

<b>SAFETY DATA SHEET</b>	Page : 1 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
	Supersedes : 15/07/2019
<b>D2190 (50%)</b>	



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

### 1.1. Product identifier

Product form : Mixture  
Trade name/designation : D2190 (50%)  
UFI : ETYJ-7TSF-2H6M-FYU9

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Coolant

#### 1.2.2. Uses advised against

No data available

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

#### Supplier

SOLVENTIS EUROPE NV  
Sint Maartenstraat 1  
2000 Antwerpen - BELGIUM  
T +32 3 205 16 66  
[sds@solventis.net](mailto:sds@solventis.net)

#### Other

Solventis Ltd  
Compton House,  
The Guildway,  
Old Portsmouth Road,  
Guildford  
GU3 1LR Surrey - UK  
T +44 1483 203224 - F +44 1483 205040  
[sds@solventis.net](mailto:sds@solventis.net)

### 1.4. Emergency telephone number

Emergency number : +32 (0)3 575 55 55  
This telephone number is available 24 hours per day, 7 days per week.

Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	+353 1 809 21 66 (public, 8am - 10pm, 7/7) +353 01 809 2566 (Professionals, 24/7)
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, 24/7, healthcare professionals only)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Acute Tox. 4 (Oral) H302  
Eye Irrit. 2 H319  
STOT RE 2 H373

Full text of H statements : see section 16

<b>SAFETY DATA SHEET</b>	Page : 2 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
	Supersedes : 15/07/2019
<b>D2190 (50%)</b>	



## 2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word :

Warning

Hazard statements (CLP) :

H302 - Harmful if swallowed.  
H319 - Causes serious eye irritation.  
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

Precautionary statements (CLP) :

P260 - Do not breathe vapours, spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P301+P312 - IF SWALLOWED: Call a POISON CENTER, a doctor if you feel unwell.  
P330 - Rinse mouth.  
P501 - Dispose of contents and container to a hazardous or special waste collection point.

## 2.3. Other hazards

Other hazards :

Results of PBT and vPvB assessment : Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanediol; ethylene glycol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index) 603-027-00-1 (REACH-no) 01-2119456816-28-XXXX	40 - 50	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Potassium 2-Ethylhexanoate	(CAS-No.) 3164-85-0 (EC-No.) 221-625-7 (EC Index) - (REACH-no) 01-2119980714-29	0,65 - 2,275	Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361d

Full text of H-statements: see section 16

<b>SAFETY DATA SHEET</b>	Page : 3 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
	Supersedes : 15/07/2019
<b>D2190 (50%)</b>	



## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Additional advice	: First aider: Pay attention to self-protection!. Concerning personal protective equipment to use, see section 8. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the doctor in attendance. Treat symptomatically.
Inhalation	: Remove person to fresh air and keep comfortable for breathing. In case of doubt or persistent symptoms, consult always a physician.
Skin contact	: Take off contaminated clothing. Gently wash with plenty of soap and water. In case of doubt or persistent symptoms, consult always a physician.
Eyes contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
Ingestion	: Rinse mouth thoroughly with water. Get medical advice/attention.

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

Inhalation	: May cause respiratory irritation. The following symptoms may occur: Cough. Dizziness. Headache.
Skin contact	: May be absorbed through the skin. Repeated exposure may cause skin dryness or cracking.
Eyes contact	: Causes serious eye irritation. The following symptoms may occur: erythema (redness). Pain.
Ingestion	: Harmful if swallowed. Weakness. The following symptoms may occur: Vomiting. Unconsciousness. Abdominal pain. Nausea.
Chronic symptoms	: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

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

Not applicable.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Alcohol resistant foam. dry extinguishing powder. Carbon dioxide.
Unsuitable extinguishing media	: Strong water jet.

