

# SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

## NOVELEC

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

#### 1.1. Product identifier

Product name : NOVELEC  
Registration number REACH : Not applicable (mixture)  
Product type REACH : Mixture

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

##### 1.2.1 Relevant identified uses

Detergent according to Regulation (EC) No 648/2004

##### 1.2.2 Uses advised against

No uses advised against known

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier of the safety data sheet

Novatio\*  
Industrielaan 5B  
B-2250 Olen  
☎ +32 14 25 76 40  
☎ +32 14 22 02 66  
info@novatio.be  
\*NOVATIO is a registered trademark of Novatech International N.V.

##### Manufacturer of the product

Novatech International N.V.  
Industrielaan 5B  
B-2250 Olen  
☎ +32 14 85 97 37  
☎ +32 14 85 97 38  
info@novatech.be

#### 1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :  
+32 14 58 45 45 (BIG)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Aerosol	category 1	H222: Extremely flammable aerosol.
Aerosol	category 1	H229: Pressurised container: May burst if heated.
Skin Irrit.	category 2	H315: Causes skin irritation.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
STOT SE	category 3	H336: May cause drowsiness or dizziness.
Aquatic Chronic	category 2	H411: Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements



Contains: hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; propan-2-ol; hydrocarbons, C6, isoalkanes, < 5% n-hexane.

Signal word Danger

##### H-statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

##### P-statements

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)  
Technische Schoolstraat 43 A, B-2440 Geel  
<http://www.big.be>  
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1 / 24

# NOVELEC

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P280	Wear protective gloves, protective clothing and eye protection/face protection.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.

### 2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard  
 Caution! Substance is absorbed through the skin

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name REACH Registration No	CAS No EC No List No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 01-2119475515-33	927-510-4	C≤40%	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(2)(10)	Constituent	
propan-2-ol 01-2119457558-25	67-63-0 200-661-7	C≤30%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent	
hydrocarbons, C6, isoalkanes, < 5% n-hexane 01-2119484651-34	931-254-9	C≤30%	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(10)	Constituent	
n-hexane 01-2119480412-44	110-54-3 203-777-6	C≤2%	Flam. Liq. 2; H225 Repr. 2; H361f Asp. Tox. 1; H304 STOT RE 2; H373 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411 STOT RE 2; H373: C≥5%, (CLP Annex VI (ATP 0))	(1)(2)(10)	Constituent	
butane 01-2119474691-32	106-97-8 203-448-7	C≤0.7%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)(21)	Propellant	
propane 01-2119486944-21	74-98-6 200-827-9	C≤0.4%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant	
cyclohexane 01-2119463273-41	110-82-7 203-806-2	C≤0.4%	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	(1)(2)(10)	Constituent	M: 1 (Acute, ECHA (registration dossier)) M: 1 (Chronic, ECHA (registration dossier))

(1) For H- and EUH-statements in full: see section 16  
 (2) Substance with a Community workplace exposure limit  
 (10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006  
 (21) 1,3-butadiene <0.1%  
 Note: numbers 9xx-xxx-x are provisional list numbers assigned by Echa pending an official EC inventory number

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General:

Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

#### After inhalation:

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2 / 24

# NOVELEC

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

**After skin contact:**

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

**After eye contact:**

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

**After ingestion:**

Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

### 4.2.1 Acute symptoms

**After inhalation:**

Headache. Dizziness. Drowsiness. Dry/sore throat. Coughing.

**After skin contact:**

Tingling/irritation of the skin.

**After eye contact:**

Irritation of the eye tissue.

**After ingestion:**

No effects known.

### 4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### 5.1.1 Suitable extinguishing media:

Small fire: Water, Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting CO2 extinguisher.

Major fire: Quantities of water.

### 5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed. Pressurised container: May burst if heated.

### 5.3. Advice for firefighters

#### 5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistent risk of physical explosion. Take account of environmentally hazardous firefighting water.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective goggles (EN 166). Head/neck protection. Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

#### 6.1.1 Protective equipment for non-emergency personnel

See section 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective goggles (EN 166). Head/neck protection. Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

### 6.2. Environmental precautions

Dam up the liquid spill.

### 6.3. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

### 6.4. Reference to other sections

See section 13.

# NOVELEC

## SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 7.1. Precautions for safe handling

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Observe normal hygiene standards. Remove contaminated clothing immediately.

### 7.2. Conditions for safe storage, including any incompatibilities

#### 7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Meet the legal requirements. Store in a cool area. Keep container in a well-ventilated place. Fireproof storeroom. Protect against frost. Keep out of direct sunlight.

#### 7.2.2 Keep away from:

Heat sources, ignition sources.

#### 7.2.3 Suitable packaging material:

Aerosol.

#### 7.2.4 Non suitable packaging material:

No data available

### 7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 Occupational exposure

##### a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

#### EU

Cyclohexane	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	700 mg/m <sup>3</sup>
n-Hexane	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	20 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	72 mg/m <sup>3</sup>

#### Belgium

Alcool isopropylique	Time-weighted average exposure limit 8 h	200 ppm
	Time-weighted average exposure limit 8 h	500 mg/m <sup>3</sup>
	Short time value	400 ppm
	Short time value	1000 mg/m <sup>3</sup>
Butane, tous isomères: n-butane	Short time value	980 ppm
	Short time value	2370 mg/m <sup>3</sup>
Cyclohexane	Time-weighted average exposure limit 8 h	100 ppm
	Time-weighted average exposure limit 8 h	350 mg/m <sup>3</sup>
Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3)	Time-weighted average exposure limit 8 h	1000 ppm
n-Hexane	Time-weighted average exposure limit 8 h	20 ppm
	Time-weighted average exposure limit 8 h	72 mg/m <sup>3</sup>

#### The Netherlands

Cyclohexaan	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	700 mg/m <sup>3</sup>
	Short time value (Public occupational exposure limit value)	400 ppm
	Short time value (Public occupational exposure limit value)	1400 mg/m <sup>3</sup>
n-Hexaan	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	20 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	72 mg/m <sup>3</sup>
	Short time value (Public occupational exposure limit value)	40 ppm
	Short time value (Public occupational exposure limit value)	144 mg/m <sup>3</sup>

