classification	Justification
<input checked="" type="checkbox"/> FLAMMABLE LIQUIDS - Category 4	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 1	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

References	: Supplément : ATC79."Best Practices Manual.2-Ethylhexyl nitrate (2EHN).2004". ATC86."Best Practices Manual. Fuel Additive packages containing 2-Ethylhexyl nitrate (2EHN). 2005".
------------	---



EXCELLIUM PRO CONCENTRATE PLUS

SDS # : C3CDTO11C

✔ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.