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

Specific hazards	: Provide adequate ventilation. Evacuate personnel to a safe area. Hazardous decomposition products COx. Do not allow run-off from fire-fighting to enter drains or water courses.
------------------	--

### 5.3. Advice for firefighters

Firefighting instructions	: Special protective equipment for firefighters. In case of fire: Wear self-contained breathing apparatus. Use water spray or fog for cooling exposed containers. Do not allow run-off from fire-fighting to enter drains or water courses. Evacuate personnel to a safe area.
---------------------------	--

<b>SAFETY DATA SHEET</b>	Page : 4 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
<b>D2190 (50%)</b>	Supersedes : 15/07/2019



## SECTION 6: Accidental release measures

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

#### **6.1.1. For non-emergency personnel**

For non-emergency personnel : Evacuate personnel to a safe area. Stay upwind/keep distance from source. Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothing.

#### **6.1.2. For emergency responders**

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

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

Methods for cleaning up : Stop leak if safe to do so. Dam up. Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite or powdered limestone. Keep in suitable, closed containers for disposal. Recover large spills by pumping (use an explosion proof or hand pump). Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases. Dispose of contaminated materials in accordance with current regulations.

### **6.4. Reference to other sections**

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

## SECTION 7: Handling and storage

### **7.1. Precautions for safe handling**

Precautions for safe handling : Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with combustibles... See also section 10. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Do not allow to enter into surface water or drains. Obtain special instructions before use. (Do not handle until all safety precautions have been read and understood.).

Hygiene measures : Keep good industrial hygiene. Wash hands immediately after handling the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Separate working clothes from town clothes. Take off contaminated clothing. Wash contaminated clothing before reuse.

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

Technical measures : Store in a dry, cool and well-ventilated place. Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity. Bund storage facilities to prevent soil and water pollution in the event of spillage.

Packaging materials : Keep only in the original container.

### **7.3. Specific end use(s)**

Coolant.

## SECTION 8: Exposure controls/personal protection

### **8.1. Control parameters**

# SAFETY DATA SHEET

Page : 5 / 15

Revision nr : 2.0

Issue date : 11/12/2019

**D2190 (50%)**

Supersedes : 15/07/2019



## ethanediol; ethylene glycol (107-21-1)

EU	IOELV TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
EU	IOELV STEL (ppm)	40 ppm
EU	Notes	Possibility of significant uptake through the skin
Austria	MAK (mg/m <sup>3</sup> )	26 mg/m <sup>3</sup>
Austria	MAK (ppm)	10 ppm
Austria	MAK Short time value (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Austria	MAK Short time value (ppm)	20 ppm
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Bulgaria	OEL TWA (ppm)	20 ppm
Bulgaria	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Bulgaria	OEL STEL (ppm)	40 ppm
Croatia	GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Croatia	GVI (granična vrijednost izloženosti) (ppm)	20 ppm
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	40 ppm
Cyprus	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Cyprus	OEL TWA (ppm)	20 ppm
Cyprus	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Cyprus	OEL STEL (ppm)	40 ppm
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	26 mg/m <sup>3</sup> 10 mg/m <sup>3</sup> (atomized)
Denmark	Grænseværdie (langvarig) (ppm)	10 ppm
Estonia	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup> (total concentration of aerosol and vapor)
Estonia	OEL TWA (ppm)	20 ppm (total concentration of aerosol and vapor)
Estonia	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup> (total concentration of aerosol and vapor)
Estonia	OEL STEL (ppm)	40 ppm (total concentration of aerosol and vapor)
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
Finland	HTP-arvo (8h) (ppm)	20 ppm
Finland	HTP-arvo (15 min)	100 mg/m <sup>3</sup>
Finland	HTP-arvo (15 min) (ppm)	40 ppm
France	VME (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup> (indicative limit-vapor)
France	VME (ppm)	20 ppm (indicative limit-vapor)
France	VLE (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup> (indicative limit-vapor)