# NOVELEC

## France

Alcool isopropylique	Short time value (VL: Valeur non réglementaire indicative)	400 ppm
	Short time value (VL: Valeur non réglementaire indicative)	980 mg/m <sup>3</sup>
Cyclohexane	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	200 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	700 mg/m <sup>3</sup>
	Short time value (VL: Valeur non réglementaire indicative)	375 ppm
	Short time value (VL: Valeur non réglementaire indicative)	1300 mg/m <sup>3</sup>
	<i>La VLCT n'est pas réglementaire et provient d'une circulaire du ministère chargé du travail.</i>	
Hydrocarbures en C6-C12 (ensemble des)	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1000 mg/m <sup>3</sup> <b>(1)</b>
	Short time value (VL: Valeur non réglementaire indicative)	1500 mg/m <sup>3</sup> <b>(1)</b>
<i>Les valeurs spécifiques fixées pour les hydrocarbures nommément désignés dans la liste restent valable simultanément. Une valeur d'objectif de 500 mg/m<sup>3</sup> avait été prévue par la circulaire du 12 juillet 1993, elle devait être réexaminée en 1995 mais ne l'a pas été.</i>		
n-Butane	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	800 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1900 mg/m <sup>3</sup>
n-Hexane	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	20 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	72 mg/m <sup>3</sup>

(1) vapeurs

## Germany

Butan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm <b>(1)</b>
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m <sup>3</sup> <b>(1)</b>
Cyclohexan	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm <b>(1)</b>
	Time-weighted average exposure limit 8 h (TRGS 900)	700 mg/m <sup>3</sup> <b>(1)</b>
Kohlenwasserstoffgemische, Verwendung als Lösemittel (Lösemittelkohlenwasserstoffe), additiv-frei: C6-C8 Aliphaten	Time-weighted average exposure limit 8 h (TRGS 900)	700 mg/m <sup>3</sup> <b>(2)</b>
n-Hexan	Time-weighted average exposure limit 8 h (TRGS 900)	180 mg/m <sup>3</sup> <b>(3)</b>
	Time-weighted average exposure limit 8 h (TRGS 900)	50 ppm <b>(3)</b>
Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm <b>(1)</b>
	Time-weighted average exposure limit 8 h (TRGS 900)	1800 mg/m <sup>3</sup> <b>(1)</b>
Propan-2-ol	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm <b>(4)</b>
	Time-weighted average exposure limit 8 h (TRGS 900)	500 mg/m <sup>3</sup> <b>(4)</b>

(1) UF: 4 (II)

(2) Vgl. Nummer 2.9 Anwendung und Geltungsbereich der Arbeitsplatzgrenzwerte für Kohlenwasserstoffgemische; UF: 2 (II)

(3) UF: 8 (II)

(4) UF: 2 (II)

# NOVELEC

## Austria

2-Propanol	Tagesmittelwert (MAK)	200 ppm
	Tagesmittelwert (MAK)	500 mg/m <sup>3</sup>
	Kurzzeitwert 15(Miw) 4x (MAK)	800 ppm
	Kurzzeitwert 15(Miw) 4x (MAK)	2000 mg/m <sup>3</sup>
Butan (beide Isomeren): n-Butan (R 600) Isobutan (R 600a)	Tagesmittelwert (MAK)	800 ppm
	Tagesmittelwert (MAK)	1900 mg/m <sup>3</sup>
	Kurzzeitwert 60(Mow) 3x (MAK)	1600 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3800 mg/m <sup>3</sup>
Cyclohexan	Tagesmittelwert (MAK)	200 ppm
	Tagesmittelwert (MAK)	700 mg/m <sup>3</sup>
	Kurzzeitwert 15(Miw) 4x (MAK)	800 ppm
	Kurzzeitwert 15(Miw) 4x (MAK)	2800 mg/m <sup>3</sup>
n-Hexan	Tagesmittelwert (MAK)	20 ppm
	Tagesmittelwert (MAK)	72 mg/m <sup>3</sup>
	Kurzzeitwert 15(Miw) 4x (MAK)	80 ppm
	Kurzzeitwert 15(Miw) 4x (MAK)	288 mg/m <sup>3</sup>
Propan (R 290)	Tagesmittelwert (MAK)	1000 ppm
	Tagesmittelwert (MAK)	1800 mg/m <sup>3</sup>
	Kurzzeitwert 60(Mow) 3x (MAK)	2000 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3600 mg/m <sup>3</sup>

## UK

Butane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	600 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1450 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	750 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1810 mg/m <sup>3</sup>
Cyclohexane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	100 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	350 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	300 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1050 mg/m <sup>3</sup>
n-Hexane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	20 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	72 mg/m <sup>3</sup>
Propan-2-ol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	400 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	999 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1250 mg/m <sup>3</sup>

## Ireland

Aliphatic hydrocarbon gases Alkanes (C1-C3): Propane	<i>Asphx.</i>	
Butane, all isomers	Short time value (Advisory occupational exposure limit values)	1000 ppm
Cyclohexane	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	200 ppm
	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	700 mg/m <sup>3</sup>
Isopropyl alcohol	Time-weighted average exposure limit 8 h (Advisory occupational exposure limit values)	200 ppm
	Short time value (Advisory occupational exposure limit values)	400 ppm
n-Hexane	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	20 ppm
	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	72 mg/m <sup>3</sup>

# NOVELEC

## USA (TLV-ACGIH)

2-propanol	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	200 ppm
	Short time value (TLV - Adopted Value)	400 ppm
Butane, isomers	Short time value (TLV - Adopted Value)	1000 ppm
	<i>Explosion hazard</i>	
Cyclohexane	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	100 ppm
n-Hexane	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	50 ppm
Propane	<i>See Appendix F: Minimal Oxygen Content; Simple asphyxiant, Explosion hazard</i>	

## b) National biological limit values

If limit values are applicable and available these will be listed below.

### Germany

Cyclohexan (1,2-Cyclohexandiol (nach Hydrolyse))	Urin: am schichtende, bei langzeitexposition nach mehreren vorangegangenen schichten	150 mg/g Kreatinin	
Hexan (n-Hexan) (2,5-Hexandion plus 4,5-Dihydroxy-2-Hexanon (nach Hydrolyse))	Urin: expositionsende, bzw. schichtende	5 mg/l	
Propan-2-ol (Aceton)	Urin: expositionsende, bzw. schichtende	25 mg/l	
Propan-2-ol (Aceton)	Vollblut: expositionsende, bzw. schichtende	25 mg/l	

### USA (BEI-ACGIH)

2-Propanol (Acetone)	Urine: end of shift at end of workweek	40 mg/L	Background, Nonspecific
Cyclohexane (1,2-Cyclohexanediol)	Urine: end of shift at end of workweek	50 mg/g creatinine	Nonspecific
n-Hexane (2,5-Hexanedione)	Urine: end of shift	0,5 mg/L	Without hydrolysis

## 8.1.2 Sampling methods

Product name	Test	Number
Cyclohexane (Hydrocarbons, BP36 to 126C)	NIOSH	1500
Cyclohexane	OSHA	1022
Isopropanol (Volatile Organic compounds)	NIOSH	2549
Isopropyl Alcohol (Alcohols I)	NIOSH	1400
Isopropyl Alcohol	NIOSH	3900
Isopropyl Alcohol	OSHA	5001
n-Hexane (Hydrocarbons, BP36 to 126C)	NIOSH	1500
n-Hexane (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
n-Hexane (Volatile Organic compounds)	NIOSH	2549
n-Hexane	NIOSH	3900

## 8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

## 8.1.4 Threshold values

### DNEL/DMEL - Workers

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2085 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	300 mg/kg bw/day	

propan-2-ol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	500 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	888 mg/kg bw/day	

hydrocarbons, C6, isoalkanes, < 5% n-hexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	5306 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	13964 mg/kg bw/day	

n-hexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	75 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	11 mg/kg bw/day	

cyclohexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	700 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	1400 mg/m <sup>3</sup>	
	Long-term local effects inhalation	700 mg/m <sup>3</sup>	
	Acute local effects inhalation	1400 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	2016 mg/kg bw/day	

### DNEL/DMEL - General population

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7 / 24

# NOVELEC

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	447 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	149 mg/kg bw/day	
	Long-term systemic effects oral	149 mg/kg bw/day	

propan-2-ol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	89 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	319 mg/kg bw/day	
	Long-term systemic effects oral	26 mg/kg bw/day	

hydrocarbons, C6, isoalkanes, < 5% n-hexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1131 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	1377 mg/kg bw/day	
	Long-term systemic effects oral	1301 mg/kg bw/day	

n-hexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	16 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	5.3 mg/kg bw/day	
	Long-term systemic effects oral	4 mg/kg bw/day	

cyclohexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	206 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	412 mg/m <sup>3</sup>	
	Long-term local effects inhalation	206 mg/m <sup>3</sup>	
	Acute local effects inhalation	412 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	1186 mg/kg bw/day	
	Long-term systemic effects oral	59.4 mg/kg bw/day	

PNEC

cyclohexane

Compartments	Value	Remark
Fresh water	44.7 µg/l	
Fresh water (intermittent releases)	9 µg/l	
Marine water	4.47 µg/l	
Marine water (intermittent releases)	0.9 µg/l	
STP	3.24 mg/l	
Fresh water sediment	3.6 mg/kg sediment dw	
Marine water sediment	0.36 mg/kg sediment dw	
Soil	0.694 mg/kg soil dw	

## 8.1.5 Control banding

If applicable and available it will be listed below.

## 8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 8.2.1 Appropriate engineering controls

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

### 8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

#### a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

#### b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Thickness	Protection index	Remark
nitrile rubber	> 480 minutes	0.35 mm	Class 6	

#### c) Eye protection:

Protective goggles (EN 166).

#### d) Skin protection:

Head/neck protection. Protective clothing (EN 14605 or EN 13034).

### 8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13



# NOVELEC

## SECTION 9: Physical and chemical properties

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

Physical form	Aerosol
Colour	Colourless
Odour	Characteristic odour
Odour threshold	No data available in the literature
Melting point	Not applicable (aerosol)
Boiling point	-140 °C - 95 °C ; Liquid
Flammability	Extremely flammable aerosol.
Explosion limits	1.1 - 12 vol % ; Propellant
Flash point	Not applicable (aerosol)
Auto-ignition temperature	Not applicable (aerosol)
Decomposition temperature	No data available in the literature
pH	Not applicable (non-soluble in water)
Kinematic viscosity	1 mm <sup>2</sup> /s ; 20 °C ; Liquid
Dynamic viscosity	1 mPa.s ; 20 °C ; Liquid
Solubility	Water ; insoluble
Log Kow	Not applicable (mixture)
Vapour pressure	8530 hPa ; 20 °C
Absolute density	731 kg/m <sup>3</sup> ; 20 °C ; Liquid
Relative density	0.73 ; 20 °C ; Liquid
Relative vapour density	No data available in the literature
Particle size	Not applicable (liquid)

### 9.2. Other information

Evaporation rate	7 ; Butyl acetate
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

#### Precautionary measures

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

### 10.5. Incompatible materials

No data available.

### 10.6. Hazardous decomposition products

Upon combustion: CO and CO<sub>2</sub> are formed.