# SAFETY DATA SHEET

Page : 6 / 15

Revision nr : 2.0

Issue date : 11/12/2019

**D2190 (50%)**

Supersedes : 15/07/2019



ethanediol; ethylene glycol (107-21-1)		
France	VLE (ppm)	40 ppm (indicative limit-vapor)
Germany	Occupational exposure limit value (mg/m <sup>3</sup> )	26 mg/m <sup>3</sup> (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	Occupational exposure limit value (ppm)	10 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Gibraltar	8h mg/m <sup>3</sup>	52 mg/m <sup>3</sup>
Gibraltar	8h ppm	20 ppm
Gibraltar	Short-term mg/m <sup>3</sup>	104 mg/m <sup>3</sup>
Gibraltar	Short-term ppm	40 ppm
Greece	OEL TWA (mg/m <sup>3</sup> )	125 mg/m <sup>3</sup> (vapor)
Greece	OEL TWA (ppm)	50 ppm (vapor)
Greece	OEL STEL (mg/m <sup>3</sup> )	125 mg/m <sup>3</sup> (vapor)
Greece	OEL STEL (ppm)	50 ppm (vapor)
Hungary	AK-érték	52 mg/m <sup>3</sup>
Hungary	CK-érték	104 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (particulate) 52 mg/m <sup>3</sup> (vapour)
Ireland	OEL (8 hours ref) (ppm)	20 ppm (vapour)
Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	30 mg/m <sup>3</sup> (calculated-particulate) 104 mg/m <sup>3</sup> (vapour)
Ireland	OEL (15 min ref) (ppm)	40 ppm (vapour)
Italy	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Italy	OEL TWA (ppm)	20 ppm
Italy	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Italy	OEL STEL (ppm)	40 ppm
Latvia	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Latvia	OEL TWA (ppm)	20 ppm
Lithuania	IPRV (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup> (aerosol and vapor)
Lithuania	IPRV (ppm)	10 ppm (aerosol and vapor)
Lithuania	TPRV (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (aerosol and vapor)
Lithuania	TPRV (ppm)	20 ppm (aerosol and vapor)
Luxembourg	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Luxembourg	OEL TWA (ppm)	20 ppm
Luxembourg	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Luxembourg	OEL STEL (ppm)	40 ppm
Malta	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Malta	OEL TWA (ppm)	20 ppm
Malta	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>

# SAFETY DATA SHEET

Page : 7 / 15

Revision nr : 2.0

Issue date : 11/12/2019

**D2190 (50%)**

Supersedes : 15/07/2019



## ethanediol; ethylene glycol (107-21-1)

Malta	OEL STEL (ppm)	40 ppm
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup> (fume) 10 mg/m <sup>3</sup> (droplets)
Netherlands	Grenswaarde TGG 15MIN (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Poland	NDS (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
Poland	NDSch (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
Portugal	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup> (indicative limit value)
Portugal	OEL TWA (ppm)	20 ppm (indicative limit value)
Portugal	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup> (indicative limit value)
Portugal	OEL STEL (ppm)	40 ppm (indicative limit value)
Portugal	OEL - Ceilings (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol only)
Romania	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Romania	OEL TWA (ppm)	20 ppm
Romania	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Romania	OEL STEL (ppm)	40 ppm
Slovakia	NPHV (priemerná) (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Slovakia	NPHV (priemerná) (ppm)	20 ppm
Slovakia	NPHV (Hraničná) (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Slovenia	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Slovenia	OEL TWA (ppm)	20 ppm
Slovenia	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Slovenia	OEL STEL (ppm)	40 ppm
Spain	VLA-ED (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup> (indicative limit value)
Spain	VLA-ED (ppm)	20 ppm (indicative limit value)
Spain	VLA-EC (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Spain	VLA-EC (ppm)	40 ppm
Sweden	nivågränsvärde (NVG) (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup> (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
Sweden	nivågränsvärde (NVG) (ppm)	10 ppm (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
Sweden	kortidsvärde (KTV) (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup> (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
Sweden	kortidsvärde (KTV) (ppm)	40 ppm (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (particulates) 52 mg/m <sup>3</sup> (vapour)
United Kingdom	WEL TWA (ppm)	20 ppm (vapour)
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup> (vapour) 30 mg/m <sup>3</sup> (calculated-particulate)

<b>SAFETY DATA SHEET</b>	Page : 8 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
<b>D2190 (50%)</b>	Supersedes : 15/07/2019



<b>ethanediol; ethylene glycol (107-21-1)</b>		
United Kingdom	WEL STEL (ppm)	40 ppm (vapour)
Norway	Grenseverdier (AN) (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup> (total sum of gas and particulate matter (aerosol) of the substance-total dust and vapor)
Norway	Grenseverdier (AN) (ppm)	20 ppm (total sum of gas and particulate matter (aerosol) of the substance-total dust and vapor)
Norway	Grenseverdier (Kortidsverdi) (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup> (total sum of gas and particulate matter (aerosol) of the substance-dust)
Norway	Grenseverdier (Kortidsverdi) (ppm)	40 ppm (total sum of gas and particulate matter (aerosol) of the substance)
Switzerland	MAK (mg/m <sup>3</sup> )	26 mg/m <sup>3</sup> (aerosol, vapour)
Switzerland	MAK (ppm)	10 ppm (aerosol, vapour)
Switzerland	KZGW (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup> (aerosol, vapour)
Switzerland	KZGW (ppm)	20 ppm (aerosol, vapour)
Australia	TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (particulate) 52 mg/m <sup>3</sup> (vapour)
Australia	TWA (ppm)	20 ppm (vapour)
Australia	STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup> (vapour)
Australia	STEL (ppm)	40 ppm (vapour)
Canada (Quebec)	PLAFOND (mg/m <sup>3</sup> )	127 mg/m <sup>3</sup> (mist and vapour)
Canada (Quebec)	PLAFOND (ppm)	50 ppm (mist and vapour)
USA - ACGIH	ACGIH TWA (ppm)	25 ppm (vapor fraction)
USA - ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable particulate matter, aerosol only)
USA - ACGIH	ACGIH STEL (ppm)	50 ppm (vapor fraction)

Additional information : Recommended monitoring procedures. Personal air monitoring. Room air monitoring

## **8.2. Exposure controls**

Engineering measure(s)	: Provide adequate ventilation. Organisational measures to prevent /limit releases, dispersion and exposure. Safe handling: see section 7 .
Personal protective equipment	: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hand protection	: Wear chemically resistant gloves (tested to EN374) . Suitable material: Nitrile rubber (BTT: >8h, 0,3mm). neoprene gloves (BTT: >8h, 0,3mm). The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Eye protection	: tightly fitting safety goggles (EN 166). During splash contact: face shield (EN 166)
Body protection	: Wear suitable protective clothing. Wear suitable coveralls to prevent exposure to the skin
Respiratory protection	: Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment. Full face mask (EN 136). Half-face mask (DIN EN 140). Filter type: ABEK (EN 141)
Thermal hazard protection	: Not required for normal conditions of use. Use dedicated equipment.



<b>SAFETY DATA SHEET</b>	Page : 9 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
	Supersedes : 15/07/2019
<b>D2190 (50%)</b>	



Environmental exposure controls : Do not allow to enter into surface water or drains. Comply with applicable Community environmental protection legislation.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: liquid. slightly. Opaque.
Colour	: Variable or Colourless.
Odour	: mild.
Odour threshold	: No data available
pH	: 7,5 - 9
Relative evaporation rate (butylacetate=1)	: No data available
Melting / freezing point	: -12 °C
Freezing point	: No data available
Initial boiling point and boiling range	: > 170 °C
Flash point	: > 111 °C (PMCC)
Auto-ignition temperature	: > 400 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable, liquid
Vapour pressure	: 0,06 mmHg (@ 20°C)
Vapour density	: 2,1 (Air = 1.0)
Relative density	: 1,11 (@ 20/20°C)
Solubility	: No data available. Water: Miscible with water
Partition coefficient n-octanol/water	: No data available
Kinematic viscosity	: No data available
Dynamic viscosity	: No data available
Explosive properties	: Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	: Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.
Explosive limits	: No data available

### 9.2. Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reference to other sections: 10.5.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Reacts vigorously with strong oxidizers and acids. See also section 7. Handling and storage.