## SECTION 11: Toxicological information

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

#### 11.1.1 Test results

#### Acute toxicity

#### NOVELEC

No (test) data on the mixture available

Judgement is based on the relevant ingredients  
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		> 5840 mg/kg bw		Rat (male / female)	Read-across	
Dermal	LD50		2800 mg/kg bw - 3100 mg/kg bw	24 h	Rat (male / female)	Read-across	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 23.3 mg/l air	4 h	Rat (male / female)	Read-across	

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9 / 24

# NOVELEC

## propan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	5840 mg/kg bw		Rat	Experimental value	
Dermal	LD50	Equivalent to OECD 402	16400 ml/kg bw	24 h	Rabbit	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 10000 ppm	6 h	Rat (male / female)	Experimental value	

## hydrocarbons, C6, isoalkanes, < 5% n-hexane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 16750 mg/kg bw		Rat (male)	Read-across	
Dermal	LD50	Equivalent to OECD 402	> 3350 mg/kg bw	4 h	Rabbit (male)	Read-across	
Inhalation (vapours)	LC50	Equivalent to OECD 403	259.35 mg/l	4 h	Rat (male)	Read-across	

## n-hexane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	16000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 3350 mg/kg bw	4 h	Rabbit (male)	Read-across	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 17.6 mg/l air	24 h	Rat (male)	Experimental value	

## cyclohexane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 5000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 2000 mg/kg bw		Rabbit (male / female)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 32.88 mg/l	4 h	Rat (male / female)	Experimental value	

## Conclusion

Not classified for acute toxicity

## Corrosion/irritation

### NOVELEC

No (test) data on the mixture available

Classification is based on the relevant ingredients

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	EPA OPPTS 870.2400		24; 48; 72 hours	Rabbit	Read-across	Single treatment without rinsing
Skin	Irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Read-across	

## propan-2-ol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	Equivalent to OECD 405		1; 2; 3; 4; 7; 10; 14 days	Rabbit	Experimental value	Single treatment without rinsing
Skin	Not irritating		4 h	4; 24; 48; 72 hours	Rabbit	Experimental value	

## hydrocarbons, C6, isoalkanes, < 5% n-hexane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Read-across	Single treatment
Skin	Not irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Read-across	
Skin	Irritating; category 2					Expert judgement	

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10 / 24

# NOVELEC

## n-hexane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Read-across	Single treatment
Skin	Irritating	Equivalent to OECD 404	24 h	24; 72 hours	Rabbit	Read-across	

## cyclohexane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Slightly irritating	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	Equivalent to EU Method B.4	4 h	24; 48; 72 hours	Rabbit	Experimental value	
Skin	Irritating; category 2					Annex VI	

### Conclusion

Causes skin irritation.  
Causes serious eye irritation.  
Not classified as irritating to the respiratory system

### **Respiratory or skin sensitisation**

#### NOVELEC

No (test) data on the mixture available  
Judgement is based on the relevant ingredients  
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406			Guinea pig (male / female)	Read-across	

#### propan-2-ol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal	Not sensitizing	OECD 406			Guinea pig (male / female)	Experimental value	

#### hydrocarbons, C6, isoalkanes, < 5% n-hexane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal (on the ears)	Not sensitizing	Equivalent to OECD 429			Mouse (male / female)	Read-across	

#### n-hexane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal (on the ears)	Not sensitizing	Equivalent to OECD 429			Mouse	Read-across	

#### cyclohexane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	EU Method B.6			Guinea pig (male / female)	Experimental value	

### Conclusion

Not classified as sensitizing for skin  
Not classified as sensitizing for inhalation

### **Specific target organ toxicity**

#### NOVELEC

No (test) data on the mixture available  
Classification is based on the relevant ingredients

# NOVELEC

## hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation (vapours)	NOAEC	Subchronic toxicity test	12470 mg/m <sup>3</sup> air	Central nervous system (no effect)	16 weeks (daily)	Rat (male)	Read-across	
Inhalation (vapours)	NOAEL	Equivalent to OECD 413	12350 mg/m <sup>3</sup> air	No adverse systemic effects	26 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Inhalation (vapours)	LOAEL	Equivalent to OECD 413	1650 mg/m <sup>3</sup> air	Central nervous system (cns depression)	26 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

## propan-2-ol

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral							Data waiving	
Dermal							Data waiving	
Inhalation (vapours)	NOAEC	OECD 451	5000 ppm	No adverse systemic effects	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Inhalation (vapours)	Dose level	Equivalent to OECD 403	5000 ppm	Central nervous system (drowsiness, dizziness)	6 h	Rat (male / female)	Experimental value	

## hydrocarbons, C6, isoalkanes, < 5% n-hexane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral							Data waiving	
Dermal							Data waiving	
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	10504 mg/m <sup>3</sup> air	No effect	13 weeks (6h / day, 5 days / week)	Rat (male)	Read-across	
Inhalation (vapours)	LOAEC	Equivalent to OECD 413	31652 mg/m <sup>3</sup> air	Liver; kidney (organ damage)	13 weeks (6h / day, 5 days / week)	Rat (male)	Read-across	

## n-hexane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	OECD 408	40 mg/kg bw/day	No effect	13 weeks (daily)	Rat (male / female)	Experimental value	
Oral (stomach tube)	LOAEL	OECD 408	200 mg/kg bw/day	Liver; kidney (weight gain)	13 weeks (daily)	Rat (male / female)	Experimental value	
Dermal							Data waiving	
Inhalation (vapours)	LOAEC	Subchronic toxicity test	3000 ppm	Central nervous system (neurotoxic effects)	16 weeks (daily)	Rat (male)	Experimental value	
Inhalation (vapours)			STOT SE cat.3	Drowsiness, dizziness			Annex VI	

## cyclohexane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral							Data waiving	
Dermal							Data waiving	
Inhalation (vapours)	NOAEC	EPA OPPTS 870.3465	7000 ppm	No adverse systemic effects	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Inhalation (vapours)	NOAEC	EPA OPPTS 870.3465	500 ppm	Central nervous system (no effect)	6 h	Rat (male / female)	Experimental value	

### Conclusion

May cause drowsiness or dizziness.  
Not classified for subchronic toxicity

### Mutagenicity (in vitro)

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12 / 24

# NOVELEC

## NOVELEC

No (test) data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Rat liver cells	No effect	Read-across	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Read-across	

## propan-2-ol

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S. typhimurium)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Chinese hamster ovary (CHO)	No effect	Experimental value	

## hydrocarbons, C6, isoalkanes, < 5% n-hexane

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S. typhimurium)	No effect	Read-across	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Read-across	

## n-hexane

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S. typhimurium)	No effect	Experimental value	

## cyclohexane

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S. typhimurium)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value	

## Mutagenicity (in vivo)

### NOVELEC

No (test) data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (vapours))	Equivalent to OECD 478	8 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect	Read-across	

## propan-2-ol

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Intraperitoneal)	Equivalent to OECD 474		Mouse (male / female)	No effect	Experimental value	Single intraperitoneal injection

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13 / 24

# NOVELEC

hydrocarbons, C6, isoalkanes, < 5% n-hexane

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (vapours))	Equivalent to OECD 475	5 days (6h / day)	Rat (male / female)	Bone marrow (no effect)	Read-across	

n-hexane

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Oral (stomach tube))	OECD 475	13 weeks (daily)	Rat (male / female)	No effect	Experimental value	

cyclohexane

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (vapours))	Equivalent to OECD 475	5 days (6h / day)	Rat (male / female)	Bone marrow (no effect)	Experimental value	

## Conclusion

Not classified for mutagenic or genotoxic toxicity

## Carcinogenicity

### NOVELEC

No (test) data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Unknown				No carcinogenic effect			Weight of evidence	

propan-2-ol

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation (vapours)	NOEL	OECD 451	5000 ppm	No carcinogenic effect	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

hydrocarbons, C6, isoalkanes, < 5% n-hexane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation (vapours)	NOAEC	Equivalent to OECD 451	9016 ppm	No carcinogenic effect	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across	

n-hexane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation (vapours)	NOAEC	Equivalent to OECD 451	3000 ppm	No carcinogenic effect	104 weeks (6h / day, 5 days / week)	Mouse (female)	Read-across	
Inhalation (vapours)	LOAEC	Equivalent to OECD 451	9018 ppm	Liver (tumor formation)	104 weeks (6h / day, 5 days / week)	Mouse (female)	Read-across	
Inhalation (vapours)	NOAEC	Equivalent to OECD 451	9018 ppm	No carcinogenic effect	104 weeks (6h / day, 5 days / week)	Mouse (male)	Read-across	

## Conclusion

Not classified for carcinogenicity

## Reproductive toxicity

### NOVELEC

No (test) data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEC	Developmental toxicity study	1200 ppm	10 days (6h / day)	Rat	No effect	Read-across	
Maternal toxicity (Inhalation (vapours))	NOAEC	Developmental toxicity study	1200 ppm	10 days (6h / day)	Rat	No effect	Read-across	

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14 / 24

# NOVELEC

## propan-2-ol

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	400 mg/kg bw/day	10 day(s)	Rat	Foetus (no effect)	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	400 mg/kg bw/day	10 day(s)	Rat	No effect	Experimental value	
Effects on fertility (Oral (drinking water))	NOAEL	Equivalent to OECD 415	853 mg/kg bw/day		Rat (male / female)	No effect	Experimental value	

## hydrocarbons, C6, isoalkanes, < 5% n-hexane

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEC	Equivalent to OECD 414	9000 ppm	10 days (gestation, daily)	Rat	No effect	Read-across	
Maternal toxicity (Inhalation (vapours))	NOAEC	Equivalent to OECD 414	3000 mg/kg bw/day	10 days (gestation, daily)	Rat	No effect	Read-across	
Effects on fertility (Inhalation (vapours))	NOAEC	Equivalent to OECD 416	9000 ppm		Rat (male / female)	No effect	Read-across	

## n-hexane

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEC	Developmental toxicity study	200 ppm	15 days (gestation, daily)	Rat	Foetus (no effect)	Experimental value	
Developmental toxicity (Inhalation (vapours))	LOAEC		1000 ppm	15 days (gestation, daily)	Rat	Foetus (reduced fetal bodyweights)	Experimental value	
Maternal toxicity (Inhalation (vapours))	NOAEC	Developmental toxicity study	200 ppm	15 days (gestation, daily)	Rat	No effect	Experimental value	
Maternal toxicity (Inhalation (vapours))	LOAEC	Developmental toxicity study	1000 ppm	15 days (gestation, daily)	Rat	Weight reduction	Experimental value	
Effects on fertility (Inhalation (vapours))	NOAEC	Equivalent to OECD 416	9000 ppm	≥ 13 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect	Experimental value	
Effects on fertility			category 2			Adverse effects on fertility	Annex VI	

## cyclohexane

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEC	Equivalent to OECD 414	7000 ppm	10 days (6h / day)	Rat	No effect	Experimental value	
Maternal toxicity (Inhalation (vapours))	NOAEC	Equivalent to OECD 414	500 ppm - 2000 ppm	10 days (6h / day)	Rat	No effect	Experimental value	
Effects on fertility (Inhalation (vapours))	NOAEC	Equivalent to OECD 416	500 ppm - 2000 ppm	> 11 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect	Experimental value	

## Conclusion

Not classified for reprotoxic or developmental toxicity

## Aspiration hazard

### NOVELEC

Judgement is based on the relevant ingredients  
Not classified for aspiration toxicity

## Toxicity other effects

### NOVELEC

No (test) data on the mixture available

## hydrocarbons, C6, isoalkanes, < 5% n-hexane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation	NOAEC	Equivalent to OECD 424	9000 ppm	Central nervous system (overall effects)	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

## Chronic effects from short and long-term exposure

### NOVELEC

No effects known.

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15 / 24

# NOVELEC

## 11.2. Information on other hazards

No evidence of endocrine disrupting properties

## SECTION 12: Ecological information

### 12.1. Toxicity

NOVELEC

No (test)data on the mixture available

Classification is based on the relevant ingredients

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	> 13.4 mg/l WAF	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EL50	OECD 202	3.0 mg/l WAF	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EL50	OECD 201	10 mg/l WAF - 30 mg/l WAF	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; Nominal concentration
	NOELR	OECD 201	10 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; Nominal concentration
Long-term toxicity fish	NOELR		1.5 mg/l	28	Oncorhynchus mykiss		Fresh water	QSAR; Nominal concentration
Toxicity aquatic micro-organisms	EL50		27 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Growth rate

propan-2-ol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	9640 mg/l - 10000 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	LC50	Equivalent to OECD 202	> 10000 mg/l	24 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	Toxicity threshold		1800 mg/l	7 day(s)	Scenedesmus quadricauda	Static system	Fresh water	Experimental value; Toxicity test
Long-term toxicity fish	NOELR	Petrotox computer model	> 1000 mg/l	28 day(s)	Brachydanio rerio			Estimated value
Long-term toxicity aquatic crustacea	NOEC		141 mg/l	16 day(s)	Daphnia magna		Fresh water	Experimental value; Growth
Toxicity aquatic micro-organisms	Toxicity threshold	Equivalent to DIN 38412/8	1050 mg/l	16 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Toxicity test
	EC50	ISO 8192	41676 mg/l	30 minutes	Activated sludge			Experimental value