<b>SAFETY DATA SHEET</b>	Page : 10 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
	Supersedes : 15/07/2019
<b>D2190 (50%)</b>	



#### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. See also section 7. Handling and storage.

#### 10.5. Incompatible materials

Strong acids and oxidizing agents. See also section 7. Handling and storage.

#### 10.6. Hazardous decomposition products

Burning produces noxious and toxic fumes. Reference to other sections: 5.2.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.  
Ethylene Glycol,  
Diethylene glycol :  
Harmful if swallowed.

ATE CLP (oral)	1286,008 mg/kg bodyweight
----------------	---------------------------

#### Potassium 2-Ethylhexanoate (3164-85-0)

LD50/oral/rat	2043 mg/kg (~ OECD 401)
LD50/dermal/rat	> 2000 mg/kg (OECD 402) (24h)

#### ethanediol; ethylene glycol (107-21-1)

LD50/oral/rat	7712 mg/kg
LD50/dermal/rat	10600 mg/kg
LD50/dermal/rabbit	> 3500

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)  
pH: 7,5 - 9

Serious eye damage/irritation : Causes serious eye irritation.  
pH: 7,5 - 9

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

#### ethanediol; ethylene glycol (107-21-1)

NOAEL (chronic, oral, animal/male, 2 years)	1000 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	1500 mg/kg bodyweight

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

#### Potassium 2-Ethylhexanoate (3164-85-0)

NOAEL (oral, rat, 90 days)	180 mg/kg bodyweight/day mouse
----------------------------	--------------------------------

#### ethanediol; ethylene glycol (107-21-1)

NOAEL (oral, rat, 90 days)	220 200 mg/kg bodyweight/day OECD Guideline 407
NOAEL (dermal, rat/rabbit, 90 days)	2220 mg/kg bodyweight/day OECD 410

# SAFETY DATA SHEET

Page : 11 / 15

Revision nr : 2.0

Issue date : 11/12/2019

**D2190 (50%)**

Supersedes : 15/07/2019



Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

<b>D2190 (50%)</b>	
Kinematic viscosity	≈ 25 mm <sup>2</sup> /s (@ 20°C)

Other information : Symptoms related to the physical, chemical and toxicological characteristics. For further information see section 4.

## SECTION 12: Ecological information

### 12.1. Toxicity

Environmental properties : Ecological injuries are not known or expected under normal use.

<b>Potassium 2-Ethylhexanoate (3164-85-0)</b>	
LC50 fish 1	> 100 mg/l (OECD 203 - Oryzias latipes)
EC50 Daphnia 1	106 mg/l (OECD 203) (48h)
EC50 Daphnia 2	75 mg/l (OECD 211) (21d)
<b>ethanediol; ethylene glycol (107-21-1)</b>	
LC50 fish 1	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
NOEC (chronic)	15380 mg/l @ 7d Pimephales promelas

### 12.2. Persistence and degradability

<b>D2190 (50%)</b>	
Persistence and degradability	No data available.
<b>Potassium 2-Ethylhexanoate (3164-85-0)</b>	
Persistence and degradability	Readily biodegradable.
Biodegradation	99 % (OECD 301E)
<b>ethanediol; ethylene glycol (107-21-1)</b>	
Persistence and degradability	Readily biodegradable.
Biodegradation	90-100 % Experimental data

### 12.3. Bioaccumulative potential

<b>D2190 (50%)</b>	
Partition coefficient n-octanol/water	No data available
Bioaccumulative potential	No data available.
<b>Potassium 2-Ethylhexanoate (3164-85-0)</b>	
Log Kow	2,96 (OECD 107)
<b>ethanediol; ethylene glycol (107-21-1)</b>	
Partition coefficient n-octanol/water	-1,93
Bioaccumulative potential	Does not bioaccumulate.

### 12.4. Mobility in soil

<b>D2190 (50%)</b>	
Mobility in soil	No data available
Ecology - soil	Adsorbs on soil.