hydrocarbons, C6, isoalkanes, < 5% n-hexane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50		18 mg/l	96 h	Oncorhynchus mykiss		Fresh water	QSAR; Nominal concentration
Acute toxicity crustacea	EL50		32 mg/l	48 h	Daphnia magna		Fresh water	QSAR; Nominal concentration
Toxicity algae and other aquatic plants	EL50		14 mg/l	72 h	Pseudokirchneriella subcapitata		Fresh water	QSAR; Growth rate
	NOELR		3.0 mg/l	72 h	Pseudokirchneriella subcapitata		Fresh water	QSAR; Growth rate
Long-term toxicity fish	NOELR		4.1 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Nominal concentration
Long-term toxicity aquatic crustacea	NOELR		7.1 mg/l	21 day(s)	Daphnia magna		Fresh water	QSAR; Reproduction
Toxicity aquatic micro-organisms	EL50		71 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Nominal concentration

Classification of this substance is debatable as it does not correspond to the conclusion from the test

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16 / 24



# NOVELEC

## n-hexane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	12 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Estimated value; Lethal
Acute toxicity crustacea	EL50	OECD 202	3 mg/l	48 h	Daphnia magna	Static system	Fresh water	Read-across; Nominal concentration
Toxicity algae and other aquatic plants	EL50		9.285 mg/l	72 h	Pseudokirchneriella subcapitata		Fresh water	Estimated value; Growth rate
	NOELR		2.077 mg/l	72 h	Pseudokirchneriella subcapitata		Fresh water	Estimated value; Growth rate
Long-term toxicity fish	NOELR		2.8 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	Estimated value; Growth rate
Long-term toxicity aquatic crustacea	NOELR		4.888 mg/l	21 day(s)	Daphnia magna		Fresh water	Estimated value; Reproduction
Toxicity aquatic micro-organisms	EL50		48.39 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Growth

Classification of this substance is debatable as it does not correspond to the conclusion from the test

## cyclohexane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	4.5 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Measured concentration
Acute toxicity crustacea	EC50	Equivalent to OECD 202	0.9 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	EC50	Equivalent to OECD 201	9.3 mg/l	72 h	Pseudokirchneriella subcapitata			Experimental value; Growth rate
Toxicity aquatic micro-organisms	IC50		29 mg/l	15 h	Aerobic micro-organisms			Experimental value; Oxygen consumption

## Conclusion

Toxic to aquatic life with long lasting effects.

## **12.2. Persistence and degradability**

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

### **Biodegradation water**

Method	Value	Duration	Value determination
OECD 301F	98 %; GLP	28 day(s)	Experimental value

### propan-2-ol

### **Biodegradation water**

Method	Value	Duration	Value determination
EU Method C.5	53 %; Oxygen consumption	5 day(s)	Experimental value

### **Phototransformation air (DT50 air)**

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	17.668 h	1.5E6 /cm <sup>3</sup>	Calculated value

### hydrocarbons, C6, isoalkanes, < 5% n-hexane

### **Biodegradation water**

Method	Value	Duration	Value determination
OECD 301F	98 %; GLP	28 day(s)	Read-across

### n-hexane

### **Biodegradation water**

Method	Value	Duration	Value determination
OECD 301F	98 %; Oxygen consumption	28 day(s)	Read-across

### **Phototransformation air (DT50 air)**

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	23.5 h	1.5E6 /cm <sup>3</sup>	Calculated value

### cyclohexane

### **Biodegradation water**

Method	Value	Duration	Value determination
OECD 301F	77 %; Oxygen consumption	28 day(s)	Experimental value

### **Phototransformation air (DT50 air)**

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	15 h	1.5E6 /cm <sup>3</sup>	QSAR

## Conclusion

### **Water**

Reason for revision: 8; 12; 15

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BIG number: 44641

17 / 24

# NOVELEC

Does not contain any not readily biodegradable component(s)

## 12.3. Bioaccumulative potential

### NOVELEC

#### Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

#### Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		3.1 - 3.8	20 °C	QSAR

propan-2-ol

#### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	1015			Estimated value

#### Log Kow

Method	Remark	Value	Temperature	Value determination
		0.05	25 °C	Weight of evidence approach

hydrocarbons, C6, isoalkanes, < 5% n-hexane

#### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		501		Pimephales promelas	Calculated value

#### Log Kow

Method	Remark	Value	Temperature	Value determination
Equivalent to OECD 107		3.6	20 °C	Read-across

n-hexane

#### Log Kow

Method	Remark	Value	Temperature	Value determination
Equivalent to OECD 107		4	20 °C	Experimental value

cyclohexane

#### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		167 l/kg; Fresh weight		Pimephales promelas	QSAR

#### Log Kow

Method	Remark	Value	Temperature	Value determination
		3.4	25 °C	Experimental value

### Conclusion

Contains bioaccumulative component(s)

## 12.4. Mobility in soil

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

#### (log) Koc

Parameter	Method	Value	Value determination
Koc		386 - 1453	QSAR
log Koc		2.6 - 3.2	Calculated value

propan-2-ol

#### (log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.185 - 0.541	Calculated value

hydrocarbons, C6, isoalkanes, < 5% n-hexane

#### (log) Koc

Parameter	Method	Value	Value determination
log Koc		3.3	Calculated value

#### Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	94 %	0 %	2.1 %	0.5 %	3.8 %	Calculated value

n-hexane

#### (log) Koc

Parameter	Method	Value	Value determination
log Koc		3.34	QSAR

cyclohexane

#### (log) Koc

Parameter	Method	Value	Value determination
log Koc		2.89	QSAR

### Conclusion

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18 / 24

# NOVELEC

Contains component(s) with potential for mobility in the soil  
Contains component(s) that adsorb(s) into the soil

## 12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

## 12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

## 12.7. Other adverse effects

### NOVELEC

#### Greenhouse gases

Contains component(s) included in the list of substances which may contribute to the greenhouse effect (IPCC)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

#### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

#### hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

##### Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

##### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

#### propan-2-ol

##### Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

##### Groundwater

Groundwater pollutant

#### hydrocarbons, C6, isoalkanes, < 5% n-hexane

##### Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

##### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

#### n-hexane

##### Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

##### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

#### cyclohexane

##### Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

##### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

##### Groundwater

Groundwater pollutant

## SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 13.1. Waste treatment methods

#### 13.1.1 Provisions relating to waste

##### European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

20 01 29\* (separately collected fractions (except 15 01): detergents containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

#### 13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste.

Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Specific treatment. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

#### 13.1.3 Packaging/Container

##### European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

## SECTION 14: Transport information

### Road (ADR)

14.1. UN number or ID number

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19 / 24

# NOVELEC

UN number	1950
<b>14.2. UN proper shipping name</b>	
Proper shipping name	aerosols
<b>14.3. Transport hazard class(es)</b>	
Hazard identification number	
Class	2
Classification code	5F
<b>14.4. Packing group</b>	
Packing group	
Labels	2.1
<b>14.5. Environmental hazards</b>	
Environmentally hazardous substance mark	yes
<b>14.6. Special precautions for user</b>	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).

## Rail (RID)

<b>14.1. UN number or ID number</b>	
UN number	1950
<b>14.2. UN proper shipping name</b>	
Proper shipping name	aerosols
<b>14.3. Transport hazard class(es)</b>	
Hazard identification number	23
Class	2
Classification code	5F
<b>14.4. Packing group</b>	
Packing group	
Labels	2.1
<b>14.5. Environmental hazards</b>	
Environmentally hazardous substance mark	yes
<b>14.6. Special precautions for user</b>	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).

## Inland waterways (ADN)

<b>14.1. UN number or ID number</b>	
UN number/ID number	1950
<b>14.2. UN proper shipping name</b>	
Proper shipping name	aerosols
<b>14.3. Transport hazard class(es)</b>	
Class	2
Classification code	5F
<b>14.4. Packing group</b>	
Packing group	
Labels	2.1
<b>14.5. Environmental hazards</b>	
Environmentally hazardous substance mark	yes
<b>14.6. Special precautions for user</b>	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).

## Sea (IMDG/IMSBC)

<b>14.1. UN number or ID number</b>	
UN number	1950
<b>14.2. UN proper shipping name</b>	
Proper shipping name	aerosols
<b>14.3. Transport hazard class(es)</b>	
Class	2.1
<b>14.4. Packing group</b>	

Reason for revision: 8; 12; 15

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BIG number: 44641

20 / 24

# NOVELEC

Packing group	
Labels	2.1
<b>14.5. Environmental hazards</b>	
Marine pollutant	P
Environmentally hazardous substance mark	yes
<b>14.6. Special precautions for user</b>	
Special provisions	190
Special provisions	277
Special provisions	327
Special provisions	344
Special provisions	381
Special provisions	63
Special provisions	959
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).
<b>14.7. Maritime transport in bulk according to IMO instruments</b>	
Annex II of MARPOL 73/78	Not applicable

## Air (ICAO-TI/IATA-DGR)

<b>14.1. UN number or ID number</b>	
UN number/ID number	1950
<b>14.2. UN proper shipping name</b>	
Proper shipping name	aerosols, flammable
<b>14.3. Transport hazard class(es)</b>	
Class	2.1
<b>14.4. Packing group</b>	
Packing group	
Labels	2.1
<b>14.5. Environmental hazards</b>	
Environmentally hazardous substance mark	yes
<b>14.6. Special precautions for user</b>	
Special provisions	A145
Special provisions	A167
Special provisions	A802
<b>Passenger and cargo transport</b>	
Limited quantities: maximum net quantity per packaging	30 kg G

## SECTION 15: Regulatory information

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

#### European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
100 %	
729 g/l	

Directive 2012/18/EU (Seveso III)

Threshold values under normal circumstances

Substance or category	Low tier (tonnes)	Top tier (tonnes)	Group	For this substance or mixture the summation rule has to be applied for:
E2 Hazardous to the Aquatic Environment in Category Chronic 2	200	500	None	Eco-toxicity
P3b FLAMMABLE AEROSOLS	5000 (net)	50000 (net)	None	Flammability

Ingredients according to Regulation (EC) No 648/2004 and amendments

≥30% aliphatic hydrocarbons

REACH Candidate list

Does not contain component(s) included in candidate list of substances of very high concern (SVHC) for authorisation (Article 59 of Regulation (EC) No 1907/2006)

REACH Annex XIV - Authorisation

Does not contain component(s) included in Annex XIV of Regulation (EC) No 1907/2006: list of substances subject to authorisation

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Liquid substances or mixtures fulfilling the criteria for any of the following hazard	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different

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Date of revision: 2025-01-10

Revision number: 0501

BIG number: 44641

21 / 24

# NOVELEC

<ul style="list-style-type: none"> <li>· propan-2-ol</li> <li>· hydrocarbons, C6, isoalkanes, &lt; 5% n-hexane</li> <li>· n-hexane</li> <li>· cyclohexane</li> </ul>	<p>classes or categories set out in Annex I to Regulation (EC) No 1272/2008:</p> <p>(a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;</p> <p>(b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;</p> <p>(c) hazard class 4.1;</p> <p>(d) hazard class 5.1.</p>	<p>phases, for example in ornamental lamps and ashtrays,</p> <ul style="list-style-type: none"> <li>— tricks and jokes,</li> <li>— games for one or more participants, or any article intended to be used as such, even with ornamental aspects,</li> </ul> <p>2. Articles not complying with paragraph 1 shall not be placed on the market.</p> <p>3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:</p> <ul style="list-style-type: none"> <li>— can be used as fuel in decorative oil lamps for supply to the general public, and,</li> <li>— present an aspiration hazard and are labelled with H304,</li> </ul> <p>4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).</p> <p>5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:</p> <p>a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: “Keep lamps filled with this liquid out of the reach of children”; and, by 1 December 2010, “Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage”;</p> <p>b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: “Just a sip of grill lighter may lead to life threatening lung damage”;</p> <p>c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.</p>
<ul style="list-style-type: none"> <li>· hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</li> <li>· propan-2-ol</li> <li>· hydrocarbons, C6, isoalkanes, &lt; 5% n-hexane</li> <li>· n-hexane</li> <li>· cyclohexane</li> </ul>	<p>Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.</p>	<p>1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:</p> <ul style="list-style-type: none"> <li>— metallic glitter intended mainly for decoration,</li> <li>— artificial snow and frost,</li> <li>— “whoopee” cushions,</li> <li>— silly string aerosols,</li> <li>— imitation excrement,</li> <li>— horns for parties,</li> <li>— decorative flakes and foams,</li> <li>— artificial cobwebs,</li> <li>— stink bombs.</li> </ul> <p>2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:</p> <p>“For professional users only”.</p> <p>3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC.</p> <p>4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.</p>
<ul style="list-style-type: none"> <li>· cyclohexane</li> </ul>	<p>Cyclohexane</p>	<p>1. Shall not be placed on the market for the first time after 27 June 2010, for supply to the general public, as a constituent of neoprene-based contact adhesives in concentrations equal to or greater than 0,1 % by weight in package sizes greater than 350 g.</p> <p>2. Neoprene-based contact adhesives containing cyclohexane and not conforming to paragraph 1 shall not be placed on the market for supply to the general public after 27 December 2010.</p> <p>3. Without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that neoprene-based contact adhesives containing cyclohexane in concentrations equal to or greater than 0,1 % by weight that are placed on the market for supply to the general public after 27 December 2010 are visibly, legibly and indelibly marked as follows:</p> <ul style="list-style-type: none"> <li>— This product is not to be used under conditions of poor ventilation.</li> <li>— This product is not to be used for carpet laying.”</li> </ul>
<ul style="list-style-type: none"> <li>· propan-2-ol</li> <li>· n-hexane</li> <li>· cyclohexane</li> </ul>	<p>Substances falling within one or more of the following points:</p> <p>(a) substances classified as any of the following in Part 3 of Annex VI to Regulation (EC) No 1272/2008:</p> <ul style="list-style-type: none"> <li>— carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, but excluding any such substances classified due to effects only following exposure by inhalation</li> <li>— reproductive toxicant category 1A, 1B or 2 but excluding any such substances classified due to effects only following exposure by inhalation</li> <li>— skin sensitiser category 1, 1A or 1B</li> <li>— skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2</li> <li>— serious eye damage category 1 or eye irritant category 2</li> </ul> <p>(b) substances listed in Annex II to Regulation (EC) No 1223/2009 of the European Parliament and of the Council</p> <p>(c) substances listed in Annex IV to Regulation (EC) No 1223/2009 for which a condition is specified in at least one of the</p>	<p>Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/2081</p>

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Revision number: 0501

BIG number: 44641

22 / 24

# NOVELEC

columns g, h and i of the table in that Annex (d) substances listed in Appendix 13 to this Annex.  
The ancillary requirements in paragraphs 7 and 8 of column 2 of this entry apply to all mixtures for use for tattooing purposes, whether or not they contain a substance falling within points (a) to (d) of this column of this entry.

## National legislation Belgium

### NOVELEC

No data available

### propan-2-ol

Agents cancérogènes, mutagènes et reprotoxiques et aux agents possédant des propriétés perturbant le système endocrinien (Code du bien-être au travail, Livre VI, titre 2)	alcool isopropylique; VI.2.2.; Liste des procédés au cours desquels une substance ou un mélange se dégage; Procédé à l'acide fort dans la fabrication d'alcool isopropylique.
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## National legislation The Netherlands

### NOVELEC

Waterbezwaarlijkheid	B (2); Algemene Beoordelingsmethodiek (ABM)
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### n-hexane

SZW - Lijst van voor de voortplanting giftige stoffen (vruchtbaarheid)	n-hexaan; Opgenomen in SZW-lijst van voor de voortplanting giftige stoffen (vruchtbaarheid); 2
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## National legislation France

### NOVELEC

No data available

### hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Catégorie cancérogène	Hydrocarbures en C6-C12 (ensemble des)
Catégorie mutagène	Hydrocarbures en C6-C12 (ensemble des)

### n-hexane

Catégorie toxique pour la reproduction	n-Hexane; R2
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## National legislation Germany

### NOVELEC

Lagerklasse (TRGS510)	2B: Aerosolpackungen und Feuerzeuge
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WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
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### hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

TA-Luft	5.2.5
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### propan-2-ol

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Propan-2-ol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

### hydrocarbons, C6, isoalkanes, < 5% n-hexane

TA-Luft	5.2.5/I
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### n-hexane

TA-Luft	5.2.5/I
TRGS900 - Risiko der Fruchtschädigung	n-Hexan; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

### cyclohexane

TA-Luft	5.2.5
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## National legislation Austria

### NOVELEC

No data available

### n-hexane

Fortpflanzungsgefährdend [Beeinträchtigung der Fortpflanzungsfähigkeit (Fruchtbarkeit)]	n-Hexan; f
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## National legislation United Kingdom

### NOVELEC

No data available

## National legislation Ireland

### NOVELEC

No data available

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Revision number: 0501

BIG number: 44641

23 / 24

# NOVELEC

## propan-2-ol

Skin resorption	Isopropyl alcohol; Skin
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## n-hexane

Skin resorption	n-Hexane; Skin
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### Other relevant data

#### NOVELEC

No data available

## propan-2-ol

IARC - classification	3; Isopropanol
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TLV - Carcinogen	2-propanol; A4
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## n-hexane

TLV - Skin absorption	n-Hexane; Skin; Danger of cutaneous absorption
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## 15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.

## SECTION 16: Other information

### Full text of any H- and EUH-statements referred to under section 3:

- H220 Extremely flammable gas.
- H222 Extremely flammable aerosol.
- H225 Highly flammable liquid and vapour.
- H229 Pressurised container: May burst if heated.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H361f Suspected of damaging fertility.
- H373 May cause damage to organs (nervous system) through prolonged or repeated exposure if inhaled.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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24 / 24