<b>SAFETY DATA SHEET</b>	Page : 12 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
	Supersedes : 15/07/2019
<b>D2190 (50%)</b>	



#### 12.5. Results of PBT and vPvB assessment

<b>D2190 (50%)</b>	
Results of PBT assessment	Not applicable

#### 12.6. Other adverse effects

Additional information : No data available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Do not allow to enter into surface water or drains. Dispose of empty containers and wastes safely. Safe handling: see section 7. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.

Additional information : Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : This material and its container must be disposed of as hazardous waste. Waste codes should be assigned by the user based on the application for which the product was used.

### SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable				

#### 14.6. Special precautions for user

Special precautions for user : Not applicable

#### - Overland transport

Not applicable

#### - Transport by sea

Not applicable

<b>SAFETY DATA SHEET</b>	Page : 13 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
	Supersedes : 15/07/2019
<b>D2190 (50%)</b>	



**- Air transport**

Not applicable

**- Inland waterway transport**

Not applicable

**- Rail transport**

Not applicable

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Code: IBC : Not applicable.

**SECTION 15: Regulatory information**

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

**15.1.1. EU-Regulations**

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	D2190 (50%) ; ethanediol; ethylene glycol
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: 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	D2190 (50%) ; Potassium 2-Ethylhexanoate ; ethanediol; ethylene glycol

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

**15.1.2. National regulations**

France

Installations classées :

Not applicable.

**Germany**

Reference to AwSV : Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

German storage class (LGK) : LGK 12 - Non-combustible liquids

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**Netherlands**

Waterbezwaarlijkheid : B (5) - Weinig schadelijk voor in het water levende organismen

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

<b>SAFETY DATA SHEET</b>	Page : 14 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
	Supersedes : 15/07/2019
<b>D2190 (50%)</b>	



NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

: None of the components are listed

#### Denmark

Recommendations Danish Regulation

: Young people below the age of 18 years are not allowed to use the product.  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product.

#### 15.2. Chemical safety assessment

No data available

**For the following substances of this mixture a chemical safety assessment has been carried out**

ethanediol; ethylene glycol

#### SECTION 16: Other information

Indication of changes:

1.1	UFI on SDS 1.1	Added	
1.3	Company	Modified	

Abbreviations and acronyms:

	ABM = Algemene beoordelingsmethodiek
	ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
	ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
	CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
	IATA = International Air Transport Association
	IMDG = International Maritime Dangerous Goods Code
	LEL = Lower Explosive Limit/Lower Explosion Limit
	UEL = Upper Explosion Limit/Upper Explosive Limit
	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	BTT = Breakthrough time (maximum wearing time)
	DMEL = Derived Minimal Effect level
	DNEL = Derived No Effect Level
	EC50 = Median Effective Concentration
	EL50 = Median effective level
	ErC50 = EC50 in terms of reduction of growth rate
	ErL50 = EL50 in terms of reduction of growth rate
	EWC = European waste catalogue
	LC50 = Median lethal concentration
	LD50 = Median lethal dose
	LL50 = Median lethal level
	NA = Not applicable
	NOEC = No observed effect concentration
	NOEL: no-observed-effect level
	NOELR = No observed effect loading rate
	NOAEC = No observed adverse effect concentration
	NOAEL = No observed adverse effect level
	N.O.S. = Not Otherwise Specified
	OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
	PNEC = Predicted No Effect Concentration
	Quantitative structure-activity relationship (QSAR)
	STOT = Specific Target Organ Toxicity
	TWA = time weighted average
	VOC = Volatile organic compounds

<b>SAFETY DATA SHEET</b>	Page : 15 / 15
	Revision nr : 2.0
	Issue date : 11/12/2019
	Supersedes : 15/07/2019
<b>D2190 (50%)</b>	



	WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)
--	--

Sources of key data used to compile the datasheet : European Chemicals Bureau INCHEM.

Training advice : Training staff on good practice. Manipulations are to be done only by qualified and authorised persons.

Other information : Assessment/classification CLP. Article 9. Calculation method.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Repr. 2	Reproductive toxicity, Hazard Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Classification according to Regulation (EC) No. 1272/2008 [CLP]  
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

**DